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Bibliography of Seismology

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4917. AYVAZOGLOU, W.,

- (1) "Geophysical Abstracts 97, April-June, 1939", Geological Survey Bulletins, No. 915-B, 49-86, Items 4887-5005, Washington, 1940.
- (2) "Geophysical Abstracts 98, July-September, 1939", Ibid., No. 915-C, 87-132, Items 5006-5161, Washington, 1940.
- 4918. Bailey, E. B., "Submarine Canyons", Nature, No. 3702, Vol. 146, p. 493, London, Oct. 12, 1940.

A brief note supporting a recently expressed theory by Prof. W. H. Bucher that submarine canyons are due to tsunamic waves.

4919. BAIRD, H. F., and BANWELL, C. J., "Recording of Air-pressure Oscillations Associated with Microseisms at Christchurch", New Zealand Journal of Science and Technology, Vol. 21, No. 6B, 314B-329B, 9 fig., 2 tab., bib., Wellington, 1940. H.F.B.

An important contribution to the data bearing on the cause of microseisms.

E.A.H.

- —— Banwell, C. J., and Baird, H. F., "Recording of Air-pressure Oscillations Associated with Microseisms at Christchurch". See No. 4919 of this list.
- 4920. Basset, J., "High Pressures", Journal de Physique et le Radium, Vol. 1, 121-123, Paris, April, 1940.

A brief abstract, signed G.G., appears as No. 2032, p. 521 of Science Abstracts, Section A, No. 511, Vol. 43, London and New York, July 25, 1940.

- 4921. Behre, Charles H., Jr. Review of "The Volcano-seismic Crisis at Montserrat", by Frank Perret, reported as No. 4754 of these lists, *Journal of Geology*, Vol. 48, No. 4, 447-448, Chicago, May-June, 1940.
- 4922. Béla, Simon, "Über den Aufgabenkreis des seismologischen Observatoriums in Budapest" (in Hungarian), Foldtani Kozlony, Vol. 67, No. 10-12, 315-330, Budapest, 1937.
- 4923. Biot, Maurice A., "The Influence of Initial Stress on Elastic Waves", Journal of Applied Physics, Vol. II, No. 8, 522-530, bib., Lancaster, Aug., 1940.
- 4924. BIRCH, Francis, and CLARK, Harry, "The Thermal Conductivity of Rocks and Its Dependence upon Temperature and Composition: Part 2", American Journal of Science, Vol. 238, No. 9, 613-635, figs. 9-10, tabs. 9-15, New Haven, Sept., 1940.
- Birkenhauer, Henry F., S.J., "The Illinois Basin Earthquake of November 23, 1939" (abstract). See p. 15 of Earthquake Notes, reported as No. 4978 of this list.

119

- BLAU, Ludwig,
 - "Method of Determining the Dips of Geological Strata with Substantially Vertical Reflections" (Patent), U.S. No. 2,148,422, Feb. 28, 1939.
 - (2) "Seismic-electric Prospecting by Means of Continued Waves" (Patent), U.S. No. 2,156,259, May 2, 1939.

Listed respectively as Nos. 4987 and 5146 of Geophysical Abstracts 97 and 98, reported as No. 4917 of this list.

4925. Bucher, Walter H., "Origin of the Submarine Valleys on the Continental Slopes of the North Atlantic", Nature, No. 3699, Vol. 146, 407-408, London, Sept. 21, 1940.

The author ascribes the cause of these submarine valleys to earthquake tsunami.

- —— Bullard, E. C., and Shepard, Francis P., "Submarine Geology and Geophysics" (discussion). See No. 4996 of this list.
- 4926. Bullen, K. E., "The Wairarapa Earthquake of 1917 August 5", Dominion Observatory (N.Z.) Bulletins, No. S-57, reprinted from the New Zealand Journal of Science and Technology, Vol. 21, No. 6B, 296B-301B, 3 tab., 1 map, bib., Wellington, 1940.

K.E.B.

- 4927. Bullen, K. E., "The Problem of the Earth's Density Variation", Bulletin, Seismological Society of America, Vol. 30, No. 3, 235-250, 4 tab., bib., Berkeley, July, 1940.
- 4928. Carl, Leroy R., "The Breaking Theory of Detonation, II", Journal of the Franklin Institute, Vol. 230, Nos. 2 and 3; 207-227, 4 fig., 2 tab., bib.; 355-374, 4 fig., 1 tab., bib., Philadelphia, Aug. and Sept., 1940.
- --- CLARK, Harry, and BIRCH, Francis, "The Thermal Conductivity of Rocks and Its Dependence upon Temperature and Composition". See No. 4924 of this list.
- 4929. CLEMENTS, Thomas, "The Bogota Fault, Colombia, South America", Journal of Geology, Vol. 48, No. 6, 660-669, 3 fig., bib., Chicago, Aug.-Sept., 1940.
- 4930. Croll, J. C. H., "Geophysics as Applied to Structural Geology", Mining and Geology Journal (Department of Mines, Victoria), Vol. 1, No. 4, 51-58, Melbourne, 1939.

A lengthy review by W. Ayvazoglou appears as No. 4958, p. 69, of Geophysical Abstracts 97, reported as No. 4917 of this list.

