BULLETIN 53

BIBLIOGRAPHY OF THE GEOLOGY AND MINERAL RESOURCES OF OREGON (Third Supplement)

January 1, 1951 to December 31, 1955

Compiled by
Margaret L. Steere
and
Lillian F. Owen

STATE OF OREGON
DEPARTMENT OF GEOLOGY AND MINERAL INDUSTRIES

1962
Bibliography of the Geology and Mineral Resources of Oregon

(Third Supplement)

January 1, 1951, to December 31, 1955

Compiled by
Margaret L. Steere and Lillian F. Owen

1962

GOVERNING BOARD

Frank C. McColloch, Chairman . . . . Portland
Harold Banta . . . . . . . . Baker
Fayette I. Bristol . . . . . . Grants Pass

Hollis M. Dole
Director
<table>
<thead>
<tr>
<th>CONTENTS</th>
<th>Page Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Introduction</td>
<td>i</td>
</tr>
<tr>
<td>Sources</td>
<td>1</td>
</tr>
<tr>
<td>Bibliography</td>
<td>7</td>
</tr>
<tr>
<td>Subject Index</td>
<td>59</td>
</tr>
</tbody>
</table>
BIBLIOGRAPHY of the GEOLOGY and MINERAL RESOURCES of OREGON

Third Supplement
1951 - 1955

Compiled by
Margaret L. Steere and Lillian F. Owen

Introduction

Bulletin 53 is the third supplement to the original "Bibliography of the Geology and Mineral Resources of Oregon" by Ray C. Treasher and Edwin T. Hodge, which was published in 1936 and is now out of print. The first supplement, compiled by John E. Allen and published as Bulletin 33, carried the bibliography through the year 1945. The second supplement, compiled by M. L. Steere and published as Bulletin 44, extended the bibliography through 1950. This, the third supplement, covers the material that was published during the 5-year period from January 1951 through December 1955.

Publications consulted in the compilation of the third supplement are listed on the following five pages. Like its predecessors, this bibliography includes theses, open-file reports, and other unpublished material that is available to the public for inspection in offices and libraries.

Gratitude is extended to all who helped with the preparation of this supplement. Special thanks are given to librarians at University of Oregon, Oregon State University, Reed College, Portland State College, Portland Public Library, and U. S. Corps of Engineers Library for their kind cooperation and assistance in locating source material.
SOURCES

American Academy of Arts and Sciences Proceedings
American Antiquity
American Association of Petroleum Geologists Bulletin
American Ceramic Society Bulletin; Journal
American Geological Institute Geological Abstracts; Reports
American Geophysical Union Transactions
American Institute of Mining and Metallurgical Engineers Mining Engineering
American Journal of Botany
American Journal of Science
American Midland Naturalist
American Mineralogist
American Museum of Natural History Bulletins; Novitates
American Petroleum Institute
American Philosophical Society Proceedings; Transactions
American Scientist
American Water Works Association Journal
Annotated Bibliography of Economic Geology
Association of American Geographers Annals
Association of Pacific Coast Geographers Yearbook
Bibliography of North American Geology
Biological Review
Botanical Gazette
Botanical Review
Bulletin of American Paleontology
California Academy of Sciences Proceedings
California Division of Mines Bulletins; Journal of Mines and Geology; Special Reports; Miscellaneous Publications; Mineral Information Service
California University Department of Geological Sciences Bulletins; Theses in Geology
Carnegie Institute of Washington Publication; Yearbook
BIBLIOGRAPHY OF THE GEOLOGY AND MINERAL RESOURCES OF OREGON

Chemical Engineering News
Chemical Engineering Transactions
Chicago Academy of Science Bulletin
Colorado School of Mines Quarterly
Condor
Earth Science Digest
Ecology
Ecology Monograph
Economic Geography
Economic Geology
Engineering and Mining Journal
Engineering Index
Evolution
Gems and Gemology
Geographical Review
Geological Society of America Bulletins; Memoirs; Proceedings; Special Papers
Geological Society of the Oregon Country News Letter
Geophysics
Idaho Bureau of Mines and Geology Annual Reports; County Reports; Mineral Resources Reports; Pamphlets
Industrial Arts Index
International Index to Periodicals
Interstate Oil Compact Commission Bulletins; Legal Reports
Journal of Geology
Journal of Metals
Journal of Paleontology
Journal of Sedimentary Petrology
Mazama
Meteoritical Society Contributions
Michigan Academy of Science Papers
Micropaleontologist
Mineralogist
Mines Magazine
Mining Congress Journal
Mining World
Museum of Comparative Zoology at Harvard College Breviora; Bulletins
National Academy of Science Memoirs; Proceedings
National Geographic Magazine
National Research Council Highway Research Board Bulletins; Proceedings; Special Reports
National Research Council Committee on Measurement of Geologic Time Report
  Report of the Committee on Paleobotany
Natural History
Nature Magazine
Nautilus
Northwest Science
Oil and Gas Journal
Oregon Academy of Science Proceedings
Oregon Bluebook
Oregon Bureau of Land Management Our Public Lands
Oregon Business Review
Oregon Department of Geology and Mineral Industry Biennial Reports; Bulletins; Maps; Miscellaneous Publi-
  cations; The Ore.-Bin; Short Papers
Oregon Historical Society Quarterly
Oregon State College Engineering Experiment Station Bulletins; Circulars
Oregon State College Studies in Geology; Studies in Botany; Theses in Geology and Mining
Oregon State Department of Agriculture Agriculture Bulletin
Oregon State System of Higher Education Condon Lecture Series
Oregon University Studies in Botany; Studies in Geology; Studies in Anthropology; Theses in Geology
BIBLIOGRAPHY OF THE GEOLOGY AND MINERAL RESOURCES OF OREGON

Oregon Voter
Pacific Discovery
Pacific Northwest Business Review
Palaeobotanist
Pit and Quarry
Popular Astronomy
Psyche, Journal of Entomology
Raw Materials Survey Information Circulars; Market Surveys; Newsletter Feature Reprints; Resource Reports
Reed College Bulletin
Rock Products
Rocks and Minerals
San Diego Society of Natural History Transactions
Science News Letters
Science (New Series)
Scientific American
Scientific Monthly
Seismological Society of America Bulletin
Sierra Club Bulletin
Smithsonian Institution Annual Reports; Miscellaneous Collections
Soil Science
Southwestern Journal of Anthropology
Stanford Research Institute Annual Reports
Stanford University Abstracts of Dissertations; Publications in Geological Sciences
State Geologists' Journal
Torrey Botanical Club
United States Bureau of Mines Bulletins; Information Circulars; Minerals Yearbooks; Reports of Investigations
United States Coast and Geodetic Survey Abstracts of Earthquake Reports for the Pacific Coast and the Western Mountain Region; Serials
United States Army Corps of Engineers, Portland District, Design Memorandum; Foundation Report;
Miscellaneous Unpublished Reports

United States Department of Agriculture Soil Surveys

United States Geological Survey Bulletins; Circulars; Geologic Quadrangle Maps; Mineral Investigation Maps; Oil and Gas Investigation Maps; Professional Papers; Unpublished Reports; Water Supply Papers

United States Government Research Reports

United States National Museum Bulletin; Proceedings

United States Government Publications Monthly Catalog

Utah Academy of Science Proceedings

Utah University Bulletins

Washington (D.C.) Academy of Science

Washington State College Bulletins; Information Circulars

Washington, State of, Division of Mines and Geology Bulletins; Information Circulars; Reports of Investigations

Washington University Publications in Geology; Theses in geology and Mining

Washington University Engineering Experiment Station Bulletins; Reports; Technical Notes; Trend in Engineering at the University of Washington

World Oil

World Petroleum
BIBLIOGRAPHY

ADAMS, M. F., see KINOSHITA, J.

ADAMS, W. CLAUDE


AGOCS, W. B.


ALLEN, R., see NOCKOLDS, S. R. (1).

ALLEN, RHESA M., JR.


ALLEN, VICTOR T.


ALLISON, IRA S., see also PACKARD, E. L. (1)


ANDERSON, A. C.


ANDERSON, ALFRED L.

BIBLIOGRAPHY OF THE GEOLOGY AND MINERAL RESOURCES OF OREGON


ANDERSON, R. L., see YOUNG, W. H.

ANDREWS, L. E., JR., see VAN VOORHIS, W. R.

ANTEVS, ERNST


ARMSTRONG, FRANK C.


ARNOLD, CHESTER A.

1. Fossil Osmundaceae from the Eocene of Oregon: Palaeontographica (Stuttgart, Germany), v. 92, pt. 8, p. 63-78, illus., 1952.


ARTHUR, JACK D.


ASHWILL, WALTER R.

The geology of the Winberry Creek area, Lane County, Oregon: Oregon Univ. master's thesis, 63 p., geol. map, 1951.

AXELROD, D. I., see also CHANEY, R. W., 3


AYRES, FRED D.


BABER, KENNETH D., see KAUFFMAN, A. J., JR., (3)

BALER, E. M. See also LOWRY, W. D.; SNAVELY, P. D., JR. (2)


BIBLIOGRAPHY

BALDWIN, E. M. - Continued:


BALDWIN, RAYMOND L.


BALES, WILLIAM E.

Geology of the lower Brice Creek area, Lane County, Oregon: Oregon Univ. master's thesis, 53 p., illus. incl. index and geol. maps, 1951.

BANGS, E., see AGOCS, W. B.

BANNING, L. H., see HUNDHAUSEN, R. J., 2.

BARGHOORN, E. S.


BARLOW, JAMES L.


BARTELL, A. O., see also BROOKE, R. E.: RICHARDS, L. C., (1).


2. (and Mason, R. S.) Northwest industrial minerals: Mining Eng., v. 3, no. 4, illus., p. 315-319, April 1951.


BARTLEY, RONALD C.

BIBLIOGRAPHY OF THE GEOLOGY AND MINERAL RESOURCES OF OREGON

BARTON, MANES


BASGEN, DONALD H.


BATTY, J. V.


BAUER, H. L., JR., see STAATZ, M. H.

BEALL, JOHN V.


BEBOUT, W.


BECK, GEORGE F.


BEDFORD, JOHN W.


BEESON, JOHN H.


BELL, G. L.


PENN, JAMES H.


BERRYHILL, LOUISE R.


BIEWENER, JOHN H.

BIBLIOGRAPHY

BINGHAM, MASON L.

BOARDMAN, S. H.

BORAH, LEO A.

BOWERS, HOWARD E.

BOWLES, OLIVER

BOYD, HAROLD A., see ALLISON, I. S., (6); HEACOCK, R. L. (2).

BRANDENBURG, NORMAN R., see also HEATH, C. O., JR.

BRIMLOW, GEORGE F.
Harney County, Oregon, and its rangeland: Binford and Mort, 316 p., illus., 1951.

BRISTOL, ESTHER

BRISTOL, FAY I.
Chrome: Mining World, v. 14, no. 5, p. 43-44, April 1952; v. 15, no. 5, April 1953; v. 16, no. 5, p. 33-34, April 1954; v. 17, no. 5, p. 50, April 1955.

BRODERS, CHESTER O.

BROEDEL, CARL H., see ESPENSHADE, G. H.

BROGAN, JOHN P.

BROGAN, PHIL F.
BIBLIOGRAPHY OF THE GEOLOGY AND MINERAL RESOURCES OF OREGON

BROOKE, ROBERT E.


BROWN, ANDREW H.


BROWN, HARRISON


BROWN, R. C.


BROWN, ROBERT D., JR., see also BALDWIN, E. M. (6).


BROWN, RANDALL E., see also WATERS, A. C. (1).


BROWN, S. G.


BUDDENHAGEN, H. J.


BUMSTEAD, NEWMAN

BURKE, HARRIS H.


BURKHAM, HOWARD J.


BURWELL, EDWARD B., JR.


BUTLER, B. ROBERT


BYERLY, PERRY


BYERS, HORACE G., see LAKIN, H. W.

Caldwell, Merle


Calkins, James A.

The geology of the northeastern half of the Jamieson quadrangle, Oregon: Oregon Univ. master's thesis, 72p., illus., geol. map, 1954.

Callaghan, Eugene


Camp, Charles L.


Campbell, Charles D.


Carlat, James E.

BIBLIOGRAPHY OF THE GEOLOGY AND MINERAL RESOURCES OF OREGON

Carpenter, Jean R.


Carter, Geo. F.


Cater, Fred W., Jr.


Chaney, Ralph W.


Chesterman, Chas. W.


Chittenden, J. S.


Clark, Donald H.


Clark, Ella E.


Cloud, Preston E., Jr.


Cloud, William K., see Murphy, L. M.

Cole, David L.

### BIBLIOGRAPHY

**COLEMAN, ROBERT G.**


**COLEMAN, MRS. SATIS N.**


**COMPTON, ROBERT R., see WATERS, A.C., I; WILLIAMS, H., 3.**

**CONRAD, CLARENCE F.**


**COOK, EARL F., see also WHEELER, H. E.**


**COOMBS, HOWARD A.**


**COOPER, MARGARET**


**COOPER, WILLIAM S.**


**CORCORAN, RAYMOND E., see also DOLE, H. M., (3)**


BIBLIOGRAPHY OF THE GEOLOGY AND MINERAL RESOURCES OF OREGON

CORCORAN, R. E., Continued:


CORNING, HOWARD M.

Oregon; end of the trail: Binfords and Mort, Portland, Oregon, revised edition, 549 p., illus., 1951.

COTTON, C. A.


CREELMAN, G. D., see VAN VOORHIS, W. R.

CREMER, HERBERT


CREASEMAN, L. S., see also PACKARD, E. L. (1)


CRESWELL, A. E., see AYERS, F. D.

CROSBY, JAMES W.


CROSS, CONSTANCE D.


DAKE, HENRY C.


BIBLIOGRAPHY

DAKE, HENRY C., Continued:


DAUGHERTY, LLOYD F.


DAWSON, JOHN W.


DEACON, ROBERT J.


DEEVEY, EDWARD S., JR., see FLINT, R. F.

DELAVAL, ROBERT E., see WARREN, H. V.

DENNEY, M. R.

Corncob ranch new Oregon locality: Mineralogist, v. 21, no. 2, p. 70, 72, 74, Feb. 1953.

DEVEREAUX, HARRY E.


DICKEN, SAMUEL N.


DIETZ, ROBERT S.

BIBLIOGRAPHY OF THE GEOLOGY AND MINERAL RESOURCES OF OREGON

DIETZ, ROBERT S., Continued:


DILLING, E. DON, see KAUFFMAN, A. J., JR. (1)

DOAK, R. A.


DOLE, HOLLIS M.


DORF, ERLING


DOTT, ROBERT H., JR.


DOWNS, THEODORE


BIBLIOGRAPHY

DRAKE, H. L.

DROSDOFF, MATTHEW, see ANDERSON, A. C.

DUNCAN, DONALD C.

DUNCAN, H. J.

DURHAM, J. WYATT

DURY, G. H.

EARDLEY, A. J.

EBNER, M. JANE

ELLSWORTH, HARRIS
BIBLIOGRAPHY OF THE GEOLOGY AND MINERAL RESOURCES OF OREGON

ELSEY, ROGER C.


ENGLE, NATHANAEL


ERICKSON, JANE


ERICKSON, RUDOLPH


ERWIN, MARGARET I., see MASON, R. S., (14).

ESPENSHADE, GILBERT H.


FALKENBACH, CHARLES H., see SCHULTZ, C. B.

FEDERAL SECURITY AGENCY


FEICHTINGER, J. R.


FELTS, WAYNE M.


FISCHER, ELIZABETH C.

BIBLIOGRAPHY

FLAXMAN, ELLIOTT M.


FLEISCHER, MICHAEL


FLETCHER, JANET D., see FLEISCHER, M.

FLINT, RICHARD F.


FLYNN, GEORGE J., JR.


FRASER, F. C.


FREEMAN, OTIS W.


FULKERSON, F. B., see KAUFFMAN, A. J., JR., (3).

FULLER, H. H.


GAIR, J. E., see BALDWIN, E. M. (6).

GARBER, D. W.


GARDNER, FRANK J.

1. Optimism on the West Coast: Oil and Gas Jour., v. 53, no. 25, p. 163, 1954.

2. Pacific Northwest tempts wildcatters: Oil and Gas Jour., v. 54, no. 6, June 13, 1955.

GIERHART, JOHN W.

BIBLIOGRAPHY OF THE GEOLOGY AND MINERAL RESOURCES OF OREGON

GIERHART, JOHN W., Continued:


GILBERT, J. ELDON

Quicksilver: Mining World, v. 14, no. 5, p. 50-51, April 1952.

GILCHRIST, FRANCIS G., see also ERICKSON, JANE, (3).


GILLSON, J. L.


GOODSPEED, G. E.


GORING, A. W., see KELLY, H. J.

GRAY, ALLAN W.


GREEN, MORTON, see also CAMP, CHARLES L.

BIBLIOGRAPHY

GREENE, W. D.

GROOM, SIDNEY, M., JR.

GUEFFROY, CHARLES H.

HALLIDAY, WILLIAM R.

HALSTEAD, PERRY N.

HAMBLEN, K. E.

HANCOCK, ALONZO W.

HANCOCK, BERRY

HARPER, W. G., see ANDERSON, A. C.

HARRINGTON, EARL G.

HART, DONALD H.
1. List of ground-water sources in Oregon known to yield mineralized water (over 1,000 ppm dissolved solids or 60 percent sodium): U. S. Geol. Survey (in coop. with State Engineer of Oregon) unpub. rept., 14 p., 1954.


HAUSEN, DONALD MARTIN
BIBLIOGRAPHY OF THE GEOLOGY AND MINERAL RESOURCES OF OREGON

HAUSEN, DONALD MARTIN, Continued:


HEACOCK, ROBERT L.


HEATH, C. O., JR.


HELLAND, R. O.


HENDRICKSON, T. A.


HENRY, J. L., see KINOSHITA, J.

HENRY, THOMAS R.


HERGERT, HERBERT L.


HERRICK, CHARLES E.


HERRON, JOHN E.

BIBLIOGRAPHY

HIGHSMITH, RICHARD M., JR., see also JENSEN, J. G., (2).


HINDS, NORMAN, E. A.


HINTZE, LEHI


HOBBA, ROBERT L., see FLAXMAN, E. M.

HODGE, EDWIN T.


HODGSON, J. H.


HOOVER, LINN, JR., see also SNAVELY, P. D., JR. (1); VOKES, H. E. (2).


HOPSON, RUTH E.


HOTZ, P. E.


HOUSLEY, ROBERT


HOWARD, CONRAD B.


HOWARD, C. S., see LOHR, E. W., (1).
BIBLIOGRAPHY OF THE GEOLOGY AND MINERAL RESOURCES OF OREGON

HOWELL, PAUL W., see also BALDWIN, E. M., (1)


HUNDHAUSEN, ROBERT J.


HUNT, CHARLES B.


IMLAY, RALPH W.


IRISH, ROBERT J.


IRISH, RUTH, see WARREN, H. V.

ISOTOFF, ANDREI, see SNAVELY, P. D., JR., (2).

JACOBS, C. W. F.


JARRARD, LEONARD D.

(and Moen, Wayne S.) Uranium in the Northwest - mineralized areas and prospecting suggestions: 93 p., geol. map, published by the authors, Butte, Montana.

JENNINGS, JESSE D.


