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W. G. MILNE

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Bibliography of Seismology

January to June, 1948

6734. ADKINS, John N., "When the Earth Quakes", *Journal of Applied Physics*, Vol. 18, No. 12, p. 1134, Lancaster, Dec., 1947.

The above is a review of a book of the same title by James B. Macelwane, which was reported as No. 6631 of this *Bibliography*.

6735. AMORÓS, PORTOLÉS, José L., "La agitación microsísmica en la costa mediterránea española", *Revista, Reale Academia de Sciences*, Vol. 40, 25 pp., Madrid, 1946.

6736. ASSOCIATION DE SÉISMOLOGIE.

"Comptes Rendus des Séances de la Conférence Réunie à Strasbourg du 4 au 8 juillet 1947", Strasbourg, 1948.

The above is the complete proceedings of the meeting of The Association of Seismology in 1947 at Strasbourg. It is edited by J. P. Rothé. The issue contains the following items: introduction; list of members; program of the meeting; list of members present; minutes of each meeting; a description of the excursions; resolutions adopted (in French and English); and reports by the following members: Stoneley, Rothé, Greve, Jeffreys, Labrouste, Lehmann, and Peterschmitt. The titles of the reports are listed under the names of their respective authors in this *Bibliography*.

6737. BARBER, N. F., and URSELL, F., "The Generation and Propagation of Ocean Waves and Swell: I. Wave Periods and Velocities", *Philosophical Transactions of the Royal Society of London*, No. 824, Vol. 240, 527-560, 16 fig., 1 tab., bib., London, Feb. 24, 1948.

— BARNETT, Robert E., "Effectiveness of Geophysical Explorations at Ft. Randall Dam, South Dakota" (abstract), *Bulletin, Geological Society of America*, p. 1165. See No. 6771 of this list.

6738. BARTELS, Julius, "Geophysik", Carl Winter, 197 pp., Heidelberg, 1944.

This book, published under the general title "Studienführer—Schriftenreihe zur einföhrung in das gesante wissenschaftliche Studium", contains chapters on pure and applied seismology and on the general organization of seismological studies throughout Germany and the world. E. T.

6739. BÅTH, Markus, "Travel Times of the Principal Earthquake Waves for Uppsala", *Meteorologiska Institutionen vid Kungl. Universitetet*, No. 11, 105-128, 2 fig., 11 tab., bib., Uppsala, 1947.

The above paper is a reprint from the *Bulletin of the Geological Institute of Uppsala*, Vol. 32, 1947.

— BAYKAL, Orhan, and WILSON, James T., "Crustal Structure of the North Atlantic Basin as Determined from Rayleigh-Wave Dispersion". See No. 6853 of this list.

— BERKEY, Charles P., "Engineering Implications of the Massena-Cornwall Earthquake" (abstract), *Bulletin, Geological Society of America*, p. 1167. See No. 6771 of this list.

6740. BERNARD, P.,

- (1) "Sur la cause des microséismes à grande période", *Annales de Géophysique*, Vol. 3, 96-100, Paris, 1947.

"These microseisms are due to the mechanical action of the wind or to the turbulence of the air in the box of the seismograph." J. P. R.

- (2) "Relation entre l'agitation microséismique et les perturbations atmosphériques", *La Météorologie*, No. 2, 122-132, 10 fig., April-June, 1947.

6741. BIRCH, Francis,

- (1) "Finite Elastic Strain of Cubic Crystals", *Physical Review*, Vol. 71, No. 11, 809-824, 11 tab., bib., New York, June, 1947.

- (2) "Temperature and Heat Flow in a Well Near Colorado Springs", *American Journal of Science*, 733-753, 2 fig., 5 tab., bib., New Haven, Dec., 1947.

- (3) "Surface Structure and Heat Flow", *Transactions, American Geophysical Union*, Vol. 28, No. 5, 792-797, 6 fig., bib., Washington, 1947.

— BLACKWELDER, Eliot, "Geomorphic Record of Earthquakes in Western United States" (abstract), *Bulletin, Geological Society of America*, p. 1264. See No. 6771 of this list.

6742. BLOOMER, P. T., "Pillar Extraction at the Sullivan Mine", *The Canadian Mining and Metallurgical Bulletin*, No. 429, Vol. 41, 2-13, 17 fig., Montreal, Jan., 1948.

— BODLE, Ralph R., and LYNCH, Joseph J., S.J., "The Dominican Earthquakes of August, 1946". See No. 6801 of this list.

6743. BODLE, Ralph R., and MURPHY, Leonard M., "United States Earthquakes 1945", *United States Department of Commerce Publication*, No. 699, 38 pp., 6 fig., 4 tab., bib., Washington, 1947.

6744. BOUŠKA, Jan, "O Dynamických Účincích Východoalpských Zemětřesení na Uzemí Velké Prahy", *Publikace Geofyzikálního Ústavu v Praze*, No. 1, 1-9, 3 fig., 1 tab., bib., Prague, 1940.

6745. BOWDEN, K. F., "Some Observations of Waves and Other Fluctuations in a Tidal Current", *Proceedings of the Royal Society*, No. 1030, Vol. 192, 403-425, 4 fig., 3 tab., bib., London, Feb. 18, 1948.

6746. BRITISH ASSOCIATION FOR THE ADVANCEMENT OF SCIENCE. "Seismological Investigations", *British Association for the Advancement of Science*, Report for 1947, 5 pp., London, Oct., 1947.

This report contains the following brief papers:

(1) TILLOTSON, Ernest, "British Earthquakes".

(2) BULLARD, E. C., "Explosions in Germany".

(3) DEACON, G. E. R., "Microseisms".

E. T.

6747. BULLARD, E. C., "The Figure of the Earth", *Monthly Notices of the Royal Astronomical Society*, Geophysical Supplement, Vol. 5, No. 6, 186-192, 2 fig., 1 tab., London, Jan., 1948.

— BULLARD, E. C., "Explosions in Germany". See No. 6746 of this list.

6748. BULLEN, K. E., "An Introduction to the Theory of Seismology", Cambridge University Press, 276 pp., 43 fig., index. Price \$4.50. Cambridge, 1947.

As indicated in the preface, "the book is intended to be only an introduction to seismological theory". The mathematical analyses throughout much of the volume are given in skeletal form, but with sufficient detail that the necessary steps may be filled in by the reader. The basic theory of harmonic motion and vibration is treated fully.