- --- Cull, John P., S.J., and Ring, Francis J., S.J., "A Vacuum Tube Coupled Relay" (abstract). See p. 18 of Earthquake Notes, reported as No. 4978 of this list.
- 4931. Denison, F. Napier, "Further Notes on Certain Pendulum Movements", Bulletin, Seismological Society of America, Vol. 30, No. 3, 219-224, 2 fig., 2 tab., bib., Berkeley, July, 1940.
- 4932. Department of Scientific and Industrial Research, New Zealand, "Geophysics Aids the Examination of Alluvial Deposits" (editorial note), Chemistry, Engineering and Mining Review, Vol. 31, No. 364, 170-172, Melbourne, 1939.

An abstract by W. Ayvazoglou appears as No. 4960, p. 71, of *Geophysical Abstracts* 97, reported as No. 4917 of this list.

- 4933. Disin. A number of seismological papers in the Japanese language have appeared in Vol. 9 of the journal Disin (Tokyo, 1937) and are reported in the section devoted to abstracts (pp. 13 and 14) of the Japanese Journal of Astronomy and Geophysics (Vol. 17, No. 2, Tokyo, 1940) as follows:—
 - 43. IMAMURA, Akitune, "Land Deformations in Aomori Prefecture", 69-74, 2 fig.
 - 44. "Land Deformations in the Kii and Muroto Peninsulas", 200-240, 1 fig.
 - 45. "Land Deformations in the North-western Part of the City of Osaka During the Period from 1934 to 1936", 411-421, 3 fig.
 - 46. Ізнімото, Mishio, "The Earthquake Faults and the Movements of Crustal Blocks", 350-354.

 A further paper is reported on page 39 of the abstracts section, as follows:—
 - 257. HUKUTOMI, Takaharu, "The Change of the Water Head of a Hot Spring at Rendaizi, Accompanying the Siduoka Earthquake of July 11, 1935", Disin, Vol. 7, 608-612, 1936.
- —— Doxsee, W. W., "Progress Report" (abstract). See pp. 18-20 of Earthquake Notes, reported as No. 4978 of this list.
- 4934. DRUCKER, Daniel C., and MINDLIN, Raymond D., "Stress Analysis by Three-dimensional Photoelastic Methods", Journal of Applied Physics, Vol. 11, No. 11, 724-732, 3 fig., bib., New York, Nov., 1940.
- 4935. Du Torr, Alexander L., "An Hypothesis of Submarine Canyons", Geological Magazine, Vol. 77, No. 5, 395-404, 6 fig., bib., Hertford, Sept.-Oct., 1940.
- 4936. EARTHQUAKE RESEARCH INSTITUTE, "Results of the Recent Precise Levelling along the Line, Zentuzi-Koti, Sikoku", Bulletin of the Earthquake Research Institute, Vol. 17, Part 4, 826-827, 1 map, Tokyo, Dec., 1939.
- 4937. ECKHARDT, E. A., "Partnership between Geology and Geophysics in Prospecting for Oil", Geophysics, Vol. 5, No. 3, Part 1, 209-214, Menasha, July, 1940.
- Elliot, C. J., S.J., and Westland, A. J., S.J., "The Observation of Microseisms at Spring Hill College, Alabama" (abstract). See pp. 16-17 of *Earthquake Notes*, reported as No. 4978 of this list.
- 4938. Engineering News-Record. Short notes of interest to seismologists have appeared in recent issues of Vol. 125 of the above periodical (New York, 1940) as follows:—
 - (1) "Tacoma Bridge Oscillations being Studied by Model", No. 5, p. 35, Aug. 1.
 - (2) "Flexible Core for Dam in Earthquake Country", No. 9, p. 41, Aug. 29.
 - (3) "William Bowie Dies, Noted Geodesist", No. 11, p. 67, Sept. 12.
 - (4) "Column Fails Underground" (in Imperial Valley Earthquake, May 18, 1940), No. 19, p. 40, 1 fig., Nov. 7.
- Engineering Laboratories, "Procédé et appareil pour prospection sismique" (Patent), France No. 834,841, Dec. 2, 1938.
 - Listed as No. 5005 of Geophysical Abstracts 97, reported as No. 4917 of this list.

- EVANS, P., and SALE, H. M., "The Geology of British Oilfields". See No. 4990 of this list.
- Ewing, Maurice, and Woollard, G. P., "Structural Geology of the Bermuda Islands". See No. 5010 of this list.
- FAUST, Lawrence Y.,
 - (1) "Subsurface Exploration" (Patent), U.S. No. 2,149,427, March 7, 1939.
 - (2) "Subsurface Seismic Surveying" (Patent), U.S. No. 2,156,624, May 2, 1939.

Listed, respectively, as Nos. 4988 and 5147 of Geophysical Abstracts 97 and 98, reported as No. 4917 of this list.

4939. Fekete, E., "Geophysical Prospecting in Years 1936-38. D. Seismic Method", Royal Hungarian Baron Eötvös Geophysical Institute Reports, 20-24, Budapest, 1939.

A brief abstract signed C. A. H. appears as No. 974, p. 301, Annotated Bibliography of Economic Geology for 1939, Vol. 12, No. 2, Urbana, Aug., 1940.