26
JENSEN, J. GRANVILLE, see also MYATT, W. G.

JOHNSON, K. A., see YANCEY, H. F.

JONES, BENJAMIN E., see also YOUNG, LOYD L., (1).

JONES, E. J.

JONES, FRANCIS T.

KAISER ALUMINUM AND CHEMICAL CORPORATION.

KAUFMAN, ALBERT J., JR.

KAY, MARSHALL

KELHAM, EDWARD A.
KELLY, H. J.


KESSLER, EUGENE L., see TOCHER, DON., (2).

KETZLACH, NORMAN


KIILSGAARD, THOR H., see YOUNGQUIST, W.

KINNISON, PHILIP T.


KINOSHITA, J.


KISER, R. T., see LOHR, E. W., (1).

KLAHOLD, B. R.


KULLERUD, GUNNAR, see BROWN, HARRISON

KUMMEL, BERNHARD, JR.


KUNO, HISASHI


LADOO, RAYMOND B.


LAKIN, HUBERT W.


LAMOTTE, R. S.

BIBLIOGRAPHY

LANG, ANDREW J., JR. see SMEDES, H. W.

LapAZ, LINCOLN


LARRISON, EARL J. see COOK, E. F.

LAWTHERS, ROBERT


LENHART, WALTER B.

1. Dredging with mobile crane: Rock Products, v. 56, no. 6, p. 112-114, June 1953.


LEWIS, A. A., see YANCEY, H. F.

LEWIS, DAVID V.


LIBBEY, F. W., see also CORCORAN, R. E., (4); MASON, R. S. (6).


BIBLIOGRAPHY OF THE GEOLOGY AND MINERAL RESOURCES OF OREGON

LIBBEY, F. W., Continued:


LIBBY, WILLARD F.

BIBLIOGRAPHY

LOHR, E. W.


LONG, W. LUNSFORD


LOOFBOUROW, J. S., JR., see ALLEN, V. T., (1).

LOVE, S. K., see LOHR, E. W., (2).

LOWRY, WALLACE D.


LUNDE, K. E., see YANCEY, H. F.

LUNK, WILLIAM A.


LUTTRELL, GWENDOLYN W., see also CARPENTER, J. R.


LUTZ, GEORGE C.


MacPHERSON, BRUCE


MARPLE, E.


MARSHALL, GEORGE A.


MARTIN, HOWARD H., see FREEMAN, O. W., (2).

MARTS, MARION E.

BIBLIOGRAPHY OF THE GEOLOGY AND MINERAL RESOURCES OF OREGON

MASON, RALPH S., see also BARTELL, A. O., (2); LIBBEY, F. W., (20).


5. Northwest Industrial Minerals Conference holds 2-day meeting: Min. Eng., v. 3, no. 6, p. 539, 1951.


MASSON, DONALD L.

MATTHEWS, THOMAS C.

MAURER, R. B.

McARTHUR, LEWIS A.
MCCASLIN, FRANK E.


MCDONALD, C. C.


McDIVITT, JAMES F.


McINTYRE, J. M., see WELLS, F. G. (1)

McINTYRE, LOREN B.


McLEOD, EDITH R.


McWILLIAMS, J. R., see HUNDHAUSEN, R. J., (2).

MEIGS, P.


MENARD, HENRY W., JR.

1. Pleistocene and Recent sediment from the floor of the northeastern Pacific Ocean: Geol. Soc. America Bull., v. 64, no. 11, p. 1279-1294, Nov. 1953.

MEREWETHER, E. ALLEN


MERRIAM, C. W.

BIBLIOGRAPHY OF THE GEOLOGY AND MINERAL RESOURCES OF OREGON

MERRYFIELD, FRED


MEYERS JOSEPH D.


MIHIELCIC, JOHN F.

Mighty mercury (rept.): Mineralogist, v. 21, no. 12, p. 452, 454, Dec. 1953.

MILLER, ALFRED L.


MILLER, CP., see SWINNEY, C. M.

MILLER, J. C.


MOEN, WAYNE S., see JARRARD, L. D.

MOODY, GRAHAM B.


MOORE, GEORGE W.


MOORE, RALPH T.


MOORE, RAYMOND C.


MORROW, BEN S.


34
BIBLIOGRAPHY

MORROW, MARTHA G.


MOTE, RICHARD H.


MOULTON, R. W., see CHITTENDEN, J. S.; KETZLACH, N.

MUELLER, J. I., see RILEY, R. R.

MUENCH, JOYCE R.


MURATA, K. J., see FLEISCHER, M.

MURPHY, LEONARD M.


MUSSEY, ORVILLE D.


MYATT, W. G.


MYERS, D. A., see VOKES, H. E. (1, 2).

MYERS, W. M., see LADOO, R. B.

NACE, R. L.


NADEAU, LEON R.


NARTEN, PERRY F., see FLEISCHER, M.

NATIONAL RESEARCH COUNCIL


2. (Division of Earth Sciences) Committee for the study of eolian deposits. Pleistocene eolian deposits of the United States, Alaska, and parts of Canada: Geol. Soc. America map (in color, 2 sheets,
BIBLIOGRAPHY OF THE GEOLOGY AND MINERAL RESOURCES OF OREGON

NATIONAL RESEARCH COUNCIL, Continued:

scale 1:2,500,000), 1952. James Thorp and H.T.U. Smith, Co-Chairmen.

NEDRY, H. S.


NELSON, M. W.


NESBIT, ROBERT ALLEN


NEUMANN, FRANK


NEWBY, JACK E.


NEWCOMB, R. C., see also BROWN, S. G., (1); HART, D. H., (2); MEYERS, J. D. (2).


NICHIPORUK, WALTER, see BROWN, HARRISON

NICHOLS, R. L., see ALLEN, V. T. (1)

NOCKOLDS, STEPHEN R.


NORBECK, EDWARD, see JENNINGS, J. D.

NORBERG, BROR

Cement industry's expansion program summarized: Rock Products, v. 54, no. 1, p. 84-93, 144, 152-157, Jan. 1951; v. 55, no. 1, p. 239, Jan. 1952.
BIBLIOGRAPHY

NORTH, OLIVER S.


NUTTLI, OTTO W.


O'BRIEN, J. C.


O'BRIEN, MORROUGH P.


ODE, W. H., see SELVIG, W. A.

ODELL, IDA M.


O'DONNELL, H. J., see SELVIG, W. A.

OLIVIER, CHARLES P.


ORCUTT, ADA M.

Tillamook; land of many waters: Binfords and Mort, Portland, Oregon, 272 p., 1951.

OREGON DEPARTMENT OF GEOLOGY AND MINERAL INDUSTRIES


BIBLIOGRAPHY OF THE GEOLOGY AND MINERAL RESOURCES OF OREGON

OREGON DEPARTMENT OF GEOLOGY AND MINERAL INDUSTRIES, Continued:


BIBLIOGRAPHY

OREGON DEPARTMENT OF GEOLOGY AND MINERAL INDUSTRIES, Continued:


OREGON STATE BOARD OF CONTROL


OREGON STATE BOARD OF EDUCATION


OREGON WATER RESOURCES BOARD

(Formerly Upper Columbia River Basin Commission of Oregon) Annual Reports, 1951-1955.

OSBORNE, DOUGLAS


PACKARD, EARL L.


PALEN, FRANK S.


PARKS, B. C., see also SELVIG, W. A.


PAUSLY, KARL A.


PEARL, RICHARD M.


PEASE, M. H., JR., see BALDWIN, E. M., (6).

PETERSON, EMIL

BIBLIOGRAPHY OF THE GEOLOGY AND MINERAL RESOURCES OF OREGON

PHINNEY, H. K., see HERGERT, H. L., (2).

PIERSON, ROYALE K.


PIPER, A. M.


POLDERVAART, ARIE (Editor)


PORTER, PHILIP W.


POTTER, PAUL EDWIN


POWERS, ALFRED, see PETERSON, E.

PRIOR, G. T. (1923)


PRITCHETT, FRANK I.


PRIVRASKY, NORMAN C.


PRUETT, J. HUGH


RAISCH, E. J., see BROWN, R. C.
RAMP, LEN


RANSOM, JAY ELLIS


RAU, WELDON W., see also SNAVELY, P. D., JR., (1)


REID, ROLLAND R.


RENTON, J. LEWIS

Some notes on thunder eggs: Mineralogist, v. 19, no. 4, p. 171-177, April 1951.

REYNOLDS, DORIS L.


RICHARDS, LESLIE C.


RIGGS, H. C., see McDonald, C. C.

RILEY, ROGER R.


ROBERTS, ALBERT E., see BALDWIN, E. M. (4); SNAVELY, P. D., JR. (1,2).


ROBERTS, FRANK H. H., JR.

BIBLIOGRAPHY OF THE GEOLOGY AND MINERAL RESOURCES OF OREGON

ROBERTS, FRANK, H. H., JR., Continued:


ROBINSON, JOHN W.


ROLLINS, J. C., see AGOCS, W. B.

ROOTS, ROBERT D.


ROSS, CLARENCE S.


ROVE, OLAF N.


RUFF, LLOYD L.


RUHLE, GEORGE C.


SARGENT, SAM C.


SCHAER, MAX


SCHALLER, GILBERT S.

BIBLIOGRAPHY

SCHLICKER, HERBERT G.


SCHOENIKE, HOWARD G.


SCHUETTE, C. N.

Guaranteed price will revive domestic quicksilver mining: Eng. and Min. Jour., v. 152, no. 4, p. 116-119, April 1951.

SCHULTZ, C. BERTRAND


SCOTT, LEWIS E.


SCOTT, RICHARD A.


SEISMOLOGICAL SOCIETY OF AMERICA


SEITZ, JAMES F.


SELVIG, W. A.


SHAPIRO, HOWARD L., see RILEY, R. R., 1953.

SHIMER, JOEL L.


43
BIBLIOGRAPHY OF THE GEOLOGY AND MINERAL RESOURCES OF OREGON

SHOTWELL, J. ARNOLD, see also SARGENT, S. (1).


SIMONS, W. D.


SIMPSON, GEORGE G.


SINGER, S. FRED


SKINNER, K. G., see KELLY, H. J.

SLEMMONS, DAVID B.


SMEDES, HARRY W.


SMITH, GEORGIA A.


SMITH, WARREN D.

BIBLIOGRAPHY

SMITHSONIAN INSTITUTION


SMITHWICK, S. CARL


SNAVELY, P. D., JR., see also VOKES, H. E. (1).


SNYDER, W. A., see SCHALLER, G. S.

SOHN, I. G.


STAATZ, M. H.


STANLEY, ORRIN E.


STAPLES, LLOYD W., see also WATERS, A. C. (1).

BIBLIOGRAPHY OF THE GEOLOGY AND MINERAL RESOURCES OF OREGON

STAPLES, LLOYD W., Continued:


STEARNS, HAROLD T.


STEERE, MARGARET L.


STEPHENS, JAMES G., see MOORE, G. W.

STERRETT, CHESTER K.


STETSON, HENRY C.


STEWART, J. W., see NACE, R. L.

STEWART, K. C., see STEWART, R. E., (1).

STEWART, R. E.


BIBLIOGRAPHY

STICKNEY, W. A., see HENDRICKSON, T. A.

STOCK, CHESTER


STOREY, R. S., see HODGSON, J. H.

STORMONT, D. H.


STOTT, WALTER J.

Inv. of saline deposits in southern Oregon: A report in fulfillment of Contract No. 1, p. 7748, and supp. agreement No. 1 between the U.S. Dept. Interior, Bonneville Power Adm. and the Univ. of Portland (Oregon), 59 p., 1952.

SWARRBRICK, JAMES C.


SWENSON, H. A.


SWINNEY, C. M.


SWITZER, GEORGES.


TAUBENECK, WILLIAM H.


TAYLOR, D. E.


TERRY, RICHARD D.

BIBLIOGRAPHY OF THE GEOLOGY AND MINERAL RESOURCES OF OREGON

THAYER, C. S.


THAYER, THOMAS P.


THOMAS, H. E.


TOCHER, DON


TRAUGER, FREDERICK D.


TRIMBLE, DONALD E.

1. An account of the geology of Oregon City, Oregon, with notes on adjacent West Linn and Willamette, Oregon: U.S. Geol. Survey unpub. rept., geol. map, 8 p., June 1, 1954.


TUTTLE, O. FRANK


TYRRELL, M.E., see KELLY, H. J.

U. S. BUREAU OF MINES


BIBLIOGRAPHY

U. S. BUREAU OF RECLAMATION


U. S. COAST AND GEODETIC SURVEY

Abstracts of earthquake reports for the Pacific Coast and the western mtn. region: U.S. Coast and Geod. Survey MSA 69, 1951; MSA 80, 1953; MSA 81, 82, 83, 84, 1954.

U. S. CORPS ENGINEERS, PORTLAND DISTRICT


U. S. GEOLOGICAL SURVEY


BIBLIOGRAPHY OF THE GEOLOGY AND MINERAL RESOURCES OF OREGON

U. S. GEOLOGICAL SURVEY, Continued:


U. S. SENATE, INTERIOR AND INSULAR AFFAIRS COMMITTEE


UTLEY, HARRY F.


VALENTINE, JAMES W.


VAN FRANK, RICHARD

BIBLIOGRAPHY

VAN VOORHIS, W. R.


VOKES, HAROLD E., see also MOORE, R. C.


WAGNER, NORMAN S., see also LIBBEY, F. W., (7).


WAGNER, WARREN R., see ANDERSON, A. L.

WALKER, A. E.


WALKER, G. W., see also WATERS, A. C. (1, 2); WELLS, F. G. (1, 2).


WALLING, I. W., see LOHR, E. W. (1).

WALSTED, JOHN P.


BIBLIOGRAPHY OF THE GEOLOGY AND MINERAL RESOURCES OF OREGON

WALSTED, JOHN P., Continued:


WARREN, HARRY V.


WASHINGTON UNIVERSITY


WATERS, AARON C., see also BROWN, R. E. (2).


WATKINS, F. A., JR.


WELLES, S. P., see CAMP, CHARLES L.

WELLS, FRANCIS G., see also CATER, F. W.


WELL, J. M.

McNary aggregate production: Western Construction, v. 28, no. 4, p. 66-68, 144, April 1953.

WELLS, R. R., see also HENDRICKSON, T. A.


WETMORE, ALEXANDER


52
BIBLIOGRAPHY

WHEELER, HARRY E.


WHIPPLE, ROY C.


WHITE, DAVID J., see WOLFE, H. D.

WHITTAKER, R. H.,


WILCOX, HOWARD G.


WILKINSON, W. D.


WILLIAMS, HOWEL, see WATERS, A. C. (1).


WILLISTON, S. H.


WILM, H. G., see NELSON, M. W.

WILSON, FORD E.


WINZER, OSCAR O.


BIBLIOGRAPHY OF THE GEOLOGY AND MINERAL RESOURCES OF OREGON

WOLFE, HAROLD D.


WOLFE, JACK A.


WOLFSON, ALBERT


WOLLE, MURIEL SIBELL


(Oregon: p. 293-324.)

WORK, R. A., see NELSON, M. W.

YANCEY, H. F.


YOPES, PAUL F., see KAUFFMAN, A. J., JR. (3).

YOUNG, LOYD L., see also JONES, B. E.


YOUNG, W. H.


YOUNQUIST, WALTER

BIBLIOGRAPHY

ANONYMOUS

1951


4. Concrete placement on Oregon Dam: Concrete, v. 59, no. 7, p. 16-18, July 1951.


1952


1953


ANONYMOUS - 1953 - Continued:


1954


42. Hanna's nickel plant readies for production: Mining World, v. 16, no. 8, p. 91, July 1954.

BIBLIOGRAPHY

56. First ferronickel; activity in Cr and Hg: Mining World, v. 17, no. 5, p. 83, April 1955, pt. 2.
64. Hanna's Oregon project on two-furnace basis: Mining World, v. 17, no. 6, p. 93, May 1955.
68. Oregon masonry interests pool advertising and promotion: Rock Products, v. 58, no. 6, p. 223, June 1955.
BIBLIOGRAPHY OF THE GEOLOGY AND MINERAL RESOURCES OF OREGON

70. Oregon test starts: Oil and Gas Jour., v. 54, no. 1, p. 184, May 1955.


75. Water resources: Oregon Voter, v. 41, no. 4, p. 6-8, Jan. 22; no. 8, p. 10-11, Feb. 19; no. 15, p. 7-9, April 9, 1955.


SUBJECT INDEX

(The numbers refer to entries in the bibliography)

ABERT LAKE

Radiocarbon dating: Allison 2
Saline deposits: Anon. 49

AGATE

(See also: GEM STONES; JASPER; OPAL; PETRIFIED WOOD; THUNDEREGGS)

General information: Dake 2
Iris agate: Jones, F. T.
Localities
  General: Dake 2; Mason 7, Switzer
  Baker County, Orofino mine: Dake 8
  Unity-Ironsde area: Wagner, N. S., 2
  Crook County, near Post: Bebout
  Prineville area: Anon. 46
  Jefferson County, Priddy Ranch: Benn
  Madras-Ashwood area: Dake 10
  Malheur County, Succor Creek: Anon. 33
  Wheeler County, near Spray: Denny
Production: Dake 7; U.S. Bur. Mines 3
Prospecting: Dake 13
Sagenite: Anon. 55

AGATE BEACH FORMATION

Lincoln County: Herron

AGGREGATE

(See: CONCRETE AGGREGATE; LIGHTWEIGHT AGGREGATE)

ALBANY QUADRANGLE

Geology: Allison 5; Vokes 2

ALKALI LAKE

Salines: Anon. 49

ALSEA QUADRANGLE

Geology: Baldwin, E.M., 5

ALUMINA

(See also: BAUXITE)
Hobart Butte clay: Allen, V. T., 1
Recovery, from clay by leach process:
  Kinoshita
  from Oregon laterites: Chittenden
Reduction plants: Anon. 24, 35; Libbey 17
Resources: Merryfield; Sohn 1

ALUMINUM

Industry: Anon. 1, 52; Engle; Jensen 1;
  Morple; Thayer, C. S.

ALUMINUM SILICON

Lake County: Anon. 36

ALVORD CREEK FORMATION

Harney County, William, 3

ANA RIVER SECTION

Geology, Lake County, Conrad 1

ANCIENT MAN

Columbia Basin salvage program: Roberts, F. H. H., 1
Great Basin, radiocarbon dating: Cressman 2
Klamath County: Cressman 1
  Lower Klamath Lake: Anon. 50
  Lower Sprague River area: Merewether
  Klamath Indian Reservation, radiocarbon
dating: Libby 3
  Lake County, Folsom man: Smithsonian Inst.
    Fort Rock Cave: Flint; Henry
BIBLIOGRAPHY OF THE GEOLOGY AND MINERAL RESOURCES OF OREGON

ANCIENT MAN, Continued

Oregon Coast: Cressman 3
Umatilla County, McNary Reservoir: Osborne; Shimer
Wasco County, The Dalles region: Butler, Cole

ANDERSON PLACE FORMATION

Mitchell quadrangle: Howard, C. B.

ANDERSON SHALE

Mitchell quadrangle: McIntyre, J.M.

ANTIMONY

Production: Libbey 6, 16; U.S. Bur. Mines 1, 3

APPLEGATE GROUP

Southwest Oregon: Wells, F.G., 3; Wolfe, H.D.