Following an introduction which includes a short historical sketch, the author deals with the Theory of Elasticity, Wave Motion, Reflection and Refraction of Elastic Waves, and the applications to an Earth Model. He then discusses the seismograph both theoretically and with descriptions of various types. The construction of Time-Distance Curves is next explained and the means of deducing the structure of the Earth. Finally, the problem of the mechanics of earthquakes receives attention, together with short discussions of other problems of seismology, pure and applied.

The book admirably fills a real need by presenting the essentials of the Theory of Seismology in fairly compact form. The equations are numbered which will be most convenient. It is a matter of minor regret that the references to other papers are indicated only by the names of the authors. No titles or bibliographical data are given which will make it somewhat difficult for students not familiar with the literature.

E. A. H.

6749. BULLEN, K. E., "The Bikini Bomb and the Seismology of the Pacific Region", *Nature*, No. 4080, Vol. 161, p 62, bib., London, Jan. 10, 1948.

6750. BYERLY, P., "When the Earth Quakes" (review), *Scientific Monthly*, Vol. 56, No. 2, 165-166, Lancaster, Feb., 1948.

The above is a review of a book of the same title by James B. Macelwane, which was reported as No. 6631 of the *Bibliography*.

6751. CALOI, Pietro,

- (1) "Sulla propagazione delle onde di Rayleigh in un mezzo elastico firmo-viscoso stratificato", *Pubblicazioni dell'Istituto Nazionale di Geofisica*, No. 120, 10 pp., Rome, 1946.
- (2) "Notevoli onde interne (sesse termiche) nel lago di Garda", *Ibid.*, No. 127, 7 pp., 6 fig., 1947.
- (3) "Sulla determinazione delle coordinate epicentrali di un terremoto ad origine vicina", *Ibid.*, No. 128, 11 pp., bib.

6752. CAMPBELL, E. L., "Winter Seismic Operations in the Rocky Mountain Region", *Mines Magazine*, Vol. 38, No. 1, pp. 10, 44, Denver, Jan., 1948.

6753. CANADIAN GEOPHYSICAL BULLETIN.

"Canadian Geophysical Bulletin", Vol. 1, No. 4, 35 pp., Ottawa, Oct.-Dec., 1947.

The above publication is the quarterly report of the Associate Committee on Geodesy and Geophysics of the National Research Council of Canada. It is made up of reports on research projects of each branch of geophysics in which Canada has a part.

6754. CHARLIER, Ch., "Deuxième Rapport sur l'Explosion d'Heligoland", *Publications du Service Sismologique et Gravimétrique*, Series S, No. 3., 26 pp., 2 fig., 6 tab., 2 pl., bib., Uccle, Oct., 1947.

- CHATTERJEA, P. K., and SCULLY, C. T.,
 (1) "Thermionic Amplifier" (patent).
 (2) "Thermionic Valve Amplifier" (patent). See No. 6823 of this list.
6755. CHRISTIE, Norman J., "Reflection Seismograph Exploration in Coastal Waters", *Mines Magazine*, Vol. 37, No. 11, 37-40, 66, 5 fig., Denver, Nov., 1947.
6756. CLOOS, H., "Ground Blocks of the Continents and Ocean Bottoms", *Nature*, No. 4080, Vol. 161, 71-72, London, Jan. 10, 1948.
6757. CLOOS, Hans, "The Ancient European Basement Blocks—Preliminary Note", *Transactions, American Geophysical Union*, Vol. 29, No. 1, 99-103, 3 fig., bib., Washington, Feb., 1948.
- COLE, W. S., LADD, H. S., TRACEY, J. I., LILL, Gordon, and WELLS, J. W., "Drilling on Bikini Atoll, Marshall Islands" (abstract), *Bulletin, Geological Society of America*, p. 1201. See No. 6771 of this list.
6758. DALY, John W., "An Instrument for Plotting Reflection Data on the Assumption of Linear Increase of Velocity", *Geophysics*, Vol. 13, No. 2, 153-157, 3 fig., Menasha, April, 1948.
- DEACON, G. E. R., "Microseisms". See No. 6746 of this list.
6759. DEPPERMAN, Charles E., S.J., "Notes on the Origin and Structure of Philippine Typhoons", *Bulletin, American Meteorological Society*, Vol. 28, No. 9, 399-401, 1 fig., 2 tab., Worcester, Nov., 1947.
6760. DIX, C. Hewitt, "The Existence of Multiple Reflections", *Geophysics*, Vol. 13, No. 1, 49-50, Menasha, Jan., 1948.
- DIX, C. Hewitt,
 (1) "Discontinuities Between Layers in the Interior of the Earth" (abstract), *Bulletin, Geological Society of America*, p. 1264.
 (2) "Effect on Seismic Waves on Passing through a Focus" (abstract), *Ibid.*, p. 1265. See No. 6771 of this list.
6761. DOBRIN, Milton B., "Seismic Measurements on the Ross Shelf Ice" (review), *Geophysics*, Vol. 13, No. 1, 117-118, Menasha, Jan., 1948.
6762. DRAPER, C. S., and WRIGLEY, Walter, "An Instrument for Measuring Low Frequency Accelerations in Flight", *Journal of the Aeronautical Society*, Vol. 7, No. 9, 388-401, Easton, 1940.
 The above paper is listed as No. 9012, in *Geophysical Abstracts 128*, reported as No. 6838 of this list.
6763. DRESBACH, C. H., "Discussion-Multiple Reflections", *Geophysics*, Vol. 13, No. 1, p. 57, Menasha, Jan., 1948.
6764. DUÉ ROJO, Antonio,
 (1) "La agitación microsísmica del suelo en Granada durante el otoño e invierno de 1945 à 1946", *Revista Geofísica*, Vol. 5, 178-186, Rome, 1946.
 (2) "La agitación microsísmica de largo period en Granada", *Ibid.*, Vol. 6, 197-211, 1947.