- 4940. FLINT, Richard Foster, "Pleistocene Features of the Atlantic Coastal Plain", American Journal of Science, Vol. 238, No. 11, 757-787, 1 fig., 2 tab., bib., New Haven, Nov., 1939.
- 4941. FRYXELL, F. M., "The Earthquakes of 1934 and 1935 in Northwestern Illinois and Adjacent Parts of Iowa", Bulletin, Seismological Society of America, Vol. 30, No. 3, 213-218, 2 fig., bib., Berkeley, July, 1940.
- 4942. GABRIEL, V. G.,
 - (1) "Geophysical Prospecting", Canadian Mining Journal, Vol. 60, No. 8, 474-477, 525, Montreal, August, 1939.
 - (2) "Geophysical Prospecting in American Mining", Engineering and Mining Journal, Vol. 140, No. 7, p. 60, New York, July, 1939.
- --- GARDNER, Louis W., "Seismograph Prospecting" (Patent), U.S. No. 2,153,920, April 11, 1939.

Listed as No. 5141 of Geophysical Abstracts 98, reported as No. 4917 of this list.

4943. Geophysics, "Cumulative Index, 1931-1939", Vol. 5, No. 3, Part 2, 40 pp., Houston, July, 1940.

The above index covers the Publications of the Society of Petroleum Geophysicists, 1931–1935, and the Publications of the Society of Exploration Geophysicists, 1936–1939. The arrangement of the index is in two sections, the first by author and the second by titles. The contents of each of the issues is also listed as a compilation of tables of contents.

4944. Goranson, R. W., "Physics of Stressed Solids", Journal of Chemical Physics, Vol. 44, 619-629, May, 1940.

An abstract by the author appears as No. 1998, p. 514, of Science Abstracts, Section A, No. 511, Vol. 43, London and New York, July 25, 1940.

- Grimes-Graeme, R., and Lundberg, H., "How Geophysics Aids the Geologist". See No. 4966 of this list.
- 4945. Hadley, Homer M., "Earthquake Design" (Letter to the Editor), Engineering News-Record, Vol. 125, No. 3, p. 43, New York, July 18, 1940.
- 4946. Hagiwara, Takahiro, "The Ogasima Earthquake and Its Aftershocks", Bulletin of the Earthquake Research Institute, Vol. 18, Part 2, 252-264, 17 fig., 3 tab., bib., Tokyo, June, 1940.
- 4947. HAGIWARA, T., and OMOTE, S., "Seismic Prospecting on a Sea Bottom", Bulletin of the Earthquake Research Institute, Vol. 18, Part 2, 305-317, 16 fig., 2 tab., bib., Tokyo, June, 1940.
- HATTORI, Y., KANEKO, T., MIYAMURA, S., MATUZAWA, T., and HAYAKAWA, M., "Erdbebenhäufigkeit in Bezug auf die Stellung der Sonne und des Mondes". See No. 4969 of this list.
- HAYAKAWA, M., HATTORI, Y., KANEKO, T., MIYAMURA, S., and MATUZAWA, T., "Erdbebenhäufigkeit in Bezug auf die Stellung der Sonne und des Mondes". See No. 4969 of this list.
- Heck, N. H., "Some Seismological Problems that Have Developed During the Past Year" (abstract). See pp. 14-15 of Earthquake Notes, reported as No. 4978 of this list.
- 4948. Heiland, C. A., "Gravimeters; Their Relation to Seismometers, Astatization, and Calibration", American Institute of Mining and Metallurgical Engineers, Technical Publications, No. 1049, 26 pp., New York, 1939.
- 4949. Heiland, C. A., "Equipment and Laboratories, Department of Geophysics at 'Mines'," Mines Magazine, Vol. 30, No. 8, 401-405, 14 fig., Golden, Aug., 1940.
- Heinrich, Ross R., and Westland, A. J., S.J., "A Macroseismic Study of the Ohio Earthquakes of March, 1937". See No. 4978 of this list.
- 4950. Holmes, Arthur. Review of: "The Internal Constitution of the Earth", edited by B. Gutenberg and listed in this bibliography as No. 4539. Nature, No. 3693, Vol. 146, 181-182, London, Aug. 10, 1940.
- 4951. Honnell, P. M., "Remote-control Seismic Instruments", Oil Weekly, Vol. 98, No. 1, p. 23, Houston, 1940.
 - A review, signed G.D.H., appears as No. 1084, p. 350A, Journal of the Institute of Petroieum, Vol. 26, No. 202, London, Aug., 1940.
- 4952. Hopkins, Harold, "Faulting at the Wright-Hargreaves Mine with Notes on Ground Movements", Canadian Mining and Metallurgical Bulletin, No. 343, 685-707, 15 fig., bib., Montreal, Nov., 1940.

4953. IIDA, Kumizi,

- (1) "Observations sur les séismes enregistrés par le microsismographe construit dernièrement (2)", Bulletin of the Earthquake Research Institute, Vol. 17, Part 4, 741-782, 15 fig., 21 tab., Tokyo, Dec., 1939.
- (2) "Velocity of Elastic Waves in a Granular Substance", *Ibid.*, 783-808, 20 fig., 10 tab., bib.

The first of the above papers is in Japanese with a short abstract in French. The second is in English with a short abstract in Japanese.