ARAGO GROUP

Coal resources: Mason 14
Southwest Oregon: Wells, F.G., 3

ARCHAEOLOGY

(See: ANCIENT MAN)

ARGILLITE

Elkhorn Ridge, Baker County: Taubeneck 2

ASBESTOS

Exploration: Anon. 5
General information: Ladoo
Industrial resources: Kauffman 2
Localities, general: Meyers 1
Evans Creek area, Jackson County, Bartley
Production annual: Libbey 6, 16; Oreg. Dept. Geol. 19;
U. S. Bur. Mines 3

ASH

(See: VOLCANIC ASH)

ASPHALT

Occurrences in lavas: Felts

ASSAY LABORATORIES

Listed: Klahold

ASSESSMENT WORK

Oreg. Dept. Geol. 22

ASTORIA CANYON

Submarine geology: Dietz 1, Menard 4, 5

ASTORIA FORMATION

Clatsop County: Lowry, Seitz; Stewart, R.E., 1
Correlation with Sobrante sandstone: Lutz
Depoe Bay area: Daugherty
Lincoln County beaches: Steere 2
Marine vertebrates: Downs 3
Yaquina Bay area: Heacock 1

BAILEY BUTTE FORMATION

Mitchell quadrangle: Howard, C. B.

BAILEY FORMATION

Dayville quadrangle: Nesbit
Suplee area: Bragan, H.P.

BAKER COUNTY

Geology

Bald Mountain batholith: Taubeneck 1
Cornucopia, petrographic studies:
Goodspeed 1, 2, 3, 4, 5, 6; Lewis, D.V.; Reynolds
Elkhorn Mountains: Taubeneck 2, 3
Huntington quadrangle: Beeson
Snake River area: Cook 1; Wheeler
Wallowa Mountains: Reid; Wagner, N.S., 7
Washington County, Idaho:
Anderson, A.L.
Ground water, Baker Valley: Trauger 2
Artesian levels: U.S. Geol. Survey 12

Mineral Resources

Agate: Dake 8, Wagner, N.S., 2
Asbestos: Meyers 1
Ash, pozzolanic properties: Heath
Gold, historical: Clark, D.H.; Garber; Smith, G.A.
Placer laws: Masson; Oreg. Dept. Geol. 17
Production: Anon. 11, 18, 47; Maurer 1, 2; Mote
SUBJECT INDEX

Mineral Resources, continued:

Gypsum: McDivitt
Iron: Mason 9
Lightweight aggregates: Mason 3
Limestone: Anon. 51; Gillson; Lenhart 2; Norberg; Utley 2
Oil and gas exploration: Stewart, R.E., 2
Perlite: Hamblen
Mineral production, 1952: Kauffman 3
Quartz: Caldwell
Tungsten: Wolfe, H.D.
Uranium: Crosby; Matthews
Paleontology, Mastodons: Downs 1
Soil survey: Anderson, A.C.

BAKER VALLEY

Geology: Wagner, N.S., 4
Ground water: Trauger 2

BALD MOUNTAIN BATHOLITH

Elkhorn Mts., Baker County: Taubeneck 1, 3

BARITE

Industrial resources: Kauffman 2

BASALT

(See also: COLUMBIA RIVER BASALT; INTRUSIVES)
Analyses: Oregon Dept. Geol. 2
Distribution in Oregon: Callaghan
Tertiary sequence: Waters 3

BASIN AND RANGE PROVINCE

Geology: Conrad, 1, 2; Freeman 2

BAUXITE

Analyses, Salem Hills: Corcoran 2, 4
Oregon general: Fleischer
Annual reviews: Libbey 6, 16; Oregon Dept. Geol. 30
Bibliography: Fischer
Exploration: Anon. 5, 67; Libbey 25, 26
General information: Ladoo
Industrial resources: Kauffman 2
Localities
  Clackamas County: Oreg. Dept. Geol. 10
  Columbia County: Hotz; Libbey 2
  Columbia River basin: Bariell 2; Sohn 1
  Marion County, Lyons quad.: Barlow; Halstead

BAUXITE Localities, Continued:

  Salem Hills: Corcoran 2, 4
  Northwest Oregon: Lowry
  Portland region: Bell
  Petrography: Allen 2; Corcoran 4
  Production: Anon. 11; Bingham

BENTON COUNTY

Geology
  Albany quadrangle: Allison 5
  Alsea quadrangle: Baldwin, E.M., 5
  Corvallis area: Vokes 2
  Halsey quadrangle: MacPherson
  Marys Peak intrusive: Roberts, A.E.
  Marys Peak quadrangle: Baldwin, E.M., 5
Ground water: Newcomb 1; U.S. Geol.
  Survey 12
Mineral production, 1952: Kauffman 3
  Oil and gas exploration 2

BENTONITE

Astoria landslides: Dole 4

BIBLIOGRAPHIES

Bauxite: Fischer
Clay: Gierhart 2
Coal: Berryhill
Coos Bay: Washington University
Copper: Luttrel
Fossil vertebrates: Camp
Geologic source material: Pearl
Marine geology: Terry
Mercury: Ebner
Nonmetallics: Ladoo
Oil and gas exploration: Stewart, R.E., 2
Open-file reports: U.S. Geol. Survey 13
Oregon geology, 1946-1950: Steere 1
Paleobotany: Nat. Res. Council 1
Sulphur and pyrite: Espenshade
Titanium: Carpenter
Uranium: Cooper, M.
Water resources: Young, L.L., 1

BIOCHEMICAL PROSPECTING

Lead zinc in plants: Warren

BIOGEOGRAPHY

Mammals: Simpson 2
BIBLIOGRAPHY OF THE GEOLOGY AND MINERAL RESOURCES OF OREGON

BIRCH CREEK AREA
Dayville quadrangle: Dawson

BLACK BUTTE SHALE
Mitchell quadrangle: Swarbrick

BLACK SANDS
Coastal counties: Libbey 2

BLAKELY FORMATION
St. Helens quadrangle: Hotz

BLUE BUCKET MINE
Grant County: Nedry

BLUE CHIP METALS
"New" metals in industry: Libbey 10

BLUE MOUNTAINS
Physiography: Freeman 2

BOHEMIA DISTRICT
Lead-zinc floatation: Hendrickson

BONANZA MINE
Quicksilver: Anon. 11; Brown, R.E., 2; Gilbert

BONNEVILLE DAM
Spillway erosion: Anon. 73; Besgen

BORATE MINERAL
Curry County: Staples 4

BORING LAVAS
General: Lowry
Clackamas River area: Gilchrist 1
Oregon City area: Trimble 1
Portland area: Elsey
Tualatin Valley: Hart 2

BRICK CREEK AREA
Lane County: Bales

BRICK
Industry: Anon. 68
Refractory: Kelly

BRIDGE CREEK FLORA
(See: FOSSIL PLANTS)

BRIDGE CREEK FORMATION
Mitchell quadrangle: Howard, C. B.

BRIDGE OF THE GODS
Geologic history: Clark, E. E.

BUILDING STONE
Industry: Kauffman 2, Oregon Dept. Geol. 30
Producers listed: Mason 10
Volcanic tuffs: Barlow; Halstead; Mason 3

BULL CREEK FORMATION
Clackamas River: Gilchrist 1

BULL RUN RIVER
Water Supply: Marshall; Morrow, B. S.

BURPEE FORMATION
Marys Peak: Roberts, A. E.
Southwest Washington: Snavely 1
Spirit Mountain quadrangle: Baldwin, E.M. 4

CALAPOOYA FORMATION
Anlauf quadrangle: Allen, V.T., 1

CALCITE
Mitchell Butte quadrangle: Pritchett

CALDERAS
Crater Lake: Williams 1
Origin: Kuno

CAPE BLANCO
Miocene Astoria Formation: Durham 3
SUBJECT INDEX

CARBONACEOUS ROCKS

Uranium bearing: Duncan 2; Moore, G. W.

CARBON DIOXIDE

Ashland: Schafer 1
Production: U.S. Bureau Mines 3

CARBONIFEROUS

Wallowa Mts.: Wagner, N. S., 7

CARNOTITE

(See: URANIUM)

CASCADE ANDESITE

(See also: CASCADE FORMATION; CASCAN FORMATION)
General: Waters 3

CASCADE FORMATION

Lyons quad.: Barlow; Halstead

CASCADE PROVINCE

Physiography: Dicken 3

CASCAN FORMATION

General: Lowry

CATLOW VALLEY CREVICE

Harney County: McLeod 1; Wagner, N. S. 3

CAVES

Arnold cave, ice stalagmites: Dake 4
Catlow cave, radiocarbon dating: Libby 2
Fort Rock cave, radiocarbon dating: Flint; Henry; Hunt; Libby 1, 2; Roberts, F. H. H. 2; Smithsonian Inst.
Lava caves, central Oregon: Halliday
Malheur caves, ice stalagmites: Dake 4

CEMENT

(See: LIME)

CERAMIC INDUSTRY

(See also: CLAY)
Review: Jacobs

CHEMICAL RAW MATERIALS

Industrial: Kaiser Alum. & Chem. Corp.

CHLOROPHAELITE

Butte Falls quad.: Smedes

CHROMITE

Annual reviews: Libbey 6, 16, 26; Mason 6; Oreg. Dept. Geol. 19, 30; U. S. Bur. Mines 3
Beneficiation: Batty
Chemical raw materials: Kaiser Alum. & Chem. Corp.
Concentrating mills listed: Oreg. Dept. Geol. 3
Locality
Coastal counties: Libbey 2
Douglas County: Libbey 3
Gardner prospect, Curry County: Ramp 1
Gasquet quad. (Calif.-Ore.): Cater
Oregon occurrences listed: Mason 1
Purchase program
Grants Pass depot: Anon. 3, 11, 15, 18; Bingham; Bristol, F. I.; Bristol, E.; Katlin; Libbey 1, 12, 16, 21; Oreg. Dept. Geol. 23
Refractory properties: Kelly
Shippers listed: Oreg. Dept. Geol. 3

CINDERS

Jordan Craters, Malheur County: Whipple
Klamath Indian Reserv.: Walker, G. W.
Lightweight aggregate: Mason 3

CINNABAR

(See: MERCURY)
Gem quality: Mihelic

CLACKAMAS COUNTY

Geography: Cross
Geology
Clackamas River area: Gilchrist 1
Eolian deposits: Nat. Research Council 2
Glacial erratics: Kelham 1
Oregon City area: Trimble 1
Quartzite cobbles: Howell 1
Rhododendron Formation: Trimble 2
Tualatin quadrangle: Schlicker 2
Tualatin River, history: Erickson, R.
Tualatin Valley: Hast 2
Mineral resources
Asbestos: Meyers 1
CLACKAMAS COUNTY,

Mineral resources, continued:
Bauxite: Oreg. Dept. Geol. 10; Sohn 1
Cement production: Anon. 71; Nordberg
Coal: Mason 14
Iron ore: Bartell 1; Hergert 1; Mason 9
Mercury: Oreg. Dept. Geol. 32
Mineral production, 1952: Kauffman 3
Molybdenum minerals: Staples 2
Oil and gas exploration: Stewart, R.E., 2
Silica, pozzolon tests: Heath
Paleontology
Culatamas flora: Wolfe, J.A., 2
Mineral resources

CLACKAMAS RIVER AREA

Geology: Gilchrist 1; Wolfe, J.A., 2

CLARNO FORMATION

Coal resources: Mason 14
Fossils
Nuts: Dake 5; Scott, R. A., 2
Vertebrates: Erickson, J., 4
Localities
Dayville quad.: Dawson; Brogan, J.P.
Horse Heaven mining dist.: Waters 1
John Day country: Steere 3; Wolfe, J.A., 1
Lookout Mt. quad.: Winney
Mitchell quad.: Bedford; Bowers;
Howard, C.B.; Mcintyre; Swarbrick
Spray quad.: Irish, R. J.
Umatilla County, southern: Wagner, N.S., 5

CLATSOP COUNTY

Geology
Astoria Formation: Selz
Astoria landslides: Dole 4
Oligocene shale in Astoria: Stewart, R.E., 1
Saddle Mountain: Boardman; Baldwin, E.M., 3
Wave erosion, Columbia River: O'Brien

Mineral resources
General: Libbey 2
Coal: Mason 14
Iron: Mason 9
Mineral production, 1952: Kauffman 3
Oil and gas exploration: Anon. 70;
Dole 6; Gardner 2; Stewart, R.E., 2

Paleontology
Foraminifera: Stewart, R.E., 1
Vertebrates: Downs 3; Shotwell 2

CLAY

Alumina clay
Hobart Butte: Allen, V.T., 1
Leach process: Kinosita
Annual reviews: Libbey 6; Mason 6; Oreg.
Dept. Geol. 30; U.S. Bur. Mines 3
Bibliography: Gierhart 2

CERAMIC INDUSTRY: Jacobs

Chemical raw materials: Kaiser Alum. & Chem. Corp.
Differential thermal analysis: Kauffman 1
Fire clays: Wilcox
Industrial resources: Kauffman 2; Sohn 2
Petrography of clay minerals: Allen, V.T., 2
Refractory consumption: Sterrett 2
Lyons quad.: Barlow
Walle Walla basin deposits: Newcomb 2
William clay deposit: Baldwin, E.M., 6

CLIMATES

Analysis of Oregon: Jones, E.J.
Paleoclimates: Antevs; Barghoorn; Durham 1;
Potter; Valentine 1, 2

CLOVER CREEK GREENSTONE FORMATION

Seven Devils region: Cook 1
Wallowa Mts.: Palen; Reid; Wagner, N.S., 7

COAL

Annual Reviews: Libbey 6; Mason 6; U.S.
Bur. Mines 3
Bibliography: Berryhill
Chemical raw materials: Kaiser Alum. & Chem. Corp.
Localities
Coastal counties: Libbey 2
Coos Bay field
Analyses: Selvig
Burning properties: Flynn; Yancey
Geology: Duncan, C., 1
Resources: Mason 14
Thickness: Young, W.H.
Douglas County: Libbey 3
Eden Ridge field: Mason 14
Evans Creek area: Bartley; Mason 14
Rogue River field: Mason 14
Squaw basin deposit: Mason 14
Petrographic study of subbituminous: Parks
Resources in Oregon: Mason 14; Merryfield
Uranium bearing: Moore, G. W.
SUBJECT INDEX

COALEDO FORMATION
Coos Bay coal field: Duncan, D.C., 1; Mason 14
Depositional features: Dott
Fossil localities: Steere 5

COAST RANGE
Intrusives: Snavely 2
Marys Peak and Alsea quads., geology: Baldwin, E. M., 5
Oil and gas exploration: Buddenhagen 2
Physiography: Dicken 3
Upper Nehalem River basin: Deacon

COBURG HILLS
Geology: Vokes 1

COFFEE CREEK FORMATION
Suplee area: Brogan, J.P.

COFFIN BUTTE VOLCANICS
Albany quad.: Allison 5

COLEBROOK SCHISTS
Curry County: Hundhausen 2

COLLAWASH FLORA
(See: FOSSIL FLORAS)

COLPITTS FORMATION
Suplee area: Brogan, J. P.

CASCADE MOUNTAINS
Mapping: Bumstead
Physiography: Dicken 3

COLUMBIA COUNTY
Geology
Eolian deposits: Nat. Research Council 2
Tualatin Valley: Hart 2
Upper Nehalem River basin: Deacon; Moore, R. C.
Mineral Resources
Bauxite: Allen, V. T., 2; Anon. 11; Chittenden; Libbey 2; Sohn 2
Coal: Mason 14
Commercial minerals, review: Libbey 2

Mineral Resources, continued:
Expanded shale: Gillson; Mason 3
Iron ore: Anon. 18; Bartell 1, 2; Gierhart 3; Hotz; Mason 9;
Walsted 2, 3
Mineral production, 1952: Kauffman 3
Oil and gas exploration: Anon. 59, Stewart, R. E., 2
Paleontology
Lower Tertiary crinoids: Moore, R. C.

COLUMBIA PLATEAU
Physiography: Freeman 2

COLUMBIA RIVER BASALT
Correlation in western Oreg.: Schlicker 1
General: Waters 3
Locality
Clackamas River area: Gilchrist 1
Columbia River Gorge: Mason 15
Dayville quad.: Brogan, J. P.; Dawson; Nesbit
Institution sites, Willamette Valley:
Schlicker 2
John Day country: Steere 3
Lookout Mt. quad.: Swinney
Lowell quad., Winberry Creek: Ashwill
McMinnville quad.: Brown, R. D.
Mitchell butte quad.: Porter
Mitchell quad.: Bedford; Bowers;
McIntyre; Swarbrick
Northwest Oregon: Lowry; Schlicker 1
Oregon City area: Trimble 1
Portland area: Elsey
Saddle Mt., Clatsop County:
Baldwin, E. M. 3
Salem Hills: Corcoran 2, 4
Sheridan and McMinnville quads.:
Baldwin, E. M., 6
Snake River area: Anderson, A. L.;
Cook; Stearns 2; Wheeler
Spray quad.: Irish, R. J.
Telocaset quad.: Wagner, N. S., 4
The Dalles dam area: Sargent 2
Tualatin quad.: Schlicker 2
Umatilla County, southern:
Wagner, N. S., 5
Vale-Buchanan area: Dole 3
Wallowa Mts.: Polen; Wagner, N. S., 7

Resources
Bauxite: Corcoran 2, 4; Libbey 26
Ground water: Brown, S. G., 2;
Hart 2; Kinnison; Newcomb 1, 2
Iron ore, Scappoose: Hotz; Walsted 1
BIBLIOGRAPHY OF THE GEOLOGY AND MINERAL RESOURCES OF OREGON

COLUMBIA RIVER BASIN

Archaeological program: Roberts, F.H.H., 1
Clay resources: Sohn 2
Geology: Campbell; Lowry
Glacial history: Gilchrist 5
Sedimentation rates: Flexman

COLUMBIA RIVER ESTUARY

Wave erosion: O'Brien

COLUMBIA RIVER GORGE

Bridge of the Gods, origin: Clark, E.E.
Erratics: Sargent 3
Geology: Mason 15
Travelog: Borah

COLUMNAR BASALT

Jointing: Bowers; Smedes; Swarbrick

COMSTOCK FLORA

(See: FOSSIL FLORAS)

CONCRETE AGGREGATE

Engineering structures: Anon. 4, 12, 16;
Lenhart 3; Ruff; Scott, L.E.; Wells, J.M.

CONDON, THOMAS

Biographical: Anon. 34; Baldwin, R. L.;
Oreg. Dept. Geol. 13

CONGLOMERATE

Mitchell quad.: Bedford; Bowers; McIntyre;
Swarbrick

CONSERVATION

Education: Oreg. State Board of Ed.

CONTINENTAL DRIFT

Relation to faunas: Durham 2; Wolfson

CONTINENTAL SHELF

Astoria Canyon: Dietz 1
Geology: Stetson
Mineral exploration lows: Groom
Oil exploration: Anon. 20, 44

CONTINENTAL SHELF, Continued:

Public lands: Duncan, H. J.