6765. ELLSWORTH, T. P., "Multiple Reflections", *Geophysics*, Vol. 13, No. 1, 1-18, 9 fig., abst., Menasha, Jan., 1948.
6766. ENGINEERING NEWS-RECORD.
Brief items of interest to seismologists have appeared in Vol. 140 of the above periodical (New York, 1948), as follows:
(1) "Geological Society Devotes Sessions to Discussion of Engineering Geology", No. 3, p. 11, 1 fig., Jan. 15.
(2) "Calls Parapet Walls an Earthquake Hazard", No. 19, p. 2, May 6.
- EWING, Maurice, and PRESS, Frank, "A Theory of Microseisms with Geologic Applications". See No. 6827 of this list.
6767. FEDERAL SCIENCE PROGRESS.
"The Seismograph; Earthquake Engineering", *U.S. Department of Commerce Publication*, Vol. 1, No. 2, pp. 3, 28, Washington, 1947.
The above paper is listed as No. 9190, of *Geophysical Abstracts 129*, which was reported as No. 6838 of this list.
6768. FINCH, R. H.,
(1) "The Inactive Periods of Kilauea", *The Volcano Letter*, No. 497, 1-2, 2 tab., bib., Honolulu, July-September, 1947.
(2) "Hawaiian Volcano Observatory Report for July-September 1947", *Ibid.*, 3-4, 3 tab.
- FLUDE, J. W., "Apparatus for Making Geophysical Surveys Under Water" (patent). See No. 6824 of this list.
- FOLK, J. F., "Position-Damped Seismometer" (patent). See No. 6824 of this list.
- FU, C. Y., and GUTENBERG, B., "Remarks on Multiple Reflections". See No. 6776 of this list.
6769. GALANOPOULOS, A. G., "Earthquake Study in Greece, 1947", *Transactions, American Geophysical Union*, Vol. 29, No. 2, 256-257, bib., Washington, April, 1948.
6770. GAMBURTSEV, G. A., "Development of Experimental Seismology in the Soviet Union" (in Russian), *Izvestiia Akademia Nauk SSSR—Serii Geograficheskaja i Geofizicheskaja*, Vol 11, No. 5, Moscow, Sept.-Oct., 1947. H. E. L.
- GARDNER, L. W., "Geophone Polarity Indicator" (patent). See No. 6824 of this list.
6771. GEOLOGICAL SOCIETY OF AMERICA.
In the *Bulletin of the Geological Society of America*, (Vol. 58, No. 12, Part 2, New York, 1947), there are abstracts of Geological papers presented at the following meetings during 1947: Geological Society Meeting in Ottawa, Dec. 29-31; Cordilleran Section of Geological Society at Stanford University, April 11-12; Pacific Coast Branch of Paleontological Society at Stanford University, April 11-12. The titles of the abstracts of interest to seismologists are listed in this issue of the *Bibliography* under the names of the following authors: Barnett, Berkey, Blackwelder, Cole, Dix, Grant, Gilluly, Gutenberg, Johnston, Ladd, Lill, Link, Louderback, Martner, Misener, Neumann, Nile, Northrop, Packard, Raitt, Richter, Roberts, Robinson, Tracey, Wells, Williams, Wilson (E.D.), Wilson (J. Tuzo).

6772. GEYER, R. A., "Pulse of the Earth" (review), *Geophysics*, Vol. 13, No. 1, 118-121, 1 fig., Menasha, Jan., 1948.
6773. GHASWALA, S. K., "Developments in Engineering Seismology", *Science and Culture*, Vol. 13, No. 8, 312-320, 1 tab., bib., Bombay, 1948. S. K. G.
- GILLULY, James and GRANT, U. S., "Rapid Tectonic Elevation Changes in Southern California" (abstract), *Bulletin, Geological Society of America*, p. 1266. See No. 6771 of this list.
- GRANT, U. S., and GILLULY, James, "Rapid Tectonic Elevation Changes in Southern California" (abstract), *Bulletin, Geological Society of America*, p. 1266. See No. 6771 of this list.
6774. GREVE, Federico,
(1) "Lista de sismos sensibles al hombre recolectados medio del servicio de postales informativas—ano 1942-1946", *Instituto Sismologico de la Universidad de Chile*, Santiago, 1947.
(2) "Determinacion del coeficiente de seguridad antisismico para las diferentes zonas de Chile", *Ibid.*, 18 pp., 1947.
(3) "Estudio de la periodicidad de los terremotos destructores de la cordillera de los Andes al sur del Paralelo", *Ibid.*, 1947.
- GREVE, F., "Movimientos sismicos observados en Chile desde 1942-44". See No. 6736 of this list.
- GUILD, Philip W., and THAYER, T. P., "Thrust Faults and Related Structures in Eastern Cuba". See No. 6843 of this list.
6775. GUTENBERG, B., "Geophysics in War and Peace", *Transactions, American Geophysical Union*, Vol. 29, No. 2, 155-156, bib., Washington, April, 1948.
6776. GUTENBERG, B., and FU, C. Y., "Remarks on Multiple Reflections", *Geophysics*, Vol. 13, No. 1, 45-48, 3 fig., bib., Menasha, Jan., 1948.
- GUTENBERG, B., and RICHTER, C. F.,
(1) "Seismicity of the Earth" (abstract), *Bulletin, Geological Society of America*, p. 1252.
(2) "Energy Release in Earthquakes" (abstract), *Ibid.*, p. 1266.
See No. 6771 of this list.
6777. HAGGERTY, P. E., and OLSON, R. W., "Preliminary Results of a Study of Seismograph Sensitivity Requirements", *Geophysics*, Vol. 13, No. 1, 86-91, 4 fig., abst., Menasha, Jan., 1948.
6778. HANSEN, Raul F., "Multiple Reflections of Seismic Energy", *Geophysics*, Vol. 13, No. 1, 58-85, 15 fig., 1 tab., abst., Menasha, Jan., 1948.
6779. HASKELL, Norman A., "On Shallow-seated Folding in Massive Rocks", *Journal of Geology*, Vol. 46, No. 2, 166-176, 5 fig., 1 tab., bib., New York, February-March, 1938.
6780. HERZBERG, G., and WALKER, G. R., "Initiation of High Explosives", *Nature*, No. 4095, Vol. 161, 647-648, 1 fig., bib., London, April 24, 1948.

6781. HESS, H. H., "Major Structural Features of the Western North Pacific, an Interpretation of H.O. 5485, Bathymetric Chart, Korea to New Guinea", *Bulletin, Geological Society of America*, Vol. 59, No. 5, 417-445, 9 fig., 2 maps, bib., Washington, May, 1948.

The part of this article of interest to seismologists is on pp. 435-438.

6782. HILLER, W., "Die Erdbeben-tätigkeit in Südwestdeutschland im Jahre 1946", *Statistische Monatshefte Württemberg-Baden*, Vol. 1, No. 11-12, 3-320, Stuttgart, Nov.-Dec., 1947.

H. W. H.

6783. HODGSON, Ernest A.,

(1) "A Proposed Seismic Survey of a Traverse in the Pre-Cambrian Shield" (abstract), *Proceedings of the Royal Society of Canada*, Vol. 41, p. 193, Ottawa, 1947.

(2) "Laboratory Tests of the Microseismic Method of Detecting Critical Rock Pressure" (abstract), *Ibid.*, p. 193.

6784. HODGSON, Ernest A., "When the Earth Quakes" (review), *Transactions, American Geophysical Union*, Vol. 28, No. 6, p. 955, Washington, Dec., 1947.