- —— IIDA, Kumizi, and KISHINOUYE, Fuyuhiko, "The Tunami that Accompanied the Oga Earthquake of May 1, 1939". See No. 4961 of this list.
- Innes, A. I., "Seismic Surveying Method" (Patent). See No. 4980 of this list.
- —— Innes, Morris J. S., "The Saint Lawrence Earthquake of October 19, 1939" (abstract). See p. 16 of Earthquake Notes, reported as No. 4978 of this list.
- 4954. Ізнімото, Mishio, "Seismic Faults", Proceedings, Imperial Academy, Vol 15, No. 1, 36-38, Tokyo, 1939.
- 4955. Iziri, Syozi, "On the 'Itoigawa-Sizuoka Tectonic Line' in the Minamikoma District, Yamanasi Prefecture, Japan", Bulletin of the Earthquake Research Institute, Vol. 18, Part 2, 340-343, 2 fig., Tokyo, June, 1940.

The paper is in Japanese with a short abstract in English.

4956. Jeffreys, Harold, "Theory of Probability", International Series of Monographs on Physics; General editors: R. H. Fowler and P. Kapitza, 380+vii pp., 2 fig. Price \$7. Oxford University Press, 1939.

A lengthy review by Edwin C. Kemble appears on pp. 331-332 of the Review of Scientific Instruments, Vol. 11, No. 10, New York, Oct., 1940.

- 4957. JEFFREYS, Harold, "On P up to 20° in North America", Bulletin, Seismological Society of America, Vol. 30, No. 3, 225-234, 7 tab., bib., Berkeley, July, 1940.
- 4958. Jeffreys, Harold, "An Analogy between the Theories of Potential and Vibrations", Philosophical Magazine, Vol. 30, No. 199, 161-167, bib., London, Aug., 1940.

4959. KAIN, Samuel W.,

- "List of Recorded Earthquakes in New Brunswick, compiled from Published Works and from Private Information", Bulletin of the Natural History Society of New Brunswick, Vol. 16, 16-22, Saint John, 1898.
- (2) "Seismic and Oceanic Noises", Monthly Weather Review, 6 pp. in reprint, Washington, April, 1898.

The above papers have been brought to the attention of the editor by Mr. L. C. L'Aigle, Snohomish, Wash., U.S.A., and have been made available for examination and copying by Mr. E. M. A. Vaughan, Librarian, Saint John Free Public Library, Saint John, N.B.

4960. KANAI, K.,

- (1) "Theory of the Aseismic Properties of the Brace Strut (Sudikai) in a Japanese-style Building. Part 4: The Effect of Material Inner Damping", Bulletin of the Earthquake Research Institute, Vol. 17, Part 4, 695-712, 26 fig., bib., Tokyo, Dec., 1939.
- (2) "Theory . . . Building. Part 5: Model Experiment Confirmations", *Ibid.*, 713-722, 9 fig., 2 tab., bib.
- Kanai, K., and Sezawa, K., "Temperature Distribution within a Semi-gaseous Earth", and "On Shallow Water Waves Transmitted to a Sea Coast with Special Reference to Love-waves in Heterogeneous Media". See No. 4994 of this list.
- KANAI, K., and SEZAWA, K.,
 - (1) "The Effect of Distribution of Heat-generating Sources on the Temperature Gradient in the Earth's Crust".
 - (2) "The Action of Soil Layers and of the Ocean as Dynamic Dampers to Seismic Surface Waves, and Notes on a few Previous Papers".
 - (3) "Viscosity Distribution within the Earth; Preliminary Notes". See No. 4995 of this list.
- Kaneko, T., Miyamura, S., Matuzawa, T., Hayakawa, M., and Hattori, Y., "Erdbebenhäufigkeit in Bezug auf die Stellung der Sonne und des Mondes". See No. 4969 of this list.
- 4961. Kishinouye, Fuyuhiko, and Iida, Kumizi, "The Tunami that Accompanied the Oga Earthquake of May 1, 1939", Bulletin of the Earthquake Research Institute, Vol. 17, Part 4, 733-740, 2 fig., bib., Tokyo, Dec., 1939.
- 4962. Kopcewicz, T., "Fazy sejsmiczne Gutenberga i metody analizy sejsmogramow dla dalekich zaburzeň" (Gutenberg's seismic phases and methods of analyzing far-distant disturbances), Towarzystwa Geofizikow w Warsawie Builetyn, No. 15, 5-12, Warsaw, 1938.

The author's abstract, translated by W. Ayvazoglou, appears as No. 5052, pp. 99-100, of *Geophysical Abstracts 98*, reported as No. 4917 of this list.

4963. Kumagai, Naoiti, "Studies in the Distribution of Gravity Anomalies in North-east Honsyu and the Central Part of the Nippon Trench, Japan", Japanese Journal of Astronomy and Geophysics, Vol. 17, No. 3, 477-551, 18 fig., 22 tab., bib., Tokyo, 1940.

Section 7 of the above paper (pp. 516-528) deals with: "Relation between the isostatic gravity anomalies and certain geological and seismological facts".

- 4964. Landsberg, H., "Sub-oceanic Seismology: (1) Report on Studies of Earthquake-wave Velocities with Special Reference to Difference in Sub-oceanic Lithosphere", from Advanced Report of the Commission on Continental and Oceanic Structure, 1 page, Washington, 1940.

 H.L.
- 4965. Lawson, Andrew C., "Isostatic Control of Fluctuations of Sea Level", Science, No. 2382, Vol. 92, 162-164, bib., New York, August 23, 1940.