CONTINENTS

Origin: Kay 3

COOS COUNTY

Bibliography: Washington, University of
Geography: Feichtinger
Geology
Coos Bay coal field: Duncan, D.C., 1
Eocene bedding: Datt
Map of southwest Oregon: Wells, F.G., 3
Meteorites: Prior
Serpentine, thermal analysis: Kauffman 1
History: Peterson
Mineral Resources
Asbestos: Meyers 1
Chromite: Kelly
Coal: Flynn; Mason 14; Selvig; Walsted
3; Yancey; Young, W.H.
Commercial minerals review: Libbey 2
Gold placers: Masson
Mineral production, 1952; Kauffman 3
Oil and gas exploration: Anon. 45;
Moody; Stewart, R.E., 2
Uranium in carbonaceous rocks:
Moore, G.W.
Paleontology
Fossil localities: Steere 5
Sea lion: Shotwell 1

COPPER

Annual production: Maurer, 1, 2; Mate;
U. S. Bur. Mines 3
Bibliography: Luttrell
Chemical raw materials: Kaiser Alum. &
Chem. Corp.
Export to Japan: Anon. 30
Localities
Evans Creek area, Trail quad.: Bartley
Galice quad.: Wells, F.G., 2
Huntington quad.: Beeson
Little North Santiam: Jensen 2
Shamrock mine, Jackson County:
Hundhausen 1
Steers-Pueblo Mts.: Williams 3

CORNUCOPIA MINING DISTRICT

Petrographic studies: Goodspeed 1, 2, 3, 4, 5,
6; Lewis, D.V.; Reynolds
SUBJECT INDEX

CORVALLIS QUADRANGLE
Geology: Vokes 2

COTTAGE GROVE QUADRANGLE
Geology: Vokes 1

COWLITZ FORMATION
Upper Nehalem River: Deacon

COYOTE BUTTE FORMATION
Suplee area: Brogan, J. P.

CRATER LAKE
General: Williams, 1
Glaciers: Hinds
Origin: Cotton; Kuno; Muench
Radiocarbon dating of eruption: Carter; Roberts, F.H.H., 2
Road guide: Ruhle

CRATER LAKE AREA
Igneous rocks, geochemistry: Nockolds
Lightweight aggregate industry: Mason 3
Pyroclastic materials: Ross

CRETACEOUS
Bald Mountain batholith: Taubeneck 1
Fossil fern: Ransom 1
Localities:
Dayville quad.: Brogan, J.P.; Dawson; Nesbit
Galice quad.: Wells, F.G., 2
Gasquet quad. (Calif.-Oreg.): Cater
John Day region: Steere 3
Mitchell quad.: Bedford; Howard, C.B.; McIntyre, L.B.; Swarbrick
Nickel Mountain: Oreg. Dept. Geol. & Min. Ind. 12
Southwest Idaho: Stearns 2
Southwest Oregon, map: Wells, F.G., 3
Spray quad. Irish, R.J.
Wallowa Mts.: Wagner, N.S., 7

CRATERS
(See: CALDERAS; CRATER LAKE; JORDAN CRATERS)

CRINOIDS
(See: FOSSIL INVERTEBRATES)

CROOK COUNTY
Geology
Gypsum, thermal analysis: Kauffman 1
Lookout Mt. quadrangle: Swinney
Suplee area: Brogan, J. P.
Thunder eggs: Anon. 65
Ground water, artesian levels: U.S. Geol. Survey 12
Mineral Resources
Agate: Anon. 46, 65; Bebout
Lightweight aggregates: Mason 3
Mercury: Anon. 76; Brown, R.E., 1; Oreg. Dept. Geol. 32
Mineral production, 1952: Kauffman 3
Oil and gas exploration: Anon. 54; Stewart, R. E., 2
Uranium: Matthews
Paleontology
Osmundites, Eocene Clarno: Arnold 1
Paleozoic ferns: Arnold 1

CROOKED RIVER, UPPER
Paleozoic faunas: Merriam

CROW QUADRANGLE
Geology: Vokes 1

CURRY COUNTY
Geology
Borate (priceite): Staples 4
Gasquet quadrangle (Calif.): Cater
Map of southwest Oregon: Wells, F.G., 3
Miocene at Cape Blanco: Durham 3
Port Orford meteorite: La Paz; Oreg. Dept. Geol. 5
History: Peterson
Mineral Resources
Asbestos: Meyers 1
Chromite: Mason 1; Ramp 1
Coal: Mason 14
Commercial minerals review: Libbey 2
Gold production: Maurer; Matte
Iron deposits: Mason 9
Mineral production, 1952: Kauffman 3
Nickel, Red Flats: Hundhausen 2; Libbey 22
Oil and gas exploration: Stewart, R.E., 2
Uranium: Matthews

67
BIBLIOGRAPHY OF THE GEOLOGY AND MINERAL RESOURCES OF OREGON

DAM SITES

Bonneville, erosion: Anon. 73; Basgen
Coastal streams, water power: Helland
Columbia River dams, construction materials:
  Lenhart 3
Cottage Grove, geology: Burwell
Crescent Lake: U. S. Bur. Reclam. 7
Detroit, construction materials: Anon. 4, 16;
  geology: Burwell; U. S. Corps. Eng. 1
Dexter, geology: Burke
Dorena, geology: Burwell; U. S. Corps. Eng. 2
Fern Ridge, geology: Burwell
Hells Canyon: U. S. Bur. Reclam. 4
Hills Creek: U. S. Corps Eng. 4
Lookout Point reservoir, geology: Howell 4;
  landslides: Newby; Staples 7
McNary, construction materials: Droke, Wells,
  J.M.; foundation: Arthur
Rogue River, Mile 186.5, geology: Miller, J.C.
The Dalles Dam, construction materials:
  Anon. 57; Lenhart 4
Upper McKenzie site; buried channels: Coombs

DAWN REDWOOD

(See: FOSSIL PLANTS)

DAYVILLE QUADRANGLE

Geology: Brogan, J. P.; Nesbit

DEPOE FORMATION

Lincoln County: Herron

DESCUTES COUNTY

Geology
  Growing avalanche deposits: Williams 2
  Newberry Crater, date of eruption: Brogan,
    P.F.; Cressman 2; Libbey 1
  Stalagmites in Arnold Cave: Dake 4
  Three Sisters area: Hopson 2, 3
Mineral Resources
  Ash, pozzalanic properties: Heath
  Diatomite: Anon. 5, 11
  Lightweight aggregates: Mason 3
  Mineral production, 1952: Kauffman 3
  Pumice: Bartell 2

DESCUTES RIVER

General description: Borah

DETROIT DAM GEOLOGY

(See: DAM SITES)

DEUTERIC ALTERATION

Columnar basalt: Smedes

DIATOMITE

Annual production: Libbey 6, 16; Mason 6;
  Mines 3
  Industrial uses: Bartell 2; Gillson; Kaiser Alum.
    & Chem. Corp.; Kaufman 2; Mason 3
  Lightweight aggregate: Mason 3
  Occurrences: Ladoo; Mason 3; Merewether

DIFFERENTIAL THERMAL ANALYSIS

Oregon minerals: Kauffman 1

DIKES, CLASTIC

Fort Rock Valley: Allison 4

DIKES, INTRUSIVE

Carnucopia, Baker County: Goodspeed 2, 3,
  4, 6; Lewis, D.C.; Reynolds
  Dayville quad.: Dawson
  Horse Heaven district: Waters 1
  Mitchell quad.: Bedford; Bowers; Howard,
    C.B.; Swarbrick
  Saddle Mt., Clatsop County: Baldwin, E.M., 3
  St. Helens quad.: Hotz
  Sheridan and McMinnville quads., Baldwin,
    E.M., 4
  Spirit Mountain quad.: Baldwin, E.M., 4
  Upper Nehalem River: Deacon

DIRECTORIES

Industrial minerals producers: Bartell 4
  Mining, annual lists: Anon. 8

DORENA TUFF FORMATION

Row River, Lane County: Hausen, 1, 2
SUBJECT INDEX

DOThan FORMATION

Galice quadrangle: Wells, F. G., 2
Nickel Mountain area: Oreg. Dept. Geol. 12
Southwest Oregon (map): Wells, F. G., 3

DOUGLAS COUNTY

Geology

Bananza-Nonpareil district: Brown, R. E., 2
Galice quadrangle: Wells, F. G., 2
General summary: Libbey 3
Hobart Butte area: Allen, V. T., 1
Map of southwest Oregon: Wells, F. G., 3
Nickel Mountain: Schoenike; Oreg. Dept. Geol. 12
Quartz stalactites: Housley
South Umpqua River area: Ramp 2

Mineral Resources

Asbestos: Meyers 1
Chromite: Mason 1
Gold: Masson; Mote
Iron deposits: Mason 9
Mercury: Anon. 11, 18, 51, 76; Brown, R. E., 2; Gilbert; Oreg. Dept. Geol. 32; Schuette
Mineral production, 1952: Kauffman 3
Mineral resource review: Broders; Libbey 2, 3
Nickel, Riddle, exploration: Anon. 5; Rove; Schoenike; VanVoorhis; Walker
Metallurgy: Anon. 6; Cremer; Walsle 3
Production: Anon. 11, 23, 26, 42, 43, 51, 64, 67; Beall; Libbey 15; Long; Oreg. Dept. Geol. 12
Thermal analysis: Kauffman 1
Oil and gas exploration: Stewart, R. E., 2; Taylor

DREDGING SAND AND GRAVEL

Willamette and Columbia Rivers: Lenhart 1

DRY ICE FROM CO2 IN WELL WATER

Ashland area, geology: Schafer 1

EAGLE CREEK FORMATION

Clackamas River area: Gilchrist 1; Wolfe, J. A., 2

EARTHQUAKES

Accelerograph installed: Mason 8
General information: Byerly; Neumann
Recent quakes described: Hodgson; Mason 12; Miller, A. L.; Nuttli
Records: Herrick; Murphy; Seismol. Soc. Am.; Slemons; Tocher 1, 2; U. S. Coast & Geod. Survey
Submarine: Tocher 2

EAST EVANS CREEK AREA

Trail quad., geology: Bartley

ECHINOIDS

(See: FOSSIL INVERTEBRATES)

EDEN RIDGE COAL FIELD

(See: COAL)

ELKHORN MOUNTAINS

Geology: Taubeneck 1, 2, 3

ELKHORN RIDGE ARGILLITE

Baker County: Taubeneck 2

ELMIRA QUADRANGLE

Geology: Vokes 1

EMPIRE FORMATION

Fossil localities, Coos County: Steere 5

ENGINEERING GEOLOGY

(See also: DAM SITES; LANDSLIDES)
Secondary minerals in pavement failure: Scott, L. E.

EOCENE

Basaltic rocks: Waters 3
Coal resources: Mason 14
Fossils, Clarno: Dake 5; Erickson; Scott, R. A., 2; Wolfe, J. A., 1
BIBLIOGRAPHY OF THE GEOLOGY AND MINERAL RESOURCES OF OREGON

EOCENE Fossils, continued:

Coos Bay localities: Steere 5; shotwell 1; Deacon
Marine general: Durham 2

Localities
Albany quadrangle: Allison 5
Ashland area: Schafer 1
Bananza-Nonpareil area: Brown, R.E., 2
Clackamas River area: Gilchrist 1
Coos Bay area: Duncan, D.C., 1; Dott
Corvallis area: Vokes 2
Dayville quadrangle: Brogan, J.P.
Eugene area: Vokes 1
Hobart Butte area: Allen, V.T., 1
Horse Heaven mining dist.: Waters 1
John Day country: Steere 3
Lookout Mt. quadrangle: Swinney
McMinnville quadrangle: Baldwin, E.M., 6; Brown, R. D.
Mitchell quadrangle: Bowers; Howard, C.B.; McIntyre, L.B.; Swarbrick
Nickel Mountain area: Oreg. Dept. Geol. 12
Sheridan quadrangle: Baldwin, E.M., 6
South Umpqua River: Ramp 2
Southwestern Oregon, map: Wells, F.G., 3
Spirit Mt. quadrangle: Baldwin, E.M., 4
Spray quadrangle: Irish
Trail quadrangle: Bartley
Tualatin Valley: Hart 2
Umatilla County: Wagner, N.S., 5
Upper Nehalem River: Deacon

ERRATICS

Glacial: Allison 5; Kelham 1; Lowry; MacPherson; Vokes 2
Ice rafted, Summer Lake: Conrad 1
Tree rafted: Sargent 3

EUGENE FORMATION

Albany quadrangle: Allison 5
Eugene area: Vokes 1
Salem Hills area: Corcoran 2
Silver Creek Falls area: Gilchrist 4

EXPANDED SHALE

Lightweight aggregate industry: Bartell 2; Brooke; Gillson; Mason 3;
Smithwick 1, 2
Shale testing: Riley
Use in The Dalles Bridge: Anon. 22

FIELD MANUAL

Oregon geology for schools: Gray

FIREBALL

Oregon, 1945: Olivier

FIREBALL

Prehistory: Jennings
Radiocarbon dating, fiber sandals: Flint; Henry; Libby 1, 2; Roberts, F.H.H., 2;
Smithsonian Inst.

FLOURESCENT MINERALS

Dake 6

FORT ROCK CAVE

Clastic dikes: Allison 4
Ground water: Newcomb 1, 3

FERN RIDGE FORMATION (TUFFS)

General distribution: Lowry
Lyons quadrangle: Barlow; Halstead
Silver Creek Falls area: Gilchrist 4
Used for building stone: Mason 3

FERROALLOYS

(See also: NICKEL)
Pacific Northwest: Marple

FERTILIZERS, MINERAL

Resources: Mason 4

FISH LAKE AREA

Wallowa Mountains, geology: Reid

FISHER FORMATION

Eugene area: Vokes 1
Winberry Creek area: Ashwill

FLUORESCENT MINERALS

Dake 6

FORT ROCK VALLEY

Coos Bay localities: Steere 5; Shotwell 1; Deacon
Marine general: Durham 2

Localities
Albany quadrangle: Allison 5
Ashland area: Schafer 1
Bananza-Nonpareil area: Brown, R.E., 2
Clackamas River area: Gilchrist 1
Coos Bay area: Duncan, D.C., 1; Dott
Corvallis area: Vokes 2
Dayville quadrangle: Brogan, J.P.
Eugene area: Vokes 1
Hobart Butte area: Allen, V.T., 1
Horse Heaven mining dist.: Waters 1
John Day country: Steere 3
Lookout Mt. quadrangle: Swinney
McMinnville quadrangle: Baldwin, E.M., 6; Brown, R. D.
Mitchell quadrangle: Bowers; Howard, C.B.; McIntyre, L.B.; Swarbrick
Nickel Mountain area: Oreg. Dept. Geol. 12
Sheridan quadrangle: Baldwin, E.M., 6
South Umpqua River: Ramp 2
Southwestern Oregon, map: Wells, F.G., 3
Spirit Mt. quadrangle: Baldwin, E.M., 4
Spray quadrangle: Irish
Trail quadrangle: Bartley
Tualatin Valley: Hart 2
Umatilla County: Wagner, N.S., 5
Upper Nehalem River: Deacon

ERRATICS

Glacial: Allison 5; Kelham 1; Lowry; MacPherson; Vokes 2
Ice rafted, Summer Lake: Conrad 1
Tree rafted: Sargent 3

EUGENE FORMATION

Albany quadrangle: Allison 5
Eugene area: Vokes 1
Salem Hills area: Corcoran 2
Silver Creek Falls area: Gilchrist 4

EXPANDED SHALE

Lightweight aggregate industry: Bartell 2; Brooke; Gillson; Mason 3;
Smithwick 1, 2
Shale testing: Riley
Use in The Dalles Bridge: Anon. 22

FELDSPAR

Resources: Krouffman 2

FERN RIDGE FORMATION (TUFFS)

General distribution: Lowry
Lyons quadrangle: Barlow; Halstead
Silver Creek Falls area: Gilchrist 4
Used for building stone: Mason 3

FERROALLOYS

(See also: NICKEL)
Pacific Northwest: Marple

FERTILIZERS, MINERAL

Resources: Mason 4

FIELD MANUAL

Oregon geology for schools: Gray

FIREBALL

Oregon, 1945: Olivier

FISH LAKE AREA

Wallowa Mountains, geology: Reid

FISHER FORMATION

Eugene area: Vokes 1
Winberry Creek area: Ashwill

FLUORESCENT MINERALS

Dake 6

FORT ROCK CAVE

Prehistory: Jennings
Radiocarbon dating, fiber sandals: Flint; Henry; Libby 1, 2; Roberts, F.H.H., 2;
Smithsonian Inst.

FORT ROCK VALLEY

Clastic dikes: Allison 4
Ground water: Newcomb 1, 3
FOSSIL INVERTEBRATES

General
Continental drift: Durham 2
Facts about fossils: Oregon Dept. Geol. 7
Field manual for schools: Gray
Inland sea shells: Morrow, M. G.
Paleozoic work: Cloud, P. E.; Merriam

Fossil assemblages
Cretaceous: Bowers; Brogan, J. P.; Howard, C. B.; McIntyre, L. B.
Eocene: Allison; Baldwin, E. M., 4, 5, 6; Duncan, D. C., 1; Durham 2; Steere 5; Vokes 1, 2
Jurassic: Brogan, J. P.; Nesbit
Miocene: Daugherty; Herron; Lutz; Steere 2
Oligocene: Baldwin, E. M., 6; Brown, R. D.; Deacon; Heacock; Steere 2; Vokes 1
Paleozoic: Bowers; Brogan, J. P.; Dawson; Merriam; Taubeneck 2
Pliocene: Meyers; Vokes 1
Triassic: Nesbit; Palen

Fossils described
Crinoids: Moore, R. C.
Echinoids: Durham 4
Foraminifera: Daugherty; Heacock; Rau; Stewart, R. E.
Nautiloid: Kummel
Odonate: Fraser
Ostracod: Conrad 2

Localities
Agate Beach area: Herron
Albany quadrangle: Allison 5
Bonanza quicksilver area: Brown, R. E., 2
Coos Bay area: Durham, D. C.; 1; Steere 5
Corvallis area: Vokes 2
Dayville quadrangle: Brogan, J. P.; Dawson; Nesbit
Depoe Bay: Daugherty
Elkhorn Ridge: Taubeneck 2
Eugene area: Vokes 1
Halsey quadrangle: MacPherson
Lincoln County beaches: Steere 2
McMinnville quadrangle: Baldwin, E. M., 6; Brown, R. D.
Mist area: Moore, R. C.
Mitchell Butte quadrangle: Corcoran 1, 3; Doak
Mitchell quadrangle: Bedford; Bowers; Howard, C. B.; McIntyre, L. B.; Swarbrick
Sheridan quadrangle: Baldwin, E. M., 6
Spirit Mt. quadrangle: Baldwin, E. M., 4
Summer Lake: Conrad 1

FOSSIL INVERTEBRATES, Localities, Continued:
Swan Lake-Yonna Valleys: Meyers 2
Upper Nehalem River: Deacon
Wallowa Mountains: Palen
Yaquina Bay area: Heacock 2

FOSSIL PLANTS

General
Bibliography: National Res. Council 1
Catalog Cenozoic floras: LaMotte
Evolution of desert vegetation: Axelrod
Geologic time scale: Dorf
Paleoecology: Barghoorn
Petrified forests: Ransom 1, 2
Wood identification: Beck

Floras
Blue Mountains: Chaney 4
Bridge Creek: Arnold 2; Barghoorn; Chaney 2, 4
Clarno: Arnold 1; Dake 5; Scott, R. A., 1, 2; Wolfe J. A., 1
Comstock: Barghoorn; Vokes 1
Fisher: Vokes 1
Goshen: Barghoorn; Vokes 1
Mascall: Barghoorn; Chaney, 2, 3, 4
Rujada: Bales
Sweet Home fossil woods: Greene; Hergert 2; Ransom 1