The above is a review of a book by James B. Macelwane of the same title, which was reported as No. 6631 of this *Bibliography*.

6785. HOLLIS, Edward P., "The Earthquake Problem in the Western Hemisphere", *Bulletin of the Pan American Union*, Washington. Part 1, 86-100, 7 fig., tab., Feb., 1948. Part 2, 147-150, bib., March, 1948.

6786. HOLMES, Arthur, "The Age of the Earth", *Endeavour*, Vol. 6, No. 23, 99-108, 11 fig., bib., London, July, 1947.

— HOOPER, H., Jr., "Seismic Amplifying System" (patent). See No. 6823 of this list.

6787. ITTNER, Frank, "Discussion on Double Reflections", *Geophysics*, Vol. 13, No. 1, 36-40, 10 fig., Menasha, Jan., 1948.

— JEFFREYS, H., "The International Seismological Summary". See No. 6736 of this list.

6788. JOHNSON, Curtis H., "Remarks Regarding Multiple Reflections", *Geophysics*, Vol. 13, No. 1, 19-26, 6 fig., Menasha, Jan., 1948.

6789. JONES, O. A., "The Detection and Tracking of Cyclones off the Queensland Coast", *The Australian Journal of Science*, Vol. 10, No. 2, 43-44, bib., Queensland, Oct., 1947.

— JOHNSTON, T. F., and RAITT, R. W., "Transmission of Explosive Impulses in the Sea" (abstract), *Bulletin, Geological Society of America*, p. 1269. See No. 6771 of this list.

— KAMMER, E. W., "Optical Time-base Generator" (patent). See No. 6823 of this list.

6790. KANAI, Kiyoshi, "Earthquake Damages to Buildings" (in Japanese), *Oyo Butsuri*, Vol. 16, No. 1, 3 pp., Tokyo, May, 1947.

H. E. L.

6791. KENNEDY, W. Q., and RICHEY, J. E., "Catalogue of the Active Volcanoes of the World", *Bulletin Volcanologique*, Vol. 7, Series 3, Supplement, 11 pp., 1 map, bib., Edinburgh, 1947.

6792. KIRKWOOD, J. G., and SEEGER, R. J., "Surface Waves from an Underwater Explosion", *Journal of Applied Physics*, Vol. 19, No. 4, 346-360, 30 fig., 2 tab., Lancaster, April, 1948.
6793. KIESLINGER, Carl, "Fourier Analysis of a Blast Record", *Transactions, American Geophysical Union*, Vol. 29, No. 1, 36-37, bib., Washington, Feb., 1948.
- LABROUSTE, H.,
- (1) "État actuel de la séismologie dans les différents pays".
 - (2) "Amélioration des moyens de travail par l'emploi de microfilms".
See No. 6736 of this list.
- LADD, H. S., TRACEY, J. I., LILL, Gordon, WELLS, J. W., and COLE, W. S. "Drilling on Bikini Atoll, Marshall Islands" (abstract), *Bulletin, Geological Society of America*, p. 1201. See No. 6771 of this list.
6794. LAGRULA, J., "La séismicité du littoral Algérien et l'isostasie", *Comptes-Rendus de l'Académie des Sciences*, Vol. 225, 811-813, Paris, 1947.
- "The strong seismicity along the coast of northern Algeria coincides with a strip of positive gravity anomalies".
J. P. R.
6795. LARSEN, R. A., and SWIGER, W. F., "Structural Design for a Steam Plant in an Earthquake Area", *Engineering News-Record*, Vol. 140, No. 12, 102-105, 5 fig., New York, March 18, 1948.
6796. LAWSON, Andrew C., "Some Further Implications of the Doctrine of Isostasy", *Bulletin, Geological Society of America*, Vol. 59, No. 3, 197-209, bib., March, 1948.
- LEHMANN, I., "Seismic Recording in Europe". See No. 6736 of this list.
6797. LESTER, O. C., Jr., "Discussion of Multiple Reflections", *Geophysics*, Vol. 13, No. 1, 51-54, 1 fig., abst., Menasha, Jan., 1948.
6798. LEVORSEN, A. I., "Our Petroleum Resources", *Bulletin, Geological Society of America*, Vol. 59, No. 4, 283-299, 12 fig., Washington, April, 1948.
- LILL, Gordon, WELLS, J. W., COLE, W. S., LADD, H. S., and TRACEY, J. I., "Drilling on Bikini Atoll, Marshall Islands" (abstract), *Bulletin, Geological Society of America*, p. 1201. See No. 6771 of this list.
- LINK, T. A., "Leduc Oil Field, Alberta" (abstract), *Bulletin, Geological Society of America*, p. 1202. See No. 6771 of this list.
6799. LIPSON, Leonard B., "Polar Mapping Applied to Seismology", *Transactions, American Geophysical Union*, Vol. 29, No. 1, 32-35, 1 fig., bib., Washington, Feb., 1948.
- LOPER, G. B., "Seismic-Wave Detector" (patent). See No. 6824 of this list.
- LOUDERBACK, George D., "Central California Earthquakes 1818-1829" (abstract), *Bulletin, Geological Society of America*, p. 1266. See No. 6771 of this list.