- 4966. Lundberg, H., and Grimes-Graeme, R., "How Geophysics Aids the Geologist", Mining and Metallurgy, Vol. 20, No. 395, 498-500, New York, Nov., 1939.
 - A brief abstract signed C. A. H. appears as No. 910, p. 291, of the Annotated Bibliography of Economic Geology for 1939, Vol. 12, No. 2, Urbana, Aug., 1940.
- 4967. Lynch, William A., "The Eastern Section of the Seismological Society of America" (Report of the fifteenth annual meeting held at Cincinnati, May 31-June 1), Science, No. 2381, Vol. 92, p. 150, New York, Aug. 16, 1940.
- LYNCH, William A., "A Long Period Galvanometer as a Torsion Seismometer" (abstract). See p. 17 of Earthquake Notes, reported as No. 4978 of this list.
- 4968. MACELWANE, James B., "Fifteen Years of Geophysics: a Chapter in the Exploration of the United States and Canada, 1924–1939", Geophysics, Vol. 5, No. 3, Part 1, 250–258, 9 fig., Menasha, July, 1940.
- 4969. MATUZAWA, T., HAYAKAWA, M., HATTORI, Y., KANEKO, T., and MIYAMURA, S., "Erdbebenhäufigkeit in Bezug auf die Stellung der Sonne und des Mondes", Bulletin of the Earthquake Research Institute, Vol. 18, Part 2, 265-280, 4 fig., 17 tab., bib., Tokyo, June, 1940.
- 4970. McCready, H. J., "Interpretation of Seismograms", Mines Magazine, Vol. 30, No. 8, 439-443, 462, bib., Golden, Aug., 1940.
- 4971. MILLER, George W., "Information Please" (Letter to the editor re some effects of the recent earthquake at Brawley, Cal.), Engineering News-Record, Vol. 125, No. 3, p. 79, 1 fig., New York, July 18, 1940.
- 4972. MILNE, E. A., "Prof. A. E. H. Love, F.R.S.", Nature, No. 3699, Vol. 146, 393-394, London, Sept. 21, 1940.
 - An obituary of Prof. Love, who died at Oxford on June 5, 1940, at the age of seventy-seven.
- MINDLIN, Raymond D., and DRUCKER, Daniel C., "Stress Analysis by Three-dimensional Photoelastic Methods". See No. 4934 of this list.
- —— Minton, J. P., "Seismograph Blasting Cap" (Patent). See No. 4980 of this list.
- 4973. MIYABE, Naomi, "Variation in the Rate of Subsidence of the Earth's Surface in Tokyo", Bulletin of the Earthquake Research Institute, Vol. 17, Part 4, 723-732, 8 fig., Tokyo, Dec., 1939.
 - The paper is in Japanese with a lengthy résumé in English.
- MIYAMURA, S., MATUZAWA, T., HAYAKAWA, M., HATTORI, Y., and KANEKO, T., "Erdbebenhäufigkeit in Bezug auf die Stellung der Sonne und des Mondes". See No. 4969 of this list.
- 4974. Morrison, R. G. K., "Points of View on the Rock Burst Problem", Transactions, Canadian Institute of Mining and Metallurgy, Vol. 42, 443-460, Montreal, Aug., 1939.

R.G.K.M.

4975. NATIONAL BROADCASTING COMPANY, "Geophysical Exploration, II", Mines Magazine, Vol. 30, No. 8, 444-446, 458, Golden, Aug., 1940.

A script dialogue of a broadcast by NBC over station KOA on March 31, 1940, in which the details of seismic prospecting are dealt with.

- 4976. NATURE, "Earthquakes during May, 1940". Short note in *Nature*, No. 3687, Vol. 145, p. 1015, London, June 29, 1940.
- 4977. Nature. Short notes of interest to seismologists have appeared in recent issues of Vol. 146 of the above periodical (London, 1940) as follows:—
 - (1) "Earthquakes Registered at Hong-Kong", and "Recent Earthquakes", No. 3690, p. 93, July 20.
 - (2) "Earthquakes in the Aleutian Islands", Ibid., p. 102.
 - (3) "Earthquake in Tibet", and "Earth Tremors in Great Britain", No. 3691, p. 128, July 27.
 - (4) "Recent Earthquakes", No. 3693, p. 196, Aug. 10.
 - (5) "Interior of the Earth", Ibid., p. 203.
 - (6) "A Seismograph for Microseisms", No. 3694, p. 237, Aug. 17.
 - (7) "Earthquakes and Structures", No. 3700, 437-438, Sept. 28.
 - (8) "July Earthquakes Registered at Kew", No. 3695, p. 263, Aug. 24.
 - (9) "Earthquakes of South and Central America", "Seismicity of the Northern Pacific Coast of U.S.A.", and "Origin of Microseisms", *Ibid.*, 270-271.
 - (10) "Japanese Earthquakes, January-June, 1939", and "Earthquakes of the U.S. Atlantic Coastal Plain", No. 3696, p. 307, Aug. 31.
 - (11) "July Earthquakes", No. 3698, p. 364, Sept. 14.
 - (12) "Seismological Data from India", No. 3699, p. 398, Sept. 21.
 - (13) "Earthquakes Registered at Hong-Kong", Ibid., p. 405.
 - (14) "Recent Earthquakes", No. 3702, p. 490, Oct. 12.
 - (15) "Progress in Seismology", Ibid., p. 496.
- 4978. Nelson, James H., "Earthquake Notes", Vol. 12, Nos. 1-2, 20 pp., 1 fig., Washington, Sept., 1940.