Fossil plants described
Koelreuteria, Knox Ranch: Arnold 2
Metasequoia: Andrew; Chaney 1, 2
Microfossil plants: Oreg. Dept. Geol. 7
Osmundites, Eocene fern: Anon. 7; Arnold 1; Dake 3
Paleozoic ferns: Arnold 3
Tempskya fern: Ransom 1; Taubeneck 1
Trochodendroxylon: Hergert 2

Localities
Brice Creek, Lane County: Bales
East Evans Creek, Jackson County: Bartley
Hobart Butte area: Allen, V. T., 1
Horse Heaven mining district: Waters 1
Mitchell Butte quadrangle: Corcoran 1, 3; Porter
Mitchell quadrangle: Bowers; McIntyre, L. B.; Swarbrick
Suplee area: Arnold 3; Brogan, J. F.
Table Mountain, Jackson County: Anon. 29
Winberry Creek, Lane County: Ashwill
BIBLIOGRAPHY OF THE GEOLOGY AND MINERAL RESOURCES OF OREGON

FOSSIL VERTEBRATES

General
Archeological occurrences: Osborne
Facts about fossils: Oreg. Dept. Geol. 7
Paleoecology: Shotwell 4; Simpson 2

Faunas
Clarno: Erickson, J., 3; Wolfe, J. A., 1
Fossil Lake: Downs 4; Lunk; Packard 2, 3; Wetmore
John Day: Anon. 31, 38; Coleman, R. G.; Green; Schultz; Steere 3
Mascall: Downs 2
McKay Reservoir: Anon. 39; Sargent 1; Shotwell 3, 4, 5, 6

Fossils described
Beaver: Shotwell 6
Birds: Downs 4; Lunk; Wetmore
Camel: Allison 6
Desmostylus: Shotwell 2
Entelodont: Coleman, R. G.
Ground sloths: Packard 2, 3
Mastodont: Downs 1
Miomastodon: Erickson, J., 2; Hancock, B.
Oreodonts: Schultz
Rhinoceros: Anon. 31
Salamander: Van Frank
Seals: Downs 3; Shotwell 1

Localities
Astoria Miocene: Downs 3; Shotwell 2
Clarno area: Erickson, J., 3, 4; Wolfe, J. A., 1
Coos Bay area: Shotwell, 1; Steere 5
Fossil Lake: Downs, 4; Lunk; Packard 2, 3; Wetmore
Goshen area: Van Frank
John Day area: Anon. 31, 38; Coleman, R. G.; Green; Schultz; Steere 3
Klamath County: Meyers 2; Odell
Lake County: Packard 1, 2, 3
Lincoln County beaches: Steere 2
Malheur County: Allison 6
Mascall area: Downs 2
McKay Reservoir area: Anon. 39; Sargent 1; Shotwell 3, 4, 5, 6
McNary Reservoir: Schaller
Mitchell Butte quadrangle: Dool; Pritchett
Spray quadrangle: Irish, R. J.
Upper Nehalem River: Deacon
Willamette Valley: Packard 2, 3

FOUNDRY SAND

Olivine: Schaller

FRIZZELL CONglomerate
Mitchell quadrangle: Bedford

FRIZZELL SHALE
Mitchell quadrangle: Bowers

FUMAROLES
Mount Hood: Ayres

GALICE FORMATION
Wells, F. G., 2, 3

GALICE QUADRANGLE
Geology: Wells, F. G. 2

GARNET
Industrial resources: Kauffman 2
Umatilla County: Anon. 40

GARNIERITE
(See: NICKEL)

GAS
(See: OIL AND GAS)

GAYLUSSITE
Alkali Lake: Anon. 49

GEM STONES
(See also: AGATE, CINNABAR, OPAL, THUNDEREGGS)
Annual reviews: Mason 6; Libbey 6
Industrial resources: Kauffman 2
Prospecting: Dake 13

GEOCHEMICAL STUDIES
Igneous rocks, Crater Lake: Nockolds 1
Minerals in water: Meyers 3

GEODES
Malheur County: Anon. 33
SUBJECT INDEX

GEOGRAPHIC NAMES

McArthur

GEOLOGIC FORMATIONS

Correlation chart: Anon. 41

GEOLOGIC MAPS

Regional (published)
Alumina resources: Sohn 1
Eolian deposits: Nat. Research Council 2
Oregon, generalized: Buddenhagen 1
Uranium areas: Jarrard

Dam sites (unpublished)
Detroit dam: U.S. Corps Engineers 1
Dorena dam: U.S. Corps Engineers 2
Hills Creek dam: U.S. Corps Engineers 4

Mining areas (published)
Bonanza quicksilver: Brown, R.E., 2
Bratcher tungsten: Wolfe, H.D., 1
Hobart Butte area: Allen, V.T., 1
Horse Heaven district: Waters 1
Nickel Mountain: Oreg. Dept. Geol. 12
Red Flats nickel: Hundhausen 2
Scappoose limonite: Hotz

Quadrangles and areas (published)
Albany quadrangle: Allison S; Vokes 2
Alsea quadrangle: Baldwin, E.M., 5
Ashland area: Schaefer 1
Coeckamis River area: Gilchrist 1
Corvallis quadrangle: Vokes 2
Cottage Grove quadrangle: Vokes 1
Crater Lake area: Williams 1
Crow quadrangle: Vokes 1
Elmira quadrangle: Vokes 1
Eugene quadrangle: Vokes 1
Galice quadrangle: Wells, F.G., 2
Gasquet quadrangle (Calif.-Oreg.): Cater
Halsey quadrangle: Vokes 2
John Day Country: Steele 3
Klamath Indian Reservation: Walker, G.W.
Marys Peak quadrangle: Baldwin, E.M.5
McMinville quadrangle: Baldwin, E.M.6
Monroe quadrangle: Vokes 2
Seven Devils region: Cook 1
Sheridan quadrangle: Baldwin, E.M.6
Snake River area: Kinnison; Wheeler
Southwestern Oregon: Wells, F.G., 3
Spirit Mt. quadrangle: Baldwin, E.M.4
Steens-Pueblo Mountains: Williams 3
Umatilla County, southern half: Wagner, N.S., 5

Unpublished quadrangles and areas
Agate Beach area: Herron
Astoria area: Seitz
Baker Valley: Trauger 2
Brice Creek, Lane County: Bales
Columbia River basalt: Schlicker 1
Dayville quadrangle: Nesbit
Depoe Bay area: Daugherty
Elkhorn Mountains: Taubenbeck 3
Halsey quadrangle: MacPherson
Huntington quadrangle: Beeson
Jamieson quadrangle: Calkins; Corlat
Lake County: Trauger 1
Lyons quadrangle: Barlow; Halstead
McMinville quadrangle: Brown, R.D.
Mitchell Butte quadrangle: Corcoran 1;
	Doe; Porter; Pritchett; Privrasky
Mitchell quadrangle: Bedford; Bowers;
	Howard, C.B.; McIntyre, L.B.;
	Swarbrick
Oregon City area: Trimble 1
Row River area, Lane County: Hausen 1
South Umpqua River area: Ramp 2
Sprague River area: Merewether
Spray quadrangle: Irish, R.J.
Swan Lake-Yonna Valleys: Meyers 2
Tualatin quadrangle: Bartley
Tualatin quadrangle: Schlicker 2
Upper Nehalem River basin: Deacon
Walla Walla basin: Newcomb 2
Wallowa Mountains: Palen; Reid
Winberry Creek area, Lane County: Ashwill

GEOLOGIC TIME SCALE

Fossil plants: Dorf
Sedimentation: Kay 2

GEOLOGY OF OREGON

Bibliography: Steere 1
Northwest Oregon: Lowry
Outline: Hancock, A.W.; Oreg. State Board of Control; Oreg. Dept. Geol. 31
Stratigraphy and structure Oregon and Washington: Hoover
GIBBSITE

Petrography: Allen, V. T., 2
Salem Hills area: Corcoran 2
Thermal analysis: Kauffman 1

GILLIAM COUNTY

Coal resources: Mason 14
Eolian deposits: Nat. Research Council, 2
Mineral production, 1952: Kauffman 3

GINKGO FOREST

(See: FOSSIL FLORAS)

GLACIAL ERRATICS

(See: ERRATICS)

GLACIAL HISTORY

(See: PLEISTOCENE)

GLACIERS

Mount Hood: Mason 13
Three Sisters: Biewener; Hopson 1, 2, 3

GLAUCONITE

Thermal analysis: Kauffman 1

GOBLE VOLCANICS

St. Helens quadrangle: Hotz
Upper Nehalem River basin: Deacon

GOLD

Annual reviews: Libbey 6, 16; Mason 6;
Oreg. Dept. Geol. 19, 30
Historical: Clark, D.H.; Libbey 13;
Garber; Smith, G.A.; Nedry; Oreg.
Dept. Geol. 17; Winther 1, 2
Localities
Douglas County: Libbey 3
East Evans Creek area: Bartley
Galice quadrangle: Wells, F.G., 2
Greenhorn district: Allen, R.M.
Huntington quadrangle: Beeson
Winberry Creek area: Ashwill

Placers
Douglas County: Libbey 3
General information: Oreg. Dept.
Geol. 17
Mining laws: Anon. 19; Harrington;

Price
Libbey 20; Moore, R.T.

Production
General: Anon. 11, 47; Bingham;
Libbey 9, 14
Statistics: Maurer, 1, 2; Motte; Oreg.
Dept. Geol. 25; U.S. Bur. Mines 3

GOLD-QUARTZ VEINS

Cornucopia: Goodspeed 2; Lewis D.V.

GOSHEN FLORA

(See: FOSSIL FLORAS)

GRANITIC ROCKS

Localities
East Evans Creek area, Jackson County:
Bartley
Pueblo Mountains, Harney County:
Williams 3
Telocaset quadrangle: Wagner, N.S., 4
Wallowa Mountains: Wegner, N.S., 7

Origin: Tuttle
Tungsten mineralization: Wolfe, H.D.

GRANITIZATION

Cornucopia, Baker County: Goodspeed
1, 2, 3, 5, 6; Reynolds

GRANT COUNTY

Early history: Nedry
Geology
Birch Creek area: Dawson
Greenhorn district: Allen, R.M.
John Day country: Steere, 3
John Day Formation: Waters
Rattlesnake welded tuff: Wilkinson
Triassic rocks, Dayville quad.: Nesbit
Weburg Formation, Jurassic nautiloids:
Kummel

Mineral resources
Asbestos: Anon. 5; Meyers 1
Chromite, refractory properties: Kelly
beneficiation: Batty
Coal: Mason
Gold, history: Clark, D.H.; Nedry
placers: Masson; Oreg. Dept. Geol. 17
production: Anon. 11; Maurer, 1, 2;
Motte
Magnesium: Ketzlach
Manganese nodules: Libbey 7
SUBJECT INDEX

GRANT COUNTY
Mineral resources, cont.:
Mineral production, 1952: Kauffman 3
Uranium: Crosby; Matthews

GRAPHITE
Industrial resources: Kauffman 2

GRASSY MOUNTAIN BASALT
Jamieson quadrangle: Carlat
Mitchell Butte quadrangle: Doak

GRAVELS, WEATHERED
Albany quadrangle: Allison 5
Corvallis area: Vokes 2

GROUND WATER
Carbon dioxide in Ashland area: Schaefer 1
Industrial water supply: Gierhart ; Lohr 1, 2; Sterrett 1
Limiting resource in U.S.: Piper 1, 2
Mineralized water resources listed: Hart 1
Mining laws pertaining to: Anon. 75; Thomas
Observation well records: U.S. Geol. Survey 7, 12
Quality of Oregon water: Lohr 2; Oreg. Dept. Geol. 33
Supply (by area): Baker Valley: Trauger 2
Catlow Valley: McLeod 1
Columbia River basin: Meigs; Nace
Cow Valley, Malheur County: Brown, S. G., 1
Fort Rock basin: Newcomb 3
Institution sites, Willamette Valley: Schlicker 2
Lake County: Trauger 1
Oregon City: Trimble
Oregon, general: Newcomb 1
Swan Lake-Yanna Valleys: Meyers 2
Tuatlian Valley: Hart 2
Umatilla County: Brown, S. G., 2
Walla Walla basin: Newcomb 2

GUIDEBOOK
Highway points of interest: Corning

GYPSUM
Baker and Malheur Counties: Beeson; Doak; McDivitt
Industrial resources: Kauffman 2; Mason 4
Thermal analysis: Kauffman 1

HALITE
Replaced by quartz: Staples

HALOYSITE
Thermal analysis: Kauffman 1

HALSEY QUADRANGLE
Geology: MacPherson; Vokes 2

HARNEY BASIN
Oil and gas: Felts
Physiography: Freeman 2

HARNEY COUNTY
Catlow cave, radiocarbon dating: Libby 2
Catlow Valley crevice: McLeod 1;
Wagner, N. S., 3
Geology, Vale-Buchanon: Doie 3
Ground water: U.S. Geol. Survey 12
History: Brimlow
Mineral resources:
Asbestos: Meyers
Lightweight aggregate industry: Mason 3
Mercury: Oreg. Dept. Geol. 32;
Williams 3
Mineral production, 1952: Kauffman 3
Oil and gas: Stewart, R. E., 2
Opal, Virgin Valley: Staatz
Perlite: Hamilton
Saline deposits: Anon. 49
Uranium: Doak 12; Matthews; Oreg. Dept. Geol. 24

HARNEY FORMATION
Dayville quadrangle: Brogan, J. P.

HAYDITE
(See: EXPANDED SHALE)
BIBLIOGRAPHY OF THE GEOLOGY AND MINERAL RESOURCES OF OREGON

HEAVY MINERALS
South Umpqua drainage: Ramp 2

HELLS CANYON
Dam project: Marts; U.S. Bur. Reclam. 4
Paleozoic rocks: Stearns 1

HISTORIC MARKER
Washington County: Libbey 4

HOBART BUTTE
Alumina clay: Allen, V.T., 1; Sohn 1

HOOD RIVER COUNTY
Mineral production, 1952: Kauffman 3

HORNBROOK FORMATION
Southwest Oregon, map: Wells, F.G., 3

HORSE MOUNTAIN AREA
Geology, Mitchell quadrangle: Bedford

HORSETOWN FORMATION
Douglas County: Oreg. Dept. Geol. 12; Ramp 2

HOT SPRINGS
Malheur County: Carlot
Oregon, listed: Mason 11

HUNTINGTON QUADRANGLE
Geology, south half: Beeson

HURWAL FORMATION
Wallowa Mts.: Palen; Wagner, N.S., 7

ICE AGE
(See also: PLEISTOCENE)
Cause of: Pauly

IDAHO FORMATION
Defined (Oregon-Idaho): Corcoran 3
Huntington quadrangle: Beeson
Jamieson quadrangle: Calkins, Carlot
Mitchell Butte quadrangle: Corcoran 1;
Doak; Porter; Pritchett; Privasky
Snake River area: Wheeler; Youngquist
Vale-Buchanan area: Dole 3

IGNEOUS ROCKS
Chemical composition: Gilchrist 2;
Nockolds 1, 2

IGNIMBRITE
(See: WELDED TUFF)

ILLAHEE FORMATION
Lyons quadrangle: Barlow; Halstead

ILSEMBANNITE
Described, Clackamas County: Staples 2

INDUSTRIAL MINERALS
(See also: MINERAL INDUSTRY; MINERAL RESOURCES; LIGHTWEIGHT AGGREGATES; LIMESTONE; DIATOMITE; BUILDING STONE)
Bibliography: Kauffman 2
Conference: Mason 5
Directory Pacific Northwest producers:
Bartell 4
Exploration tax: McCasl
Promotion: Anon. 68
Survey of resources: Gillson; Kauffman 2;
Ladoo; Mason 4
Technical advances: Lenhart 3

INTRUSIVES
Albany quadrangle: Allison 5
Bald Mountain batholith: Taubeneck 1, 3
Coast Range: Snively 2
Corvallis area: Vokes 2
Dayville quadrangle: Brogan, J.P.
Halsey quadrangle: MacPherson
SUBJECT INDEX

INTRUSIVES, continued

Horse Heaven mining district: Waters 1
Marys Peak: Baldwin, E.M., 5; Roberts, A.E.
Mitchell Butte quadrangle: Doak; Porter; Fritchett
Mitchell quadrangle: Bedford; Bowers; Howard, C.B.; McIntyre, L.B.; Swarbrick
Pueblo Mountains: Williams 3
Red Flats area, Curry County: Hundhausen 2
Riddle area, Douglas County: Van Voorhis
Shamrock mine, Jackson County: Hundhausen 1
Sheridan-McMinnville quadrangles: Baldwin, E.M., 6
South Umpqua River drainage: Ramp 2
Spirit Mountain quadrangle: Baldwin, E.M., 4
Spray quadrangle: Irish, R.J.
Trail quadrangle: Bartley
Umatilla County: Wagner, N.S., 5
Vale-Buchanan area: Dole 3
Wallowa Mountains: Palen; Reid
Winberry Creek, Lane County: Ashwill

IRON

General: Mason 9
Annual reviews: Libbey 16; Mason 6; Oreg. Dept. Geol. 19, 30
Oswego iron: Bartell 1; Hergert 1
Scappoose iron: Bartell 1; Gierhart 3; Hotz; Walsted 1, 2, 3

JACKSON COUNTY

Geology
Ashland area: Schafer 1
Butte Falls quadrangle basalt: Smedes
Southwest Oregon map: Wells, F.G., 3
Trail quadrangle: Bartley
Ground water: Marshall; Newcomb 1
Mineral resources
Agate: Anon. 29
Asbestos: Bartley; Meyers 1
Carbon dioxide: Schafer 1
Chromite occurrences listed: Mason 1
Coal: Mason 14
Copper-nickel: Hundhausen 1
Gold placers: Anon. 19; Masson; Oreg. Dept. Geol. 17
Gold production: Maurer, 1, 2; Mote
Iron deposits: Mason 9
Lightweight aggregate industry: Mason 3

MINERAL RESOURCES, cont.:

Mercury: Oreg. Dept. Geol. 32;
Wells, R.R.
Mineral production, 1952: Kauffman 3
Oil and gas exploration: Stewart, R.E., 2
Pumicites as pozzolans: Heath
Silica: Anon. 51
Tungsten: Wolfe, H.D.
Uranium: Matthews; Moore, G.W.