6800. LUNDBERG, Hans,
 (1) "Mining Geophysics", *Mining and Metallurgy*, Vol. 29, No. 494, 88-92, 2 fig., New York, Feb., 1948.
 (2) "The History of Geophysical Exploration", *Canadian Mining and Metallurgical Bulletin*, No. 431, Vol. 41, 171-185, 26 fig., bib., Montreal, March, 1948.
6801. LYNCH, Joseph J., S.J., and BODLE, Ralph R., "The Dominican Earthquakes of August, 1946", *Bulletin, Seismological Society of America*, Vol. 38, No. 1, 1-17, 17 fig., Berkeley, Jan., 1948.
6802. LYNCH, William A., "The Envelope Method of Analysis Applied to Surface Waves", *Transactions, American Geophysical Union*, Vol. 28, No. 6, 838-839, 2 tab., bib., Washington, Dec., 1947.
6803. MACELWANE, James B., S.J.,
 (1) "Storms and the Origin of Microseisms", *Annales de Géophysique*, Vol. 2, No. 4, 281-289, 1 fig., bib., Paris, Dec., 1946.
 (2) "Geophysics", *Proceedings of the American Philosophical Society*, Vol. 91, No. 1, 79-82, Philadelphia, 1947.
 (3) "The Interior of the Earth", *Science in Progress*, Fifth Series, 54 pp., 26 fig., New Haven, 1947.
 (4) "Progress Report for the Jesuit Seismological Association for the Years 1945 and 1946", *Transactions, American Geophysical Union*, Vol. 28, No. 6, 931-935, 2 tab., Washington, Dec., 1947.
6804. MARTIN, Harold M., "What Makes a Typhoon Tick", *Saturday Evening Post*, Vol. 220, No. 32, pp. 39, 45, 3 fig., New York, Feb. 7, 1948.
 The above is a popular article mentioning the microseismic method of tracking of ocean storms as used in the Pacific area.
- MARTNER, Samuel, "Dominguez Hills, California, Earthquake of June 18, 1944" (abstract), *Bulletin, Geological Society of America*, p. 1266. See No. 6771 of this list.
6805. MATHER, Kirtley F., "Causes of Catastrophe", *Nonfiction Book News*, 4-7, New York, Feb., 1948.
 The above is a review of a book of the same title by L. Don Leet.
- McLURE, C. D., "Timing Device for Recorders" (patent). See No. 6824 of this list.
6806. MEADE, B. K., "Earthquake Investigation in the Vicinity of El Centro, California; Horizontal Movement", *Transactions, American Geophysical Union*, Vol. 29, No. 1, 27-31, 2 fig., 3 tab., bib., Washington, Feb., 1948.
6807. MECHANICS, "Geological Testing of Underground Rock Structures", *Mechanics*, No. 1,129, Vol. 43, No. 5, p. 80, London, Nov. 28, 1947.
6808. MEISSER, Phil Otto, "Praktische Geophysik für Lehre, Forschung und Praxis", Theodor Steinkopff, 368 pp., Leipzig, 1943.

This book contains chapters on the theory and practical details of pure and applied seismology.
 E. T.

6809. MELLE, F. A. Van, "Wave-front Circles for a Linear Increase of Velocity with Depth", *Geophysics*, Vol. 13, No. 2, 158-162, 2 fig., Menasha, April, 1948.
6810. MIHAILOVIĆ, Jelenko, "L'activité séismique des dépressions d'Ohrid et de Prespa", *Bulletin, Académie des Sciences Mathématiques et Naturelles*, Sec. B, No. 6, 81-95, 6 fig., 1 tab., bib., Belgrade, 1940.
- MISENER, A. D., "Geothermal Measurements in the Canadian Shield" (abstract), *Bulletin, Geological Society of America*, p. 1209. See No. 6771 of this list.
6811. MOLARD, P.,
- (1) "Le séimographe amplifié en haute fréquence de la station du Morne des Cadtes, Martinique", *Annales de Géophysique*, Vol. 3, 24-62, 36 fig., Paris, 1947.
"Description and theory of the apparatus". J. P. R.
 - (2) "Tremblements de terre des Petites Antilles et manifestations actuelles du volcanisme de Archipel, 1936 à 1943", *Ibid.*, 113-140, 7 fig.
"Most of the seismic activity originates from an exterior belt around the Atlantic side of the lesser Antilles; other shocks are due to a deep volcanic activity in the neighbourhood of Mount Pelée". J. P. R.
6812. MONAHAN, A. C., "Untapped Sources of Oil", *Science News Letter*, Vol. 53, No. 2, 26-27, 2 fig., Washington, Jan. 10, 1948.
6813. MOSES, H. E., "The Head-on Collision of a Shock Wave and a Rarefaction Wave in One Dimension", *Journal of Applied Physics*, Vol. 19, No. 4, 383-387, bib., Lancaster, April, 1948.
6814. MUNK, Walter H., "Wave Action on Structures", *Petroleum Technology*, Vol. 11, No. 2, 1-18, 16 fig., 2 tab., bib., New York, March, 1948.
- MURPHY, Leonard M., and BODLE, Ralph R., "United States Earthquakes 1945". See No. 6743 of this list.
6815. NATIONAL BUREAU OF STANDARDS.
- "Growth of Marble as a Basis for Durability Tests", *Technical News Bulletin*, Vol. 32, No. 3, p. 27, March, 1948.
- Abstract: "Some marbles turn to sand right through in 50 years due to repeated temperature cycles due to the thermal properties of calciet crystals. The crystals have a different thermal expansion along different axes. The crystals are tightly interlaced, and complex stresses and slippage occurs between them. This explains a marked hysteresis effect in the volume changes resulting from a temperature cycle. A permanent increase in volume up to 3½ per cent has been observed in some weathered samples".
F. G. M.
6816. NATIONAL RESEARCH COUNCIL OF CANADA.
- "Canadian Geophysical Bulletin", Vol. 1, No. 3, 41 pp., Ottawa, July-September, 1947.
- The above periodical is the organ of the Associate Committee on Geodesy and Geophysics of Canada. Articles of interest to seismologists in this issue are as follows: Seismic Survey Project, Kirkland Lake, Ontario; Ontario Department of Mines Seismic 12 Channel Refraction Survey for Determination of Depth of Overburden in North York Township, Ontario; Geophysical Surveys in Western Canada by Oil Companies; Toronto Transportation Commission.

6817. NATURE.

Brief items of interest to seismologists have appeared in Vol. 160 of the above periodical (London, 1947), as follows:

- (1) "Volcanic Activity in 1946", No. 4074, p. 744, Nov. 29.
- (2) "Bibliography of Seismology", No. 4078, p. 898, Dec. 27.

6818. NATURE.

Brief items of interest to seismologists have appeared in recent issues of Vol. 161 of the above periodical (London, 1948), as follows:

- (1) "Earthquake in the Philippines", No. 4085, p. 232, Feb. 14.
- (2) "Earthquakes During the Last Quarter of 1947", No. 4087, p. 306, Feb. 28.
- (3) "Seismological Research in Great Britain", No. 4094, 615-616, April 17.
- (4) "Earthquakes During July-August, 1947", No. 4095, p. 657, April 24.

6819. NEUMANN, Frank, "Earthquake Notes", Vol. 19, Nos. 1 and 2, 16 pp., Washington, Sept.-Dec., 1947.

The above periodical is the organ of the Eastern Section of the Seismological Society of America. The issue listed contains a thorough discussion of the problem of a university operating a seismograph station. The sub-headings are as follows: Editorial comment; the university seismograph problem; principal uses of seismographic data; why additional stations are needed; the microseism problem; stations in seismic and non-seismic areas; how the university benefits by operating a seismographic station; independent and cooperative stations; cost of equipment; selection of site and instrument; maintenance; interpretation of records and publication of results; amateur seismology; some general considerations on the choice of a seismograph; Benioff seismographs; Sprengnether seismographs; Wood-Anderson seismographs; miscellaneous seismographs; amateur seismographs; bibliography of papers on seismographs. The following important article is quoted from the publication: "Seismologists operating seismographs are requested to submit further discussion of the university seismograph problem in a subsequent issue of *Earthquake Notes*. Please contact the Editor now concerning your plans".