The above publication is the organ of the Eastern Section of the Seismological Society of America. The Editor, Mr. Nelson, of the U.S. Coast and Geodetic Survey, Washington, D.C., should be notified of any data of interest to the Eastern Section which should be published in this periodical.

The present issue deals in order with the following topics: Imperial Valley earth-quake; Earthquake recorded on "non-seismic" instruments; Boulder Dam seismological program; Earthquake felt in Ohio; Seismology in Connecticut; Connection between deep-focus earthquakes and anomalies of terrestrial magnetism and gravity; Earthquakes at sea; Notes on earthquakes from Nature; Old earthquake recorders; Earthquakes in Turkey; Dr. Charles Davison (who died at Cambridge on April 28, 1940, at the age of 81); Personal observation of earthquake in Peru; Letters to the editor; Epicentres; Proceedings of the Cincinnati meeting of the Eastern Section (May 31-June 1, 1940); Abstracts of papers delivered at the meeting (for titles see under names of authors: Heck, Birkenhauer, Walter, Innes, Westland and Elliot, Smith, Lynch, Cull and Ring, Doxsee); Officers of the Eastern Section.

- 4979. NETTLETON, L. L., "Geophysical Prospecting for Oil", McGraw-Hill Book Company, 443 pp. Price \$5. New York, 1940.
- —— OMOTE, S., and HAGIWARA, T., "Seismic Prospecting on a Sea Bottom". See No. 4947 of this list.
- 4980. PATENTS. The following patents of interest to seismologists are listed in *Geophysics*, Vol. 5, No. 3, Part 1, 307-308 (Menasha, July, 1940), as follows:—
 - (1) MINTON, J. P., "Seismograph Blasting Cap", U.S. No. 2,189,741, Feb. 6, 1940.
 - (2) Innes, A. I., "Seismic Surveying Method", U.S. No. 2,192,972, March 12, 1940.
 - (3) Zuschlag, Theodor, "Apparatus for Geophysical Exploration", U.S. No. 2,202,885, June 4, 1940.
 - (4) SPARKS, N. R., "Apparatus for Determining Seismic Velocities", U.S. No. 2,203,272, June 4, 1940.
- 4981. Patents. A list of patents granted on geophysical apparatus or methods appears in Geophysical Abstracts 97 and 98, reported as No. 4917 of this list. Those of particular interest to seismologists are listed in this issue of the Bibliography under the names of the patentees as follows: Rieber, Blau, Faust, Engineering Laboratories, Weatherby, Gardner, Scherbatskoy, Prescott, and Zavialov.
- 4982. PERRINE, C. D., "The Origin of the Earth's Land Formations", Science, No. 2384, Vol. 92, 210-212, New York, Sept. 6, 1940.
- 4983. Picard, Leo, "Outline on the Tectonics of the Earth, with Special Emphasis upon Africa", Bulletins of the Geological Department, Hebrew University, Jerusalem, Vol. 2, No. 3-4, 66 pp., maps, diag., bib., Jerusalem, 1939.

A lengthy review by Chester R. Longwell appears on pp. 700-701 of Geographical Review, Vol. 30, No. 4, New York, Oct., 1940.

- 4984. POPULAR MECHANICS, "'Old Quakes' Are Repeated to Analyze Relative Shocks", Popular Mechanics, Vol. 74, No. 3, p. 352, 1 fig., New York, Sept., 1940. G.H.A.C.
- --- Prescott, Harold R., "Method and Apparatus for Making Geological Explorations" (Patent), U.S. No. 2,158,198, May 16, 1939.

Listed as No. 5148 of Geophysical Abstracts 98, reported as No. 4917 of this list.

- 4985. Puig, Ignacio, S.J., "Le edad de la tierra", Biblioteca Cientifica del Observatorio de San Miguel (F.C.P.), No. 16, 43 pp., Buenos Aires, 1940.

 I.P.
- 4986. Rhodes, Jean, "Le tremblement de terre du Chili", La Nature, No. 3048, 268-271, 13 illus., Paris, May 1, 1939.
- 4987. Riabinkin, L. A., "Seismic Methods of Prospecting" (in Russian), Razvedka Nedr, Vol. 9, No. 1, 24-27, Moscow, 1939.

A brief review, signed W. A., appears as No. 4929 of Geophysical Abstracts 97, reported as No. 4917 of this list.

- RIEBER, Frank,
 - (1) "Method of Geophysical Exploration" (Patent), U.S. No. 2,144,812, Jan. 24, 1939.
 - (2) "Wave Record Analyzer" (Patent), U.S. No. 2,155,507, April 25, 1939.

Listed, respectively, as Nos. 4985 and 5144 in Geophysical Abstracts 97 and 98, reported as No. 4917 of this list.