JAMIESON QUADRANGLE

Geology: Calkins; Carlat

JASPER

Baker County: Wagner, N.S., 2
Crook County: Anon. 46

JEFFERSON COUNTY

Geology
Fossil fern: Arnold 1
Horse Heaven district: Waters 1
John Day Formation: Waters 2
Mineral resources
Agate: Dake 9
Gold production: Maurer 2
Iron: Mason 9
Lightweight aggregates: Mason 3
Mercury: Anon. 76; Oreg. Dept. Geol. 32; Waters 1
Oil and gas exploration: Gardner 2;
Stewart, R.E., 2

JOHN DAY FORMATION

Fossils
Plants: Arnold 2; Chaney 1, 2, 3
Vertebrates: Green; Schultz
Dayville quadrangle: Dawson
Lookout Mt. quadrangle: Swinney
Mitchell quadrangle: Bedford; Bowers; Swarbrick
Picture Gorge area: Steere 3
Spray quadrangle: Irish
Western extension: Waters 2

JOHN DAY REGION

(See also: JOHN DAY FORMATION)

Fossils
Plants: Arnold 1, 2; Sarghorn; Chaney 1, 2, 3, 4; Dake 5; Ransom 1; Scott, R.A., 1, 2; Wolfe, J.A., 1
BIBLIOGRAPHY OF THE GEOLOGY AND MINERAL RESOURCES OF OREGON

JOHN DAY REGION, Fossils, continued:

Vertebrates: Anon. 31, 38; Coleman, R.G.; Downs 2; Erickson J., 3, 4; Green; Schultz
Geology, general: Steere 3
International Geol. Congress trip: Adams, W.C.
Mineral resources:
   Chromites: Kelly
   Coal: Mason 14
   Mercury: Waters 1
   Oil and gas: Wells
   Physiography: Freeman 2
   Welded tuff: Thayer, T.P.; Wilkinson

JORDAN CRATERS

Malheur County: Whipple

JORDISITE

Clackamas County: Staples 2

JOSEPHINE COUNTY

Geology
   Galice quadrangle: Wells, F.G., 2
   Gasquet quadrangle: Cater
   Map of southwest Oregon: Wells, F.G., 3
Mineral resources
   Asbestos: Meyers 1
   Cement plant: Anon. 30
   Chromite, beneficiation: Batty
   Exploration: Rave
   Occurrences listed: Mason 1
   Purchasing program: Anon. 3, 11, 15, 18, 51; Bristol, F.I.; Katlin;
   Libbey 12, 21
   Refractory: Kelly
   Copper: Anon. 30
   Gold: Clark, D.H.; Masson; Maurer 1, 2; Mote; Oreg. Dept. Geol. 17
   Iron: Mason 9
   Manganese: Walsted 3
   Mercury: Oreg. Dept. Geol. 32
   Mineral production, 1952: Kauffman 3
   Tungsten: Wolfe, H.D.
   Uranium: Matthews

JUNIPER BUTTE AREA

Spray quadrangle: Irish, R.J.

JURASSIC

Correlation chart: Imlay
Fossils, nautiloids: Kummel
Localities
   Bold Mountain area: Taubeneck 1
   Dayville quadrangle: Brogan, J.P.; Nesbit
   Galice quadrangle: Wells, F.G., 2
   Gasquet quadrangle: Cater
   Nickel Mountain area: Oreg. Dept. Geol. 12
   Red Flats nickel area: Hunshausen 2
   South Umpqua River drainage: Ramp 2
   Southwest Oregon (map): Wells, F.G., 3
   Trail quadrangle: Bartley

KEASEY FORMATION

Coal resources: Mason 14
Crinoids, Mist area: Moore, R.C.
Expanded shale: Brooke; Gillson; Mason 3
Geology: Deacon; Moore, R.C.

KEYES SHALE

Mitchell quadrangle: McIntyre, L.B.

KINGS VALLEY SILTSTONE

Corvallis area: Vokes 2

KLAMATH COUNTY

Archaeology: Anon. 50; Cressman 1, Libby 3
Geology
   Crater Lake, origin: Coleman, S.N.; Cotton; Kuno; Muench; Williams 1
   Igneous rocks, Crater Lake area: Nockolds 1
   Map of southwest Oregon: Wells, F.G., 3
   Radiocarbon dating of Mt. Mazama eruption: Carter; Cressman 2; Libby 2;
   Roberts F.H.H., 2
   Road guide, Crater Lake: Ruhle
   Swan Lake-Yonna Valleys: Meyers 2
   Wocus Marsh slickenside: McLeod 2
Mineral resources
   Ash, pozzolanic properties: Heath
   Lightweight aggregate industry: Mason 3
   Mineral production, 1952: Kauffman 3
   Oil and gas exploration: Stewart, R.E., 2
   Pumice: Merewether; Walker, G.W.
KLAMATH COUNTY, Continued:

Pleistocene fossil bones: Odell
Water resources: Anon. 9; Meyers 2;
              Newcomb 1; U.S. Bur. Reclam. 6, 7

KLAMATH INDIAN RESERVATION

Pumice deposits: Walker, G.W.

KLAMATH MOUNTAINS

Geology (Calif.): Hinds
Ground water: Newcomb 1
Mineral resources (Calif.): O'Brien, J.C.
Paleozoic faunas: Merriam
Physiography: Dicken 3
Pre-Cretaceous stratigraphy: Wells, F.G., 1

KNOXVILLE FORMATION

Nickel Mountain: Oreg. Dept. Geol. 12
South Umpqua River: Ramp 2
Southwest Oregon (map): Wells, F.G., 3

LACOMB GRAVELS

Albany quadrangle: Allison 5

LAKE BEDS

Umatilla County: Wagner, N.S., 5
Wallowa Mountains: Wagner, N.S., 7

LAKE COUNTY

Geology
  Clastic dikes: Allison 4
  Fort Rock Cave, radiocarbon dating:
              Flint; Henry, T.R.; Jennings;
              Libby 1, 2; Roberts, F.H.H., 2;
              Smithsonian Inst.
  Geologic map: Trauger 1
  Pluvial lakes: Allison 1, 2, 7
  Summer Lake area: Conrad 1, 2
Ground water: Newcomb 1, 3; Trauger 1;
              U.S. Geol. Survey 12
Mineral resources
  Asbestos: Meyers 1
  Lightweight aggregates: Mason 3
  Oil and gas exploration: Dole 6;
              Moody; Stewart, R.E., 2

LAKE COUNTY Mineral resources, Continued:

Opal, Hart Mountain: Dake 11
Perlite: Hamblen
Saline deposits: Anon. 49
Uranium: Dake 12; Matthews; Oreg. Dept.
          Geol. 24; Schafer 2
Paleontology
  Ground sloths: Packard 3
  Mammal tracks: Packard 1
  Pleistocene birds, Fossil Lake: Downs 4;
              Lunk; Wetmore

LANDSLIDES

Astoria: Dole 4
Lookout Point Reservoir: Howell 4; Newby;
                   Staples 7

LANE COUNTY

Geology
  Alsea quadrangle: Baldwin, E.M., 5
  Brice Creek area: Bales
  Dexter dam: Burke
  Dorena dam: U.S. Corps Eng. 2
  Eugene, Elmira, Cottage Grove, Crow
  quadrangles: Vokes 1
  Halsey quadrangle: MacPherson
  Hills Creek dam: U.S. Corps. Eng. 4
  Hobart Butte area: Allen, V.T., 1
  Long Tom River, physiographic history:
              Baldwin, E.M., 1
  Lookout Point reservoir landslides:
              Howell 4; Newby; Staples 7
  McKenzie River, buried channels: Coombs
  Monroe quadrangle: Vokes 2
  Quartz crystals: Howell 2
  Sand dune control: Nadeau; Pierson
  Spencer Butte intrusive: Snively 2
  Three Sisters area: Hopson 2, 3
  Triangle Lake, origin: Baldwin, E.M., 2
  Welded tuff, Row River: Hausen 1
  Winberry Creek area: Ashwill
Ground water, artesian levels: U.S. Geol.
              Survey 12
Mineral resources
  Alumina clay, Hobart Butte: Allen, V.T.,
              1; Sohn 1, 2
  Aluminum silicon: Anon. 36
  Asbestos: Meyers 1
  Commercial minerals: Libbey 2
  Gold mining history: Clark, D.H.
  Gold production: Maurer; Mote
  Lead-zinc flotation, Mustick mine:
             Hendrickson
LANE COUNTY Mineral resources, Continued:

Mercury: Oreg. Dept. Geol. 32; Schuette
Mineral production, 1952; Kauffman 3
Oil and gas exploration: Gardner 2; Stewart, R.E., 2
Refractory clay: Bartell 2
Paleontology
Oligocene salamander: Van Frank

LAPILLI TUFFS

Swan Lake-Yonna Valley area: Meyers 2

LATERITE

(See also: BAUXITE; NICKEL)
Rhododendron Formation: Trimble 2

LAVA-CAST FOREST

Ransom 1

LAVA CAVES

Dake 4; Halliday

LEAD

Biochemical prospecting: Warren
Floation, Musick mine: Hendrickson.
Little North Santiam River area: Jensen 2
Production: Libbey 9; Maurer; Mote; U.S. Bur. Mines 3

LEFFLER GRAVELS

Albany quadrangle: Allison 5

LIGHTWEIGHT AGGREGATES

(See also: DIATOMITE; CINDERS; EXPANDED SHALE; PUMICE; PELITE; TUFF)
Annual reviews: Libbey 6; Mason 6; Oreg. Dept. Geol. 19, 30
Industrial survey: Anon. 58; Bartell 2;
Chesterman; Gillson; Mason 3
Producers: Oreg. Dept. Geol. 18
Sources in Oregon: Mason 3

LIMESTONE

Annual reviews: Libbey 6, 16; Mason 6;
Oreg. Dept. Geol. 19, 30
Cement industry: Anon. 51, 71; Nordberg

LIMESTONE, Continued:

Chemical raw materials: Kaiser Alum. & Chem. Corp.
Demand exceeds production: Anon. 10; Utley 1
Industrial resources: Bartell 2; Bowles;
Kauffman 2; Mote; Richards 1
Localities
Buell deposit: Baldwin, E.M., 6
Douglas County: Libbey 3
Durkee high-calcium deposit: Utley 2
Huntington quadrangle: Beeson
Mitchell Butte quadrangle: Doak
Mitchell quadrangle: Bowers; Howard, C.B.
Northeastern Oregon deposits:
Richards 2
Supplee area: Brogan, J.P.
Production: U.S. Bureau Mines 3
Quarry methods, Lime: Lenhart 2

LIMONITE

Scappoose deposits: Anon. 23; Hotz

LINCOLN COUNTY

Geology
Agate Beach Formation: Herron
Coastal geology: Gilchrist 3
Marys Peak-Alsea quadrangles:
Baldwin, E.M., 5
Nye Formation, Yaquina Bay: Heacock 1
Mineral resources
Coal: Mason 14
Commercial minerals: Libbey 2
Mineral production, 1952: Kauffman 3
Oil and gas exploration: Stewart, R.E., 2
Paleontology
Foraminifera: Daugherty; Heacock 1, 2;
Herron
Fossil localities: Steere 2
Mollusks: Daugherty

LIMONITE

Scappoose deposits: Anon. 23; Hotz

LINN COUNTY

Geology
Albany quadrangle: Allison 5
Clay minerals, thermal analysis: Kauffman 1
Corvallis-Monroe quadrangles: Vokes 2
Detroit dam site: U.S. Corps Eng. 1
Halsey quadrangle: MacPherson
Quartz pseudomorph: Staples 1
Ground water, artesian levels: U.S. Geol. Survey 12
SUBJECT INDEX

LINN COUNTY, Continued:

Mineral resources
Concrete aggregates: Anon. 4, 16
Mineral production, 1952: Kauffman 3
Zirconium plant: Gillson
Paleontology
Sweet Home petrified forest: Greene; Hergert 2; Ransom

LINN GRAVELS
Albany quadrangle: Allison 5

LITTLE NORTH SANTIAM MINING AREA
Lead and zinc: Jensen 2

LOESS
Pleistocene deposits: Nat. Research Council 2

LONG TOM RIVER
Physiographic history: Baldwin, E.M., 1

LOOKOUT MOUNTAIN QUADRANGLE
Geology: Swinney

LOWELL QUADRANGLE
Brice Creek area: Bales
Winberry Creek area: Ashwill

LOWER BRICE CREEK VOLCANIC SEQUENCE
Bales

LYONS QUADRANGLE
Geology: Barlow; Halstead

MAGNESIUM
Resources: Kauffman 2; Ketzlach

MAGNETITE
Klamath County: Merewether
Malheur County: Oreg. Dept. Geol. 8

MAGNETOMETER SURVEY
Portland to Albuquerque: Agocs

MALHEUR COUNTY

Geology
Huntington quadrangle: Beeson
Idaho Formation: Corcoran 3
Jamieson quadrangle: Calkins; Carlat
Jordan craters: Whipple
Lava caves: Dole 4
Mitchell Butte quadrangle: Corcoran 1;
Doak; Porter; Pritchett; Privasky
Payette Formation: Corcoran 3
Snake River capture: Wheeler
Vale-Buchanan section: Dole 3
Ground water
Artesian levels: U.S. Geol. Survey 12
Cow Valley: Brown, S.G., 1

Mineral resources
Agate: Anon. 33; Wagner 2
Asbestos: Meyers 1
Ash, pozzolanic: Heath
Gold: Masson; Maurer
Iron: Mason 9
Lightweight aggregates: Mason 3
Magnetite: Oreg. Dept. Geol. 8
Mercury: Anon. 53; Oreg. Dept. Geol.
32; Schuette
Mineral production, 1952: Kauffman 3
Oil and gas exploration: Anon. 45, 48,
58, 59, 60, 69; Dole 6; Gardner 2;
Stewart, R.E., 2; Taylor
Perlite: Gillson; Hamblen; North 2
Selenium: Lakin; Steere 4
Uranium: Matthews
Paleontology
Camel: Allison 6

MAMMALS
(See: FOSSIL VERTEBRATES)

MANGANESE
Annual reviews: Libbey 16; Oreg. Dept.
Geol. 19
Grant County: Libbey 7
Jackson County: Bartley
Josephine County: Walsted 3
Pacific sea floor: Dietz 2

MARBLE
Wallowa Mountains: Reid
BIBLIOGRAPHY OF THE GEOLOGY AND MINERAL RESOURCES OF OREGON

MARINE GEOLOGY

Bibliography: Terry

MARION COUNTY

Geology

Albany quadrangle: Allison 5
Detroit dam: U.S. Corps Eng. 1
Gibbsite, thermal analysis:
Kauffman 4
Little North Santiam River basin:
Jensen 2
Lyons quadrangle: Barlow; Halstead
McMinneville quadrangle: Baldwin, E.M., 6; Brown, R.D.
Salem Hills: Corcoran 2, 4
Silver Creek Falls: Gilchrist 4
Ground water: U.S. Geol. Survey 12

Mineral resources
Alumina plant: Anon. 24; Libbey 17
Bauxite: Anon. 67; Barlow; Halstead; Corcoran 2, 4
Clay, refractory: Barlow
Concrete aggregates, Detroit Dam:
Anon. 4; 16
Iron: Mason 9
Lead, zinc, copper: Jensen 2
Lightweight aggregates: Mason 3
Mineral production, 1952: Kauffman 3
Tuff building stone: Barlow; Halstead; Mason 3

MARSHALL BUTTE AREA

Geology: McIntyre, L.B.

MARSHALL BUTTE FORMATION

Mitchell quadrangle: Howard, C.B.; McIntyre, L.B.

MARTIN BRIDGE FORMATION

Wallowa Mountains: Palen; Wagner, N.S., 7

MARYS PEAK

Geology: Baldwin, E.M., 5; Roberts, A.E.

MARYS PEAK QUADRANGLE

Geology: Baldwin, E.M., 5

MASCALL FORMATION

Coal: Mason 14
Fossils
Plants: Barghoorn; Chaney 3, 4; Ransom 1
Vertebrates: Downs 2

Localities
Dayville quadrangle: Dawson
John Day country: Steere 3
Mitchell quadrangle: Bowers
Spray quadrangle: Irish, R.J.

MAY CREEK FORMATION

Jackson County, Evans Creek area: Bartley, Hundhausen 1

MCKAY RESERVOIR

Fauna: Anon. 39; Shotwell 3, 4, 6

MCKENZIE RIVER BURIED CHANNELS

Coombs

MCMINNVILLE QUADRANGLE

Geology: Baldwin, E.M., 6; Brown, R.D.

McNARY RESERVOIR

Vertebrates: Osborne

MENTAL INSTITUTE SITES

Geology: Schlicker 2

MERCURY

Annual reviews: Libbey 6, 16; Mason 6; Oreg. Dept. Geol. 19, 30; U.S. Bur. Mines 3

Bibliography: Ebner
Chemical raw materials: Kaiser Alum. & Chem. Corp.
Cinnabar, gem quality: Mihelic

Localities
General: Oreg. Dept. Geol. 32
Bonanza: Brown, R.E., 2; Libbey 3
Douglas County: Libbey 3
Gasquet quadrangle: Cater
Horse Heaven district: Waters 1
Jackson County: Bartley; Wells, R.R.
Jamieson quadrangle: Carlat
Maury Mountain mine: Brown, R.E., 1
Mitchell quadrangle: Bowers
Mining news items: Oreg. Dept. Geol. 26
SUBJECT INDEX

MERCURY, Continued:
Production: Anon. 11, 53, 76; Gilbert; Schuette
Prospecting guides: Oreg. Dept. Geol. 32
Treatment processes: Oreg. Dept. Geol. 32; Wells, R.R.

MESOZOIC
(See also: CRETACEOUS; JURASSIC; TRIASSIC)
Geosynclines: Kay 1
Northern Klamath Mountains: Wells, F.G., 1
Southern Umatilla County: Wagner, N.S., 5

METAMORPHICS
Asbestos localities: Meyers 1
Cornucopia district: Goodspeed 1 - 6
Dayville quadrangle: Dawson
Galice quadrangle: Wells, F.G., 2
Mitchell Butte quadrangle: Bedford; Howard, C.B.; Bowers
Pueblo Mountains: Williams 3
South Umpqua River drainage area: Ramp 2
Southwestern Oregon (map): Wells, F.G., 3
Umatilla County: Anon. 40; Wagner, N.S., 5
Wallowa Mountains: Palen; Reid; Wagner, N.S., 4, 7

METEORITES
Bibliography: Brown, H.
Catalog of: Prior
Chemical testing: Staples 6
Oregon general: Pruett 1
Port Orford: La Paz; Oreg. Dept. Geol. 5
Willamette: Pruett 2; Singer

MEYERS CANYON FORMATION
Mitchell quadrangle: Howard, C.B.