— NEUMANN, Frank,

- (1) "Present Status of Engineering Seismology" (abstract), *Bulletin, Geological Society of America*, p. 1267.
- (2) "Measurement of Permanent Ground Displacement by Geodetic and Seismographic Methods" (abstract), *Ibid.*

See No. 6771 of this list.

— NILE, Stephen W., "Seismology in Montana" (abstract), *Bulletin, Geological Society of America*, p. 1268. See No. 6771 of this list.— NORTHROP, Stuart A., "Seismology in New Mexico" (abstract), *Bulletin, Geological Society of America*, p. 1268. See No. 6771 of this list.

— OLSON, R. W., and HAGGERTY, P. E., "Preliminary Results of a Study of Seismograph Sensitivity Requirements". See No. 6777 of this list.

6820. O'NEILL, John J., "Moon's 'Tickle' May Cause Earthquakes", *Toronto Star Weekly*, p. 9, Toronto, April 10, 1948.

The above is a popular article quoting some work done by Dr. Stetson on earthquake occurrence.

6821. OXFORD, UNIVERSITY OBSERVATORY.

- (1) "International Seismological Summary. 1936 July, August, September", 333-466, Richmond, August 17, 1947.
- (2) "International Seismological Summary. 1936 October, November, December", 469-637, Richmond, October 23, 1947.

— PACKARD, E. L., "Status of Seismology in Oregon" (abstract), *Bulletin, Geological Society of America*, p. 1268. See No. 6771 of this list.

6822. PARKIN, ERNEST J., "Vertical Movement in the Los Angeles Region, 1906-1946", *Transactions, American Geophysical Union*, Vol. 29, No. 1, 17-26, 8 fig., abst., Washington, Feb., 1948.

— PARR, J. O., JR., "Seismic Surveying" (patent). See No. 6824 of this list.

6823. PATENTS.

Patents of interest to seismologists are found in *Geophysics* (Vol. 13, No. 2, Menasha, April, 1948), as follows:

- (1) CHATTERJEA, P. K., and SCULLY, C. T., "Thermionic Amplifier", U.S. No. 2,431,306.
- (2) CHATTERJEA, P. K., and SCULLY, C. T., "Thermionic Valve Amplifier", U.S. No. 2,431,307.
- (3) WOLF, A., "Seismic Exploration with Control of Directional Sensitivity", U.S. No. 2,431,600.
- (4) KAMMER, E. W., "Optical Time-base Generator", U.S. No. 2,428,369.
- (5) RUSLER, G. W., "Tuning Fork Construction", U.S. No. 2,433,160.
- (6) PIETY, R. G., "Automatic Volume Control for Seismograph Amplifiers", U.S. No. 2,430,246.
- (7) HOOVER, H., JR., "Seismic Amplifying System", U.S. No. 2,430,983.

6824. PATENTS.

The following patents of interest to seismologists are listed in *Geophysics* (Vol. 13, No. 1, Menasha, Jan., 1948).

- (1) GARDNER, L. W., "Geophone Polarity Indicator", U.S. No. 2,423,970.
- (2) RIEBER, F., "Apparatus and Method for Making and Analyzing Geophysical Records", U.S. No. 2,427,421.
- (3) McLURE, C. D., "Timing Device for Recorders", U.S. No. 2,424,622.
- (4) PARR, J. O., JR., "Seismic Surveying", U.S. No. 2,424,705.
- (5) FLUDE, J. W., "Apparatus for Making Geophysical Surveys under Water", U.S. No. 2,423,591.
- (6) FOLK, J. F., "Position-Damped Seismometer", U.S. No. 2,424,724.
- (7) LOPER, G. B., "Seismic-Wave Detector", U.S. No. 2,428,168.

— PETERSCHMITT, M. E., "La magnitude des séismes". See No. 6736 of this list.

6825. PETROESCHEVSKY, W. A., "Vulkanologische berichten (Volcanological Reports)", *Bulletin of the Bureau of Mines and the Geological Survey in Indonesia*, Vol 1, No. 1, 12-13, Bandoeng, 1947.

"The above paper contains short remarks on the observations with the horizontal seismograph which has been put in use in Bandoeng in May, 1946. It mentions the Japanese earthquake in December, 1946, and the tectonic earthquake in Djokja on September 5, 1946."

J. F. S.

- PIETY, R. G., "Automatic Volume Control for Seismograph Amplifiers" (patent). See No. 6823 of this list.
6826. POISSON, R. P.,
- (1) "La Séismicité de Madagascar", *Comptes-Rendus de l'Académie des Sciences*, Vol. 224, 699-700, Paris, 1947.
"The seismicity is concentrated in the 'Graben' faulting of the old gneissic rocks". J. P. R.
 - (2) "Quelques indications sur la géologie profonde de Madagascar d'après les enregistrements des tremblements de terre", *Ibid.*, Vol. 225, 1051-1053, 1947.
"The hypotheses by Jeffreys and Joliat are very useful for interpreting the underground structure of Madagascar".
 - (3) "Notes de Météorologie Malgache; I—Tremblements de terre Malgaches en 1944; II—Tremblements de terre Malgaches en 1945; III—Echelle des intensités pour l'étude des tremblements de terre; IV—Le tremblement de terre du 28 février 1945; V—un prédécesseur du tremblement de terre du 28 février 1945", *Bulletin de l'Académie Malgache*, New Series, Vol. 26, Tananarive, 1947. J. P. R.
6827. PRESS, Frank, and EWING, Maurice, "A Theory of Microseisms with Geologic Applications", *Transactions, American Geophysical Union*, Vol. 29, No. 2, 163-174, 5 fig., 1 tab., bib., Washington, April, 1948.
- RAITT, R. W., and JOHNSTON, T. F., "Transmission of Explosive Impulses in the Sea" (abstract), *Bulletin, Geological Society of America*, p. 1269. See No. 6771 of this list.
6828. RANDALL, Jack, "Determination of Overburden Depth by Employment of the Seismograph", *The Quebec Miner*, Vol. 16, No. 122, pp. 3, 6, 2 fig., Toronto, Jan. 9, 1948.
6829. REPETTI, W. C., S.J., "The Manila Observatory", 43 pp., Washington, 1948.
The above is a booklet giving the complete history of the Observatory at Manila.
- RICHEY, J. E., and KENNEDY, W. Q., "Catalogue of the Active Volcanoes of the World". See No. 6791 of this list.
- RICHTER, C. F., and GUTENBERG, B.,
- (1) "Seismicity of the Earth" (abstract), *Bulletin, Geological Society of America*, p. 1252.
 - (2) "Energy Release in Earthquakes" (abstract), *Ibid.* See No. 6771 of this list.
- RIEBER, F., "Apparatus and Method for Making and Analysing Geophysical Records" (patent). See No. 6824 of this list.
6830. RIVLIN, R. S., "Large Elastic Deformations of Isotropic Materials: III. Some Simple Problems in Cylindrical Co-ordinates", *Philosophical Transactions of the Royal Society of London*, No. 823, Vol. 240, 509-525, bib., London, Feb. 24, 1948.
- ROBERTS, Elliott B., "Projected Activities, U.S. Coast and Geodetic Survey, in Seismology" (abstract), *Bulletin, Geological Society of America*, p. 1269. See No. 6771 of this list.
6831. ROBERTSON, Florence, "On the Selection of a Seismograph", Sprengnether Instrument Company, 41 pp., 8 fig., bib. Price \$1.00. Saint Louis, 1948.