- --- RING, Francis J., S.J., and Cull, John P., S.J., "A Vacuum Tube Coupled Relay" (abstract). See p. 18 of Earthquake Notes, reported as No. 4978 of this list.
- 4988. Rosaire, E. E., "A Perspective of Exploration for Petroleum", Geophysics, Vol. 5, No. 3, Part 1, 259-271, 1 fig., 1 tab., bib., Menasha, July, 1940.
- 4989. Rössle, P., "Seismic Work in the Region between the Mouth of the Aller and the Weser Highland" (abstract), Bohrtechnik Zeitung, Vol. 57, No. 1, 1-3, Vienna, 1939.

A review is given of the above article, among others, reported at the meeting of the German Society for Oil Prospecting on December 8, 1938, A brief abstract, translated by W. Ayvazoglou, appears as No. 4959, p. 70, of *Geophysical Abstracts 97*, reported as No. 4917 of this list.

4990. SALE, H. M., and Evans, P., "The Geology of British Oilfields", Geological Magazine, Vol. 77, No. 5, 337-363, 2 fig., bib., Hertford, Sept.-Oct., 1940.

The above article is listed here because of an excellent and extended account of the geology of the Assam-Arakan Oil Region.

— Scherbatskov, Serge Alexander, "Method for Seismic Prospecting" (Patent), U.S. No. 2,156,198, April 25, 1939.

Listed as No. 5145 of Geophysical Abstracts 98, reported as No. 4917 of this list.

- 4991. Science. Short notes of interest to seismologists have appeared in recent issues of Vol. 92 of the above periodical (New York, 1940) as follows:—
 - (1) "Research Grants by the Geological Society of America to Francis Birch re Pressure Studies", No. 2378, p. 86, July 26.
 - (2) "Submarine Canyons", No. 2381, p. 7 (Suppl.), Aug. 16.
 - (3) "Earthquake of August 21 at Dutch Harbour, Alaska", No. 2383, p. 10 (Suppl.), Aug. 30.
 - (4) "Measurement of the Extent of Stretch of Metals", No. 2391, p. 10 (Suppl.), Oct. 25.
- 4992. Science News-Letter. Short notes of interest to seismologists have appeared in recent issues of Vol. 38 of the above periodical (Washington, 1940) as follows:—
 - (1) "Powerful Magnet Developed by Bell Telephone Laboratories", No. 3, p. 35, 1 illus., July 20.
 - (2) "Earth Trembles (July 14, 1940)", No. 4, p. 59, July 27.
 - (3) "Earth Trembles (July 27, 1940)", No. 6, p. 93, Aug. 10.
 - (4) "War Spurs Canadian Hunt for Minerals", No. 7, p. 100, Aug. 17.

- (5) "Earth Trembles (Aug. 1, 1940)", Ibid., p. 106.
- (6) "Strange Reversible Currents Keep Ocean Canyons Clear", No. 8, p. 116, Aug. 24.
- (7) "Earth Trembles (Aug. 21, 1940)", No. 9, p. 143, Aug. 31.
- (8) "Ice Age Glaciers Possibly Thicker than Old Estimate", No. 10, p. 152, Sept. 7.
- (9) "Electric Calculating Machine Devised for Complex Problems", No. 11, pp. 163-164, 1 fig., Sept. 14.
- (10) "Earth Trembles (Oct. 4 and 5, 1940)", No. 15, p. 236, Oct. 12.
- (11) "Earth Trembles (Oct. 11, 1940)", No. 16, p. 244, Oct. 19.
- (12) "Earthquake Weather", Ibid., p. 248.
- 4993. Sezawa, K., "The Plasticity Conditions Requisite for the Formation of Normal and Reverse Faults", Bulletin of the Earthquake Research Institute, Vol. 17, Part 4, 661-674, 2 fig., 1 tab., bib., Tokyo, Dec., 1939.

4994. SEZAWA, K., and KANAI, K.,

- "Temperature Distribution within a Semi-gaseous Earth: Part 2", Bulletin of the Earthquake Research Institute, Vol. 17, Part 4, 675-684, 8 fig., bib., Tokyo, Dec., 1939.
- (2) "On Shallow Water Waves Transmitted in the Direction Parallel to a Sea Coast with Special Reference to Long-waves in Heterogeneous Media", *Ibid.*, 685-694, 8 fig., bib.

4995. SEZAWA, K., and KANAI, K.,

- (1) "The Effect of Distribution of Heat-generating Sources on the Temperature Gradient in the Earth's Crust", Bulletin of the Earthquake Research Institute, Vol. 18, Part 2, 137-149, 14 fig., bib., Tokyo, June, 1940.
- (2) "The Action of Soil Layers and of the Ocean as Dynamic Dampers to Seismic Surface Waves, and Notes on a few Previous Papers", Ibid., 150-168, 18 fig., bib.
- (3) "Viscosity Distribution within the Earth; Preliminary Notes", *Ibid.*, 169-177, 5 fig., bib.
- 4996. Shepard, Francis P., and Bullard, E. C., "Submarine Geology and Geophysics" (discussion), Nature, No. 3700, Vol. 146, 431-432, London, Sept. 28, 1940.
- 4997. Sieberg, August, "Seismologie", Geologische Jahresberichte, Vol. 1, 236-244, Gebrüder Borntraeger, Berlin, 1938.

A brief abstract by W. Ayvazoglou appears as No. 5064, p. 103, of Geophysical Abstracts 98, reported as No. 4917 of this list.