MICA
Industrial resources: Kauffman 2

MICROFOSSILS
(See: FOSSIL FLORAS; FOSSIL INVERTEBRATES)

MINERAL INDUSTRY
Annual reviews: Libbey 5, 6, 16, 22, 25, 26; Mason 6; Oreg. Dept. Geol. 19, 30, 36
Blue chip metals: Libbey 10
Industrial surveys: Anon. 5, 11, 18, 51, 56; Marple
Production
Century of: Libbey 9
Metals: Anon. 47; Bingham
Yearbook statistics: Maurer; Mote; Kauffman 3

MINERAL RESOURCES
Area summaries
Coastal area: Libbey 2
Douglas County: Broders; Libbey 3
Oregon general: Oreg. Dept. Geol. 31; Smith, W.D.
Pacific Northwest: Hodge; Merryfield
Atlas of Pacific Northwest: Hintze
Bibliography: Steere 1
Conservation education: Oreg. State Board of Ed.
Field manual: Gray

MINERAL SPRINGS
Listed: Mason 11

MINERALIZED WATER
Resources listed: Hart 1

MINES DIRECTORIES
Active mines: Anon. 8; Mason 10

MINING HISTORY
Coos and Curry Counties: Peterson
Grant County: Nedry
Harney County: Brimlow
Hendryx papers: Wagner, N.S., 6
Western states: Wolfe

MINING LAWS
General information: Oreg. Dept. Geol. 27
Continental shelf exploration: Groom
Contravening: Libbey 11
Nonmetallics: Anon. 61
Oil and gas: Libbey 23
Placer: Anon. 19; Harrington; Masson

83
MINING LAWS, Continued:

Public lands policies: Anon. 62; Bartell 5;
Duncan, H.J.; Harrington; U.S.
Senate 1, 2
Timber resources: Bartell 3; Ellsworth
Water resources: Anon. 75; Thomas

MIocene

Basaltic rocks: Waters 3
Fossils
Floras: Chaney 2, 3, 4; Ransom 1, 2
Invertebrates: Daugherty; Heacock 1, 2;
Herron; Lutz; Stewart, R.E., 1
Lincoln County localities: Steere 2
Vertebrates: Downs 1, 2, 3; Sargent 1;
Shotwell 2
Localities
Astoria area: Stewart, R.E., 1
Cape Blanco: Durham 3
Clackamas River area: Gilchrist 1
Coast Range: Snively 2
Columbia River: Mason 15; Lowry
Dayville quadrangle: Brogan, J.P.;
Dawson; Nesbit
Halsey quadrangle: MacPherson
Hobart Butte area: Allen, V.T., 1
Huntington quadrangle: Beeson
Jamierson quadrangle: Carlat
John Day country: Steere 3
Lincoln County: Herron
Lowell quadrangle: Ashwill
Lyons quadrangle: Barlow; Halstead
Malheur County: Corcoran 3
McMinnville quadrangle: Baldwin, E.M.,
6; Brown, R.D.
Mitchell Butte quadrangle: Corcoran 1;
Doak; Porter; Pritchett; Privrasky
Mitchell quadrangle: Bedford; Bowers;
McIntyre, L.B.
Oregon City area: Trimble 1
Rhododendron area: Trimble 2
Saddle Mountain: Baldwin, E.M., 3;
Boardman
St. Helens quadrangle: Hare
Salem Hills: Corcoran 2, 4
Silver Creek Falls: Gilchrist 4
Southwest Oregon map: Wells, F.G., 3
Spray quadrangle: Irish, R.J.
Trail quadrangle: Bartley
Umatilla County: Wagner, N.S., 5
Walla Walla basin: Newcomb, R.C., 2
Wallowa Mountains: Palen
Yaquina Bay: Heacock 1, 2

MITCHELL BUTTE QUADRANGLE
Geology: Corcoran 1; Doak; Porter;
Pritchett; Privrasky

MITCHELL FORMATION
Mitchell quadrangle: Bedford; Bowers

MITCHELL QUADRANGLE
Geology: Bedford; Bowers; Howard, C.B.;
McIntyre, L.B.; Swarbrick

MOLALLA FORMATION
Lowry; Trimble 2

MOLYBDENUM MINERALS
Kiggins mine, Clackamas County: Staples 2

MONAZITE
Prospecting: Dake 6, 13

MONROE QUADRANGLE
Geology: Vokes 2

MORROW COUNTY
Coal resources: Mason 14
Eolian deposits: Nat. Res. Council 2
Mineral production, 1952: Kauffman 3
Oil and gas exploration: Stewart, R.E., 2

MOUNT HEBO
Geology: Baldwin, E.M., 4

MOUNT HOOP
Fumaroles: Ayres
Glaciers: Mason 13

MOUNT MAZAMA
Dating eruption: Allison 2, 7; Carter;
Cressman 2; Flint; Libby 2
Origin and history: Coleman, S.N.; Cotton;
Kuno; Muench; Williams 1
Pumice: Conrad 1
SUBJECT INDEX

MOUNT NEWBERRY

Dating eruption: Cressman 2

MOUNT WASHINGTON

Glaciers: Biewener

MULTNOMAH COUNTY

Geology
Eolian deposits: Nat. Res. Council 2
Opalized wood: Ransom 2
Portland area geology: Elsey
Quartzite cobbles: Howell 1
Silt, pozzolanic properties: Heath
Tualatin Valley, geology and ground water: Hart 2
Mineral resources
Bauxite: Allen, V.T., 2
Coal: Mason 14
Lightweight aggregates: Smithwick 1,2
Lime putty plant: Anon. 63
Mineral production 1952: Kauffman 3
Oil and gas exploration: Stewart, R.E.,2
Sand and gravel dredging: Lenhart 1
Water resources
Ground water: Hart 2; Newcomb 1;
U.S. Geol. Survey 12
Surface water: Anon. 2; Marshall;
Morrow, B.S.
Willamette stone: Burnham

MYRTLE FORMATION

Heavy detrital minerals: Ramp 2

NEHALEM FORMATION

Deacon

NEHALEM RIVER (UPPER) BASIN

Geology: Deacon

NESTUCCA FORMATION

Sheridan and McMinnville quadrangles: Baldwin, E.M. 6
Spiral Mountain quadrangle: Baldwin, E.M.4

NEWBERRY CRATER

Dating eruption: Brogan, P.F.; Flint;
Libby 2
Pumice industry: Mason 3

NICKEL

Economics, general: Beall; U.S.Bur. Mines 2
Mining activity: Anon. 5; Libbey 6, 16;
Oreg. Dept. Geol. 19, 28, 30
Nickel Mountain deposit:
General: Anon. 43, 67; Libbey 3, 15;
Oreg. Dept. Geol. 12; Schoenike;
Walker, A.E.
Metallurgy: Anon. 6, 23, 25; Cremer;
Long
Ore reserves: Beall; Long; Van Voorhis
Pig iron: Walsted 3
Production: Anon. 23, 25, 42, 56, 64;
Bingham; Long
Red Flats deposit: Hundhausen 2
Shamrock copper nickel mine: Hundhausen 1
Thermal analysis: Kauffman 1

NICKEL METEORITES

Chemical testing: Staples 6

NONMETALLICS

(see: INDUSTRIAL MINERALS)

NONPAREIL MINE

Quicksilver, Douglas County: Brown, R.E., 2

NYE FORMATION

Lincoln County: Heacock 1, 2; Herron

OBSIDIAN

Thermal analysis: Kauffman 1

OCEANOGRAPHY

(see: SUBMARINE GEOLOGY)

OCHOCO BASALTS

Mitchell quadrangle: Howard, C.B.

OCHOCO FORMATION

Supplee area: Brogan, J.P.

OCHOCO LAVAS

Dayville quadrangle: Nesbit
BIBLIOGRAPHY OF THE GEOLOGY AND MINERAL RESOURCES OF OREGON

OIL AND GAS

Compact Commission, Oregon joins:
Oreg. Dept. Geol. 16

Exploration
General activity: Anon. 66, 67, 77;
Brown, R.C.; Dole 5; Gardner 1, 2;
Geffroy; Libbey 6; Moody; Oreg. Dept. Geol. 29, 30
Drilling permits listed: Oreg. Dept. Geol. 34
Leasing: Anon. 72; Dole 1

Localities
Clatsop County: Anon. 70; Dole 6
Columbia County: Anon. 59
Coos County: Anon. 45
Crook County: Anon. 54
Douglas County: Taylor
Lake County: Dole 6
Malheur County: Anon. 45, 48, 58, 59, 60, 69; Dole 6; Taylor

Well records listed: Stewart, R. E., 2

Geologic investigations
Eugene area: Vokes 1
Future petroleum provinces: Anon. 20, 44; Buddenhagen 1, 2; Felts
Huntington quadrangle: Beeson
Jamieson quadrangle: Calkins; Carlat
Marys Peak and Alsea quadrangles: Baldwin, E.M., 5
Mitchell quadrangle: Howard, C.B.
Sheridan and McMinnville quadrangles: Baldwin, E.M., 6
Spirit Mountain quadrangle: Baldwin, E.M., 4

Laws and regulations: Anon. 28; Libbey 23;
Oreg. Dept. Geol. 9, 20
Natural gas pipeline: Myatt; Stormont

OLIGOCENE

Coal resources: Mason 14
Fossils, flora: Chaney 2; Hergart 2; Jay 1
Crinoids: Moore, R.C.
Foraminifera: Hecock 2
Insect: Fraser
Lincoln Beach localities: Steere 2
Salamanders: Van Frank

Localities
Albany quadrangle: Allison 5
Anlauf quadrangle: Allen, V.T., 1
Astoria area: Stewart, R. E., 1
Brice Creek area: Balas
Clackamas River area: Gilchrist 1
Coast Range intrusive: Snively 2
Columbia River gorge: Mason 15
Covallis area: Vokes 2

OLIGOCENE Localities, Continued:
Eugene area: Vokes 1
Halsey quadrangle: MacPherson
John Day country: Steere 3
Lincoln County: Hecock 1, 2; Herron
Lyons quadrangle: Barlow; Halstead
McMinnville quadrangle: Baldwin, E.M., 6; Brown, R.D.
Mitchell quadrangles: Bedford; Bowers;
Howard, C.B.; McIntyre
Oregon City area: Trimble 1
Saddle Mountain area: Baldwin, E.M., 3
St. Helens quadrangle: Hotz
Salem Hills: Corcoran 2, 4
Sheridan quadrangle: Baldwin, E.M., 6
Silver Creek Falls area: Gilchrist 4
Umatailla County: Wagner, N.S., 5
Upper Nehalem River basin: Deacon
Winberry Creek area: Ashwill

OLIVINE

Foundry-sand aggregate: Schaller
Magnesium source: Ketzlach

OPAL

Localities, Central Oregon: Dake 1
Hart Mountain area: Dake 11
Succor Creek, Anon. 33
Virgin Valley, Staatz

Occurrences, general: Ladoo; Ransom 1
Prospecting: Dake 13; Mason 7
Uranium bearing: Dake 6

OREGON CITY AREA

Geology: Trimble 1

OWYHEE BASALT

Jamieson quadrangle: Calkins; Carlat
Mitchell Butte quadrangle: Corcoran 1;
Doak; Porter; Pritchett; Privrasky
Vale-Buchanan area: Dole 3

OWYHEE RHYOLITE

Mitchell Butte quadrangle: Corcoran 1;
Porter

PACIFIC NORTHWEST

Natural resources survey: Freeman 3
SUBJECT INDEX

PALEOCLIMATES
(see: CLIMATES)

PALEOGEOGRAPHY
Paleozoic and Mesozoic: Kay 1

PALEONTOLOGY
(see: FOSSILS)

PALEOZOIC
Fossils: Arnold 3; Merriam
Geosynclines: Kay 1
Localities
Mitchell quadrangle: Howard, C.B.
Pacific Coast, general: Cloud, P.E.
Pueblo Mountains area: Williams 3
Snake River: Stearns 1
Suplee area: Brogan, J.P.; Nesbit
Umatilla County: Wagner, N.S., 5

PAYETTE FORMATION
General description: Corcoran 3
Mitchell Butte quadrangle: Corcoran 1; Doak; Porter
Snake River area: Kinnison; Stearns 2;
Wheeler; Youngquist
Vale-Buchanan area: Dole 3

PENNSYLVANIAN
Fossil plants: Arnold 3

PERIDOTITE
Galice quadrangle: Wells, F.G., 2
Red Flats: Hundhausen 2

PERLITE
Annual reviews: Libbey, 6, 16; Mason 6;
Oreg. Dept. Geol. 19, 30
Dantore mine, Wasco County: Anon. 13
Industrial survey: Gillson; North 1, 2
Lightweight aggregate: Mason 3
Occurrences: Hambien; Ladoo
Thermal analysis: Kauffman 1

PERMIAN
Dayville quadrangle: Brogan, J.P.; Dawson
Elkhorn Ridge: Taubenek 2
Wallowa Mts.: Palei; Reid; Wagner, N.S., 7

PETRIFIED WOOD
Occurrences, general: Greene; Mason 7;
Ransom 1, 2
Baker-Malheur Counties: Wagner, N.S., 2

PETROGRAPHIC STUDIES
Basalt column rinds: Smedes
Bauxite: Allen, V.T., 2
Eocene basalt, secondary minerals: Scott
Kaolinite: Allen, V.T., 1
Lignite: Parks
Localities
Albany quadrangle: Allison 5
Brice Creek area: Bales
Cortenupia area: Goodspeed 1, 2, 3, 4,
5, 6; Lewis, D.V.; Reynolds
Corvallis area: Vokes 2
Halsey quadrangle: MacPherson
Horse Heaven mining district: Waters 1
Jamieson quadrangle: Calkins; Carlat
Lyons quadrangle: Barlow; Halstead
Marys Peak and Alsea quadrangles:
Baldwin 5
Mitchell Butte quadrangle: Corcoran 1;
Doak; Porter; Fritchett; Privaskey
Mitchell quadrangle: Bedford; Bowers;
Howard, C.B.; McIntyre, L.B.;
Swarbrick
South Umpqua River, heavy detrital
minerals: Ramp 2
Spray quadrangle: Irish, R. J.
Upper Nehalem River basin: Deacon
Wallowa Mountains: Reid
Pumicites: Heath
 Welded tuff: Hausen 1, 2

PICTURE GORGE
Geol.: Steere 3

PIKE CREEK VOLCANIC SERIES
Steens Mountains: Williams 3
BIBLIOGRAPHY OF THE GEOLOGY AND MINERAL RESOURCES OF OREGON

PILLOW LAVAS

Albany quadrangle: Allison 5

PITTSBURG BLUFF FORMATION

Coal resources: Mason 14
Upper Nehalem River: Deacon

PLEISTOCENE

(see also: ERRATICS; GLACIERS)
Age dating: Antevs; Flint; Hunt
Eolian deposits: Nat. Research Council 2
Fossils
   Birds: Downs, 4; Lunk; Wetmore
   Camel: Allison 6
   Ground sloth: Packard 3
   Mollusca: Valentine 1
Ice ages, cause of: Pauly
Localities
   Albany quadrangle: Allison 5
   Columbia River basin: Freeman 1;
      Gilchrist 5; Lowry; Mason 15
   Corvallis area: Vokes 1
   Galice quadrangle: Wells 2
   Dayville quadrangle: Nesbit
   Eugene area: Vokes 1
   Halsey quadrangle: MacPherson
   Hobart Butte area: Allen, V.T., 1
   Horse Heaven mining district: Waters 1
   Jamieson quadrangle: Calkins, Carlat
   Lyons quadrangle: Barlow
   Marys Peak and Alsea quadrangles: Baldwin, E. M., 5
   McMinnville quadrangle: Baldwin, E. M., 6;
      Brown, R. D.
   Mitchell Butte quadrangle: Corcoran 1;
      Dook; Porter; Privrasky
   Mitchell quadrangle: Bowers; Howard, C.B.; McIntyre, L.B.
   St. Helens quadrangle: Hotz
   Silver Creek area: Gilchrist 4
   Southwestern Oregon: Wells, F.G., 3
   Sprague River area: Merewether
   Spray quadrangle: Irish, R. J.
   Steens-Pueblo Mountains: Williams 3
   Swan Lake-Yonna Valleys: Meyers, J. D., 2
   Walla Walla basin: Newcomb 2
Pyroclastic materials: Ross

PLIOcene

Basalt flows: Callaghan
Fossils, localities: Steere 5
   Vertebrates: Packard 3; Shotwell 5, 6
Localities
   Butte Falls quadrangle: Smedes
   Clackamas County: Trimble 2
   Columbia River valley: Lowry; Mason 15
   Dayville quadrangle: Brogan, J.P.;
      Nesbit
   Hobart Butte area: Allen, V.T., 1
   Horse Heaven mining district: Waters 1
   Jamieson quadrangle: Calkins, Carlat
   John Day country: Steere 3; Thayer, T.P.
   Klamath Indian Reservation: Walker, G.W.
   Lyons quadrangle: Halstead
   Malheur County: Corcoran 3
   McMinnville quadrangle: Baldwin, E. M.; Brown, R.D.
   Mitchell Butte quadrangle: Corcoran 1;
      Dook; Porter; Privrasky
   Mitchell quadrangle: Bowers; Howard, C.B.; McIntyre, L.B.
   St. Helens quadrangle: Hotz
   Silver Creek area: Gilchrist 4
   Southwestern Oregon: Wells, F.G., 3
   Sprague River area: Merewether
   Spray quadrangle: Irish, R. J.
   Steens-Pueblo Mountains: Williams 3
   Swan Lake-Yonna Valleys: Meyers, J. D., 2
   Walla Walla basin: Newcomb 2
Pyroclastic materials: Ross

PLUVIAL LAKES

Age dating: Antevs; Allison 2
Lake County: Allison 1, 7; Conrad 1

POLK COUNTY

Asbestos: Meyers, J. D., 1
Geology
   Marys Peak: Baldwin, E. M., 5
   McMinnville quadrangle: Baldwin, E. M., 6;
      Brown, R. D.
   Sheridan quadrangle: Baldwin, E. M., 6
   Spirit Mountain quadrangle: Baldwin, E. M., 4
Mineral production 1952: Kauffman 3
Oil and gas exploration: Stewart, R.E., 2
SUBJECT INDEX

POLLEN CHRONOLOGY
  Mount Mazama: Flint
  Pluvial lakes: Allison 2

PORTLAND AREA
  Geology: Hart 2; Lowry

PORTLAND HILLS SILT
  Lowry

PORT ORFORD METEORITE
  La Paz; Oreg. Dept. Geol. 5

POZZALAN
  Oregon pumicites: Heath

PRE-TERTIARY ROCKS
  (see also: PALEOZOIC; MESOZOIC)
  Correlation, Telocaset quadrangle: Wagner, N.S., 4

PRICEITE
  Curry County borate: Staples 4

PUBLIC LANDS
  (see: MINING LAWS)

PUEBLO MOUNTAINS
  Geology: Williams 3

PUMICE
  Age dating: Allison 2; Flint; Libby 2
  Industry: Chesterman; Ladoa; Mason 3; Wagner, N.S., 1
  Localities
    Bend area: Williams 2
    Klamath Indian Reservation: Walker, G.W.
    Sprague River, Klamath County: Merewether
    Summer Lake area: Conrad 1, 2
  Pozzolanic properties: Heath

PUTTY PLANT
  Portland area: Anon. 63

PYRITE
  Bibliography: Espenshade

PYROCLASTICS
  General: Ross
  Western Cascades: Howell 3

QUARRIES
  Listed: Scott, L.E.; U.S. Corps Eng. 3

QUARTZ
  (see also: SILICA)
  Crystals: Caldwell; Howell 2
  Pseudomorphs: Staples 1
  Stalactites: Housley

QUARTZITE GRAVELS
  Portland area: Howell 1
  Snake River: Stearns 1

QUICKSILVER
  (see: MERCURY)

RADIOCARBON DATING
  Fort Rock Cave: Flint; Henry, T.R.; Libby 1, 2; Roberts, F.H.H. 2;
  Smithsonian Inst.
  Great Basin, general: Allison 2; Cressman 2;
  Hunt Klamath Indian Reservation: Libby 3
  Mount Mazama: Carter
  Oregon Coast prehistory: Cressman 3
  Summer Lake: Conrad 1

RARE EARTH METALS
  Blue chip metals: Libbey 10

RATTLESNAKE FORMATION
  Dayville quadrangle: Dawson
  John Day country: Steere 3
  Mitchell quadrangle: McIntyre, L. B.
  Spray quadrangle: Irish, R. J.
  Welded tuff member: Thayer, T.P.; Wilkinson
BIBLIOGRAPHY OF THE GEOLOGY AND MINERAL RESOURCES OF OREGON

RED FLATS
Nickel laterite: Hundhausen 2; Libbey 2

REFRACTORY MATERIALS
Chromites: Anon. 27; Kelly
Clay: Sterrett 2

RHODODENDRON FORMATION
Lowry; Trimble 2

ROCKS
Field manual for schools: Allan

ROCKY POINT FORMATION
Upper Nehalem River basin: Deacon

ROGUE FORMATION
Wells, F. G., 2, 3

ROGUE RIVER COUNTRY
Geography: Dickson 2

ROW RIVER AREA
Welded tuff: Hausen 1

SADDLEBACK MOUNTAIN
Geology: Baldwin, E. M., 4

SADDLE MOUNTAIN
Geology: Baldwin, E. M., 3

SAGENITE
(see: AGATE)

SALEM HILLS
Bauxite deposits: Corcoran 2, 4

SALINES
Chemical industry: Kaiser Alum.
Deposits: Anon. 49; Conrad 1; Stott

SANBORN, DR. ETHEL
Memorial: Anon. 21; Allison 3; Erickson 1, 1

SAND
Minerals in: Wilson 1
Physical & chemical properties: Devereaux

SAND AND GRAVEL
Annual production: Libbey 6, 16; Mason 16;
Mines 3
Dredging: Lenhart 1
Resources: Anon. 57; Bartell 2; Kauffman 2;
Lenhart 4; Libbey 3; Mason 4

SAND DUNES
Coastal distribution: Cooper, W. S., 1, 2;
Libbey 2
Control of: Nadeau; Pierson

SATISFICATION FORMATION
Lowry

SCAPPOUSE FORMATION
Upper Nehalem River basin: Deacon

SEA LEVEL
Eustatic changes: Cooper, W. S., 2

SEDIMENTATION
Columbia River, rates of: Flaxman
Geosynclines: Kay 3
Sea floor: Menard 1

SEDIMENT SAMPLING
Western Oregon streams: Barton

SELENIUM
Malheur County: Lakin; Steere 4

SERPENTINE
Asbestos survey: Meyers 1
Localities
Galice quadrangle: Wells, F. G., 2
Nickel Mountain: Oreg. Dept. Geol. 12
Red Flats: Hundhausen 2
SUBJECT INDEX

SERPENTINE, Continued:
Origin: Anon. 32
Plant ecology: Whittaker
Thermal analysis: Kauffman 1

SEVEN DEVILS AREA
Geology: Cook 1; Kinnison

SHALE
(see: EXPANDED SHALE)

SHAMROCK MINE
Copper-nickel: Hundhausen 1

SHAW FORMATION
Suplee area: Brogan, J. P.

SHEEP MOUNTAIN AREA
Mitchell quadrangle, geology: Swarbrick

SHERIDAN QUADRANGLE
Geology: Baldwin, E. M., 6

SHERMAN COUNTY
Pleistocene eolian deposits: Nat. Research Council 2

SILICA (INDUSTRIAL)
Annual reviews: Libbey 6, 16; Mason 6; Oreg. Dept. Geol. 19, 30
Chemical raw materials: Kaiser Alum.
Industry: Anon. 51; Bartell 2

SILVER
Production, a century of: Libbey 9
Annual: Maurer; Mote; U. S. Bur. Mines 3

SILVER CREEK FALLS STATE PARK
Geology: Barlow; Gilchrist 4

SLICKENSIDE
Wocus Marsh, Klamath County: McLeod 2

SMITH, WARREN DuPRE'
Obituary: Dicken 1

SNAKE RIVER REGION
(see also: HELLS CANYON; SEVEN DEVILS AREA)
Oil and gas investigations: Felts; Youngquist
Physiography: Freeman 2
Pleistocene history: Cook 2; Wheeler
Water supply: Kinnison; U. S. Geol. Survey 3; 10

SODIUM
Ground water: Hart 1
Saline lakes: Anon. 47; Conrad 1

SOILS
Backyard geologist: Kelham 2
Education Geochemistry: Meyers 3
Surveys Baker area: Anderson
Institution sites: Schlicker 2

SOUTHWESTERN OREGON
Geologic map: Wells, F. G., 3
Gold placers: Oreg. Dept. Geol. 17

SPENCER FORMATION
Coal deposits: Mason 14
Localities Albany quadrangle: Allison 5
Corvallis area: Vokes 2
Eugene area: Vokes 1
BIBLIOGRAPHY OF THE GEOLOGY AND MINERAL RESOURCES OF OREGON

SPENCER BUTTE

Geology: Snavely 2

SPIRIT MOUNTAIN QUADRANGLE

Geology: Baldwin, E. M., 4

SPOKANE FLOOD

Tree-rafted erratics: Sargent 3

SPOTTED RIDGE FORMATION

Supelee area: Brogan, J. P.

SPRAGUE RIVER AREA

Geology: Merewether

SPRAY QUADRANGLE

Geology: Irish, R. J.

STALACTITES

Quartz, Douglas County: Housley

STALAGMITES

Malheur and Arnold caves: Dake 4

STAYTON LAVAS

(see also: COLUMBIA RIVER BASALT)
Lower Columbia River basin: Lowry
Lyons quadrangle: Barlow; Halstead
Silver Creek Falls area: Gilchrist 4

STEENS BASALT

Steens Mt. area: Williams 3
Vale-Buchanan area: Dole 3

STEENS MOUNTAIN AREA

Geology: Williams 3
Uranium deposits: Dake 12; Oreg. Dept. Geol. 24

STEENS MOUNTAIN VOLCANIC SERIES

Williams 3

STONE

(see: BUILDING STONE)

STRATEGIC MINERALS

Production problems: Libbey 8, 18; Oreg. Dept. Geol. 23; Williston 1, 2

STRUCTURAL GEOLOGY

General: Eardley 2; Hoover; Poldervaart
Eastern Oregon
Dayville quadrangle: Dawson, Nesbit
Mitchell Butte quadrangle: Corcoran 1; Doak
Mitchell quadrangles: Bedford; Bowers; Howard, C. B.
Sprague River area: Merewether
Steens-Pueblo Mts. area: Williams 3
Summer Lake area: Conrad 1, 2
Wallowa Mts.: Palen
Wocus Marsh, Klamath County: McLeod 2
Western Oregon
Albany quadrangle: Allison 5
Corvallis area: Vokes 2
Galice quadrangle: Wells, F. G., 2
Marys Peak and Alsea quadrangles: Baldwin, E. M., 5
Oregon City area: Trimble 1
Spirit Mountain quadrangle: Baldwin, E. M., 4
Tualatin Valley: Hart 2
Upper Nehalem River basin: Deacon

SUBMARINE GEOLOGY

Astoria Canyon: Dietz 1; Menard 2
Deformation: Menard 3, 4
Sedimentation: Menard 1
Topography: Menard 2; Stetson

SULPHUR

Bibliography: Espenshade
Douglas County occurrence: Libbey 3

SUMMER LAKE AREA

Geology: Conrad 1, 2
Radiocarbon dating: Allison 2; Flint
Saline deposits: Anon. 49

SURFACE WATER

Bibliography of water-power resources:
Young, L. L., 1
Index of records: U.S. Geol. Survey 1
Industrial utility: Lohr 1, 2
Laws: Anon. 75
Pollution: Federal Security Agency 1, 2
SUBJECT INDEX

SURFACE WATER, Continued:

Potential power development: Helland;
  Jones, B. E.; Young, L. L., 2
Quality: Gierhart 1; Lohr 1, 2; Mussey;
  Oreg. Dept. Geol. 33; Swenson;
  U.S. Geol. Survey 5, 6, 8, 9
Reservoir projects: U.S. Bur. Reclamation 1-8
Sediment sampling: Barton
Sources of information: Sterrett 1
Supply
  Columbia River Basin: Anon. 17, 37;
    Freeman 1; Meigs; McDonald; Nelson;
    Simons; U. S. Geol. Survey 2, 4,
    10, 11
  Klamath River: Anon. 9
  Lake County: Trauger 1
  Milton-Freewater: Watkins
  Multnomah County: Anon. 2; Marshall;
    Morrow
  Pacific Northwest: Fuller; Merryfield
  Snake River: U.S. Geol. Survey 3, 10
  Willamette Basin: Highsmith
Watershed control: Marshall

SUPLEE AREA

Geology: Brogan, J. P.; Nesbit

SWAN LAKE - YONNA VALLEY AREA

Geology: Meyers 2

SWEET HOME AREA

Petrified forest: Greene; Ransom 1
Quartz pseudomorphs: Staples 1

TALC

Resources: Kauffman 2

TELOCASET QUADRANGLE

Geology: Wagner, N. S., 4

TEMPSKYA

(see: FOSSIL PLANTS)

THREE SISTERS AREA

General description: Hopson 2, 3
Glaciers: Biewener; Hopson 1

THUNDER EGGS

Occurrences
  General: Dake 2; Mason 7; Renton;
    Roots; Switzer
  Crook County: Anon. 65
  Jefferson County: Dake 9
  Malheur County: Carlat
Origin: Dake 9

TILLAMOOK COUNTY

Geology
  Sheridan quadrangle: Baldwin, E. M., 6
  Spirit Mountain quadrangle: Baldwin,
    E. M., 4
History: Orcutt
Mineral resources
  Coal: Mason 14
  Oil and gas exploration: Stewart, R. E., 2
  Production 1952: Kauffman 3
  Review of commercial minerals: Libbey 2

TILLAMOOK VOLCANIC SERIES

McMinnville quadrangle: Brown, R. D.

TITANIFEROUS MAGNETITE

Sprague River area: Merewether

TITANIUM

Bibliography: Carpenter
  Kroll process: Libbey 19
  Resources of world: Lawthers

TONY BUTTE AREA

Geology, Mitchell quadrangle: Bowers

TRAIL QUADRANGLE

Geology: Bartley

TRIANGLE LAKE

Origin, Lane County: Baldwin, E. M., 2

TRIASSIC

Dayville quadrangle: Brogan, J. P.; Dawson;
  Nesbit
  Douglas County: Libbey 3
  Huntington quadrangle: Beeson
  South Umpqua River: Ramp 2
  Southwestern Oregon: Wells, F. G., 3
BIBLIOGRAPHY OF THE GEOLOGY AND MINERAL RESOURCES OF OREGON

TRIASSIC, Continued:

Wallowa Mountains: Palen; Wagner, N. S.; 7

TROUTDALE FORMATION

Hart 2; Hotz; Howell; Lowry; Trimble 1, 2

TUALATIN QUADRANGLE

Geology: Schlicker 2

TUALATIN RIVER

Geologic history: Erickson, R.
Theory of meandering: Dury

TUALATIN VALLEY

Geology: Hart 2

TUFF

(see: LAPILLI TUFFS; WELDED TUFFS; BUILDING STONE; LIGHTWEIGHT AGGREGATE)

TUNGSTEN

Occurrences in Oregon: Wolfe, H. D.
Production: Libbey 6, 16; U. S. Bur. Mines 3

TYEE FORMATION

Coal resources: Mason 14
Corvallis area: Vokes 2
Eugene area: Vokes 1
Marys Peak and Alsea quadrangles: Baldwin, E. M., 5

UMATILLA COUNTY

Geology
Eolian deposits: Nat. Research Council 2
Garnet locality near Pilot Rock:
Anon. 40
Geology of southern half of county:
Wagner, N. S., 5
McNary Dam area: Arthur; Wells, J. M.
Walla Walla basin: Newcomb 2

Mineral resources
Coal: Mason 14
Production for 1952: Kauffman 3

UMATILLA COUNTY, Continued:

Paleontology
McKay Reservoir vertebrate fauna:
Anon. 39; Sargent 1; Shotwell 5, 6
McNary Reservoir vertebrates: Osborne

Water resources
Ground water: Brown, S. G., 2;
Newcomb 1, 2; U. S. Geol. Survey 12
Surface water: U. S. Bur. Reclam. 8;
Watkins

UMPOQUA FORMATION

Coal resources in: Mason 14

Localities
Ashland area: Schaefer 1
Bonanza-Nanpopareil area: Brown, R. E., 2
East Evans Creek area: Bartley
Hobart Butte area: Allen, V. T., 1
Nickel Mt. area: Oreg. Dept. Geol. 12
South Umpqua River area: Ramp 2
Southwestern Oregon: Wells, F. G., 3

UNION COUNTY

Geology
Telocaset quadrangle: Wagner, N. S., 4
Walla Walla basin: Newcomb 2

Ground water resources: Newcomb 2; U. S. Geol. Survey 12

Mineral resources
Gold: Masson
Lightweight aggregates: Mason 3

Mineral production 1952: Kauffman 3
Uranium: Matthews

URANIUM

Analyses: Matthews
Bibliography: Cooper, M.
Carbonaceous rocks: Moore, G. W.; Duncan, D. C., 2

Localities
General: Matthews
Grant and Baker Counties: Crosby
Lakeview area: Dake 12; Oreg. Dept. Geol. 24; Schaefer 2
Steens Mt. area: Dake 12; Oreg. Dept. Geol. 24
Virgin Valley: Staatz
Prospecting: Armstrong; Jarrard; Oreg. Dept. Geol. 21
VANCE MEMORIAL
Stanley

VIRGIN VALLEY
Uranium in opal: Staatz

VOLCANIC ASH
Abrasives, Mitchell Butte quadrangle:
Corcoran 1
Lightweight aggregate: Chesterman
Pozzolanic properties: Brandenburg; Heath
Quaternary deposits
Dayville quadrangle: Dawson
Mitchell quadrangle: Bowers; McIntyre, L. B.
Spray quadrangle: Irish, R. J.
Trail quadrangle: Bartley

VOLCANOES
(see: MOUNT HOOD; MOUNT MAZAMA; MOUNT NEWBERRY)

WAKEMAP PROJECT
Archaeology, Deschutes region: Butler

WALLA WALLA BASIN
Geology and ground water: Newcomb 2

WALLOWA COUNTY

Geology
Eolian deposits: Nat. Research Council 2
Snake River capture: Wheeler
Telocaset quadrangle: Wagner, N.S., 4
Walla Walla basin: Newcomb 2
Wallowa Mts.: Palen; Reid; Wagner, N.S., 7
Ground water: Newcomb 2
Mineral resources
Limestone: Anon. 51
Mineral production 1952: Kauffman 3
Tungsten: Wolfe, H. D.
Uranium: Matthews

WALLOWA MOUNTAINS
Geology: Palen; Reid; Wagner, N.S., 7
Physiography: Freeman 2

WASCO COUNTY
Archaeology: Butler; Cole
Geology
Eolian deposits: Nat. Research Council 2
The Dalles Dam area: Sargent 2
Ground water: Newcomb 1; U. S. Geol. Survey 12
Mineral resources
Alumina plant: Anon. 24; 35
Lightweight aggregates: Mason 3
Mineral production 1952: Kauffman 3
Oil and gas exploration: Stewart, R.E., 2
Perlite: Anon. 13; Bartell 2; Borah; Hamble; Mason 3
Sand and gravel, The Dalles Dam:
Anon. 57; Lenhart 4

WASHINGTON COUNTY
Geology
Eolian deposits: Nat. Research Council 2
Tualatin quadrangle: Schlicker 2
Tualatin River meandering: Dury
Tualatin Valley: Hart 2
Upper Nehalem River basin: Deacon;
Moore, R. C.
Ground water: Hart 2; Newcomb 1; U. S. Geol. Survey 12
Historic landmark: Libbey 4
Mineral resources
Bauxite: Allen, V.T., 2; Anon. 11;
Chittenden; Sohn 1, 2
Expanded shale: Gillson; Mason 3
Iron: Mason 9
Mineral production 1952: Kauffman 3
Oil and gas exploration: Stewart, R.E., 2

WASHINGTON, STATE OF
Geology: Campbell

WATER
(see also: GROUND WATER; SURFACE WATER)
Mineral composition: Meyers 3

WEBURG FORMATION
Grant County: Kummel
BIBLIOGRAPHY OF THE GEOLOGY AND MINERAL RESOURCES OF OREGON

WELDED TUFF

Localities
- Bend area: Williams 2
- Central Oregon, general: Ross
- Dayville quadrangle: Brogan, J.P.; Dawson; Nesbit
- Halsey quadrangle: MacPherson
- John Day basin: Thayer, T.P.; Wilkinson
- Lookout Mt. quadrangle: Swinney
- Mitchell quadrangle: Bedford; McIntyre
- Row River area: Hausen 1
- Winberry Creek area: Ashwill
Origin: Hausen 2; Staples 5

WESTERN CASCADES

Pyroclastics: Howell 3

WEST BRANCH CONGLOMERATE

Mitchell quadrangle: Swarbrick

WHEELE R COUNTY

Geology
- Dayville quadrangle: Dawson
- John Day region: Steere 3; Waters 2; Wolfe, J.A., 1
- Mitchell quadrangle: Bedford; Bowers; Howard, C.B.; McIntyre, L.B.; Swarbrick
- Spray quadrangle: Irish, R.J.

Mineral resources
- Agate: Denney
- Asbestos: Meyers 1
- Coal: Mason 14
- Iron: Mason 9
- Oil and gas exploration: Stewart, R.E., 2
- Uranium: Matthews

Paleontology
- Plants: Arnold 2; Doke 5; Scott, R.A., 2; Wolfe, J.A., 1
- Vertebrates: Erickson, J., 4; Wolfe J.A., 1

WHITE BUTTE AREA

Geology: Mitchell quadrangle: Howard, C.B.

WILLAMETTE GRAVEL

Dredging: Lenhart 1

WILLAMETTE METEORITE

(see: METEORITES)

WILLAMETTE Silt

General: Lowry
- Albany quadrangle: Allison 5
- Corvallis area: Vokes 2
- Sheridan and McMinnville quadrangles: Baldwin, E.M., 6; Brown, R.D.

WILLAMETTE STONE

Public land survey: Burnham

WILLAMETTE VALLEY

Geology: Allison 5; MacPherson; Vokes 2
- Groundwater: Newcomb 1
- Physiography: Dicken 3

WINBERRY CREEK AREA

Geology, Lane County: Ashwill

YAMHILL COUNTY

Geology
- Eolian deposits: Nat. Research Council 2
- McMinnville quadrangle: Baldwin, E.M., 6; Brown, R.D.
- Sheridan quadrangle: Baldwin, E.M., 6
- Spirit Mt. quadrangle: Baldwin, E.M., 4
- Tualatin Valley: Hart 2
- Groundwater: Hart 2; U.S. Geol. Survey 12

Mineral resources
- Coal: Mason 14
- Mineral production 1952: Kauffman 3
- Oil and gas exploration: Stewart, R.E., 2

YAMHILL FORMATION

Sheridan and McMinnville quadrangles: Baldwin, E.M., 6

YAQUINA BAY AREA

Nye Formation: Heacock 2
SUBJECT INDEX

YAQUINA FORMATION

Fossil localities: Steere 2
Stratigraphy: Herron

YONNA VALLEY

Geology: Meyers 2

ZEOLITE

Ferrierite: Staples 8
Localities
Albany quadrangle: Allison 5
Horse Heaven mining district: Waters 1
Marys Peak and Alsea quadrangles:
Baldwin, E. M., 5
Steens and Pueblo Mountains:
Williams 3
Micromounts: Wilson 2

ZINC

Biochemical prospecting: Warren
Little North Santiam River: Jensen 2
Production
Annual statistics: Maurer; Mote;
U.S. Bureau Mines, 3
Century of: Libbey 9

ZIRCONIUM

Industrial survey: Gillson