- ROBINSON, Harry B., "Recent Earthquakes in Lassen Volcanic National Park" (abstract), *Bulletin, Geological Society of America*, p. 1269. See No. 6771 of this list.
6832. ROTHÉ, J. P., "Quelques aspects de la structure terrestre éclairés par la séismologie", *Revue Scientifique*, No. 3271, Vol. 85, 401-408, Paris, 1947.
 "A brief review of the problem concerning the structure of the Atlantic and Pacific Ocean floor; the real Atlantic Ocean only extends to the west of the Mid-Atlantic ridge; is seismic activity connected with folding or faulting? classification by Professor Caloi; seismicity of the Western Alps".
 J. P. R.
- ROTHÉ, J. P.,
 (1) "Rapport sur la gestion du Bureau International de Séismologie (1939-1947)".
 (2) "Rapport sur la gestion des fonds de l'Association de Séismologie".
 See No. 6736 of this list.
6833. RUPNIK, John J., "The Constant Level Datum Plane in Areas of Rough Topography", *Mine Magazine*, Vol. 37, No. 11, 63-64, 2 fig., Golden, Nov., 1947.
- RUSLER, G. W., "Tuning Fork Construction" (patent). See No. 6823 of this list.
6834. SCHMITT, Don E. G., "Prevention of Accidents from Falls of Ground", *Canadian Mining and Metallurgical Bulletin*, No. 428, 566-570, Montreal, Dec., 1947.
6835. SCIENCE.
 Brief items of interest to seismologists have appeared in Vol. 107 of the above periodical (Lancaster, 1948), as follows:
 (1) "Harvard University's Seismograph Station", No. 2773, 185-186, Feb. 20.
6836. SCIENCE NEWS LETTER.
 Brief items of interest to seismologists have appeared in Vol. 52 of the above periodical (Washington, 1947), as follows:
 (1) "70 Major Earthquakes Recorded on Seismographs" No. 25, p. 392, Dec. 20.
6837. SCIENCE NEWS LETTER.
 Brief items of interest to seismologists have appeared in Vol. 53 of the above periodical (Washington, 1948), as follows:
 (1) "Warns Quakes May Damage St. Lawrence Waterway", No. 3, p. 41, Jan. 17.
 (2) "New Slope Design Features May Lessen Danger of Slides", No. 5, p. 73, Jan. 31.
 (3) "Home-Made Seismograph Detects Quake in Alaska", No. 8, 117-118, Feb. 21.
 (4) "Plan Earthquake Design Research Body", No. 11, p. 7, March 11.
 (5) "Record Track Running", No. 13, p. 198, March 27.
 (6) "Forecast Wave Conditions", *Ibid.*, p. 204.
 (7) "Deep Submarine Canyons Found off New Guinea", No. 14, p. 217, April 3.
 (8) "Earth's Crust Redated", No. 15, p. 231, April 10.
 (9) "Early Stages of Universe", No. 17, p. 259, April 24.
 (10) "Man-made Quake Waves Studied after Explosions", No. 18, p. 281, May 1.
 (11) "New Earthquake Indicator Records at Distance", No. 21, p. 334, May 22.

- SCULLY, C. T., and CHATTERJEA, P. K.,
 (1) "Thermionic Amplifier" (patent).
 (2) "Thermionic Valve Amplifier" (patent).
 See No. 6823 of this list.
- SEEGER, R. J., and KIRKWOOD, J. G., "Surface Waves from an Underwater Explosion".
 See No. 6792 of this list.
6838. SKITSKY, V. L.,
 (1) "Geophysical Abstracts 128—January to March, 1947", United States Department of the Interior, Section of Geophysics of the U.S. Geological Survey, Bulletin 957-A, 56 pp., Washington, 1947.
 (2) "Geophysical Abstracts 129—April to June, 1947", *Ibid.*, Bulletin 957-B.
6839. SKY AND TELESCOPE.
 Brief items of interest to seismologists have appeared in recent issues of the above periodical (Vol. 7, London, 1948), as follows:
 (1) "New Theory on Earth's Interior", No. 4, p. 94, February.
 (2) "Ticker-Tape Seismograph", No. 6, p. 150, April.
6840. SLOAT, John, "Identification of Echo Reflections", *Geophysics*, Vol. 13, No. 1, 27-35, 2 fig., bib., Menasha, Jan., 1948.
6841. SMALL, Walter M., "A Short Description of the General Geology of the Dominican Republic, with Notes on the Earthquake of August 4, 1946", *Bulletin, Seismological Society of America*, Vol. 38, No. 1, 19-32, 12 fig., Berkeley, Jan., 1948.
6842. SONDER, R. A., "Discussion of 'Shear Patterns of the Earth's Crust' by F. A. Vening Meinesz", *Transactions, American Geophysical Union*, Vol. 28, No. 6, 939-946, 1 tab., bib., Washington, Dec., 1947.
 The last two pages of the above discussion are a reply by F. A. Vening Meinesz to the paper by Sonder.
- STONELEY, R., "International Cooperation in Seismology". See No. 6736 of this list.
- SWIGER, W. F., and LARSEN, R. A., "Structural Design for a Steam Plant in an Earthquake Area". See No. 6795 of this list.
6843. THAYER, T. P., and GUILD, Philip W., "Thrust Faults and Related Structures in Eastern Cuba", *Transactions, American Geophysical Union*, Vol. 28, No. 6, 919-930, 10 fig., bib., Washington, Dec., 1947.
6844. TIENSTRA, J. M., "An Extension of the Technique of the Methods of Least Squares to Correlated Observations", *Bulletin Géodésique*, New Series, No. 6, 301-335, Paris, Oct. 1, 1947.
6845. TILLOTSON, E., "Pure and Applied Seismology" (review), *Nature*, No. 4091, Vol. 161, p. 459, London, March 27, 1948.
 The above article is a review of the book "When the Earth Quakes" by Father Macelwane, which was reported as No. 6631 of this *Bibliography*.
6846. TILLOTSON, Ernest, "Séismes et Volcans" (review), *Nature*, No. 4087, Vol. 161, p. 296, London, Feb. 28, 1948.
 The above article is a review of a book of the same title by J. P. Rothé which was reported as No. 6316 of this *Bibliography*.

- TILLOTSON, Ernest, "British Earthquakes". See No. 6746 of this list.
- TRACEY, J. I., LILL, Gordon, WELLS, J. W., COLE, W. S., and LADD, H. S., "Drilling on Bikini Atoll, Marshall Islands" (abstract), *Bulletin, Geological Society of America*, p. 1201. See No. 6771 of this list.
6847. TRANSACTIONS, AMERICAN GEOPHYSICAL UNION. "Earthquakes, December 1947 and January 1948", *Transactions, American Geophysical Union*, Vol. 29, No. 2, 292-293, Washington, April, 1948.
6848. TVALTVADZE, G., "Some Data on the Structure of the Earth's Crust in the Region of Abastumani-Tsnisi-Moktsevi, Eastern Georgia" (in Russian), *Académie des Sciences URSS, Bulletins Géographiques et Géophysiques*, Vol. 9, No. 1, 36-39, Moscow, 1945.
The above paper is listed as No. 9217, of *Geophysical Abstracts 129*, which is reported as No. 6838 of this list.
6849. ULRICH, Franklin P., "Progress Report of the Seismological Work by the United States Coast and Geodetic Survey in the Western United States during 1946", *Bulletin, Seismological Society of America*, Vol. 38, No. 1, 55-67, 5 fig., 2 tab., Berkeley, Jan., 1948.
- URSELL, F., and BARBER, N. F., "The Generation and Propagation of Ocean Waves and Swell: I. Wave Periods and Velocities". See No. 6737 of this list.
6850. VALLE, Paolo Emilio,
- (1) "Dromocrone e velocità apparenti delle onde spaziali relative al terremoto del 15 aprile 1941—XIX (Messico centrale)", *Pubblicazioni dell'Istituto Nazionale di Geofisica del Consiglio Nazionale delle Ricerche*, No. 76, 18 pp., 6 fig., 5 tab., bib., Rome, 1941.
 - (2) "Nuovo metodo per la determinazione delle coordinate ipocentrali di un terremoto lontano", *Ibid.*, No. 78, 7 pp., 2 tab., bib., 1942.
 - (3) "Contributo allo studio delle onde SKS", *Ibid.*, No. 88, 16 pp., 3 fig., 3 tab., bib., 1942.
 - (4) "Sull'energia associata alle onde sismiche SKS et SKKS", *Ibid.*, No. 94, 9 pp., 2 fig., 2 tab., bib., 1943.
 - (5) "Sull'interpretazione dei sismogrammi tra 80° e 120°", *Ibid.*, No. 103, 6 pp., 1 fig., 1 tab., 1943.
 - (6) "Sulla determinazione delle coordinate ipocentrale di un sisma lontano", *Ibid.*, No. 106, 11 pp., 1 tab., bib., 1945.
 - (7) "Sulla costituzione del nucleo terrestre", *Ibid.*, No. 108, 5 pp., bib., 1945.
 - (8) "Sulla rifrazione di onde piane elementari in mezzi firno-viscosi", *Ibid.*, No. 110, 10 pp., 1945.
 - (9) "Sulla dispersione delle onde sismiche dirette", *Ibid.*, No. 113, 4 pp., 1 fig., 1 tab., bib., 1945.
 - (10) "Sull'equazione della velocità delle onde di Rayleigh", *Ibid.*, No. 114, 4 pp., 1945.
 - (11) "Sull'interpretazione della fase F", *Ibid.*, No. 118, 6 pp., bib., 1946.
 - (12) "Sul coefficiente di assorbimento delle onde sismiche superficiale", *Ibid.*, No. 124, 1 tab., 1946.
- WALKER, G. R., and HERZBERG, G., "Initiation of High Explosives". See No. 6780 of this list.

6851. WALLING, Dean, "Notes on Multiple Reflections", *Geophysics*, Vol. 13, No. 1, 55-56, Menasha, Jan., 1948.
6852. WATERMAN, Joseph C., "Multiple-Reflection Evidence", *Geophysics*, Vol. 13, No. 1, 41-44, 3 fig., Menasha, Jan., 1948.
- WELLS, J. W., COLE, W. S., LADD, H. S., TRACEY, J. I., and LILL, Gordon, "Drilling on Bikini Atoll, Marshall Islands" (abstract), *Bulletin, Geological Society of America*, p. 1201. See No. 6771 of this list.
- WILLIAMS, J. STEWART, "Cooperative Seismological Program in Utah" (abstract), *Bulletin, Geological Society of America*, p. 1270. See No. 6771 of this list.
- WILSON, Eldred D., "Seismology in Arizona" (abstract), *Bulletin, Geological Society of America*, p. 1270. See No. 6771 of this list.
6853. WILSON, James T., and BAYKAL, Orhan, "Crustal Structure of the North Atlantic Basin as Determined from Rayleigh-Wave Dispersion", *Bulletin, Seismological Society of America*, Vol. 38, No. 1, 41-53, 6 fig., 8 tab., bib., Berkeley, Jan., 1948.
6854. WILSON, J. TUZO, "Some Aspects of Geophysics in Canada with Special Reference to Structural Research in the Canadian Shield", *Transactions, American Geophysical Union*, Vol. 29, No. 1, 1-12, 5 fig., bib., Washington, Feb., 1948.
- WILSON, J. TUZO,
- (1) "Geological and Geophysical Study of a Part of the Canadian Shield" (abstract), *Bulletin, Geological Society of America*, p. 1241.
 - (2) "Use of Air Photographs to Interpret the Structure of Part of the Canadian Shield" (abstract), p. 1242.
- See No. 6771 of this list.
- WOLF, A. "Seismic Exploration with Control of Directional Sensitivity" (patent). See No. 6823 of this list.
6855. WOOD, HARRY O., "A Possible Layer for the Transmission of