- —— SMITH, Thomas J., S.J., "Determination of Depth of Glacial Deposit by Seismic Methods" (abstract). See p. 17 of Earthquake Notes, reported as No. 4978 of this list.
- 4998. Soske, Joshua L., "Requirements of a Modern Seismograph Service", Mines Magazine, Vol. 30, No. 8, 429-434, 462, Golden, Aug., 1940.
- --- Sparks, N. R., "Apparatus for Determining Seismic Velocities" (Patent). See No. 4980 of this list.

4999. STONELEY, R., "The Interior of the Earth", Royal Astronomical Society, Occasional Notes, No. 8, 103-116, London, March, 1940.

A brief review, signed C. A. S., appears as No. 2079, p. 533, of Science Abstracts, Section A., No. 511, Vol. 43, London and New York, July 25, 1940.

5000. Takahasi, R., "Obituary: Professor Mishio Ishimoto, D.S.", Bulletin of the Earthquake Research Institute, Vol. 18, Part 2, 2 pp. in appendix, 1 portrait, Tokyo, June, 1940.

Professor Ishimoto died suddenly on February 5, 1940. He was Director of the Earthquake Research Institute of the Imperial University at Tokyo.

5001. THORNTON, D. Laugharne, "Earthquakes and Structures", Journal of the Royal Society of Arts, London, Aug. 23, 1940.

A review of this paper appears in *Nature*, No. 3700, Vol. 146, 437-438, London, Sept. 28, 1940.

- 5002. ULRICH, Franklin P., "Seismological Work of the Coast and Geodetic Survey during 1938 in the Region Adjoining the Pacific Coast of the United States". Bulletin, Seismological Society of America, Vol. 30, No. 3, 261-272, 8 fig., Berkeley, July, 1940.
- 5003. Van Tuyl, F. M., "Importance of Research in Petroleum Geology", Mines Magazine, Vol. 30, No. 8, 393-394, 400, 456, Golden, Aug., 1940.
- 5004. Von Thyssen-Bornemisza, Stephan, "A New Device for a Quick Determination of the Travel-times of Elastic Waves in Cores" (abstract), Bohrtechnik Zeitung, Vol. 57, No. 1, 1-3, Vienna, 1939.

A review is given of the above article, among others, reported at the meeting of the German Society for Oil Prospecting on December 8, 1938. A brief abstract, translated by W. Ayvazoglou, appears as No. 4959, p. 70, of *Geophysical Abstracts 97*, reported as No. 4917 of this list.

5005. Waagen, Lukas, "Geophysikalische Tiefenforschung mit dem 'Geoskop'," Bohrtechnik Zeitung, Vol. 57, No. 1, 5-7, Vienna, 1939.

A brief review, signed W. A., appears as No. 4939, p. 64, of *Geophysical Abstracts* 97, reported as No. 4917 of this list.

- WALTER, Edward J., "Earthquake Travel Times and Structure South of Saint Louis" (abstract). See pp. 15-16 of Earthquake Notes, reported as No. 4978 of this list.
- 5006. WATANABE, Toru, "High Magnification Microseismograph for Seismic Prospecting of Submarine Coal Seams", Journal, Geological Society of Japan, No. 553, Vol. 46, 519-522, Oct. 20, 1939.

The paper is in Japanese.

5007. Weatherby, B. B., "The History and Development of Seismic Prospecting", Geophysics, Vol. 5, No. 3, Part 1, 215-230, 2 fig., bib., Menasha, July, 1940.

- Weatherby, Benjamin,
 - (1) "Seismic Surveying" (Patent), U.S. No. 2,151,878, March 28, 1939.
 - (2) "Seismic Surveying" (Patent), U.S. No. 2,154,548, April 18, 1939.

Listed, respectively, as Nos. 5138 and 5142 of Geophysical Abstracts 98, reported as No. 4917 of this list.

- 5008. Westland, A. J., S.J., and Heinrich, Ross R., "A Macroseismic Study of the Ohio Earthquakes of March, 1937", Bulletin, Seismological Society of America, Vol. 30, No. 3, 251-260, 3 fig., 3 tab., bib., Berkeley, July, 1940.
- Westland, A. J., S.J., and Elliott, C. J., S.J., "The Observation of Microseisms at Spring Hill College, Alabama" (abstract). See pp. 16-17 of Earthquake Notes, reported as No. 4978 of this list.
- 5009. Wilson, James T., "The Love Waves of the South Atlantic Earthquake of August 28, 1933", Bulletin, Seismological Society of America, Vol. 30, No. 3, 273-301, 8 fig., 9 tab., bib., Berkeley, July, 1940.
- 5010. Woollard, G. P., and Ewing, Maurice, "Structural Geology of the Bermuda Islands", Nature, No. 3630, Vol. 143, p. 898, London, 1939.
- ZAVIALOV, V. D., "Method of Working up Oscillograms Obtained During Geophysical Prospecting" (Patent), Russia No. 53,845, Sept. 30, 1938.

Listed as No. 5161 of Geophysical Abstracts 98, reported as No. 4917 of this list.

ZUSCHLAG, Theodor, "Apparatus for Geophysical Exploration" (Patent). See No. 4980 of this list.

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SUBJECT INDEX FOR THE YEAR 1940

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- C4. Cycles, Earthquake: 4717, 4859, 4911. See also P5. (Prediction).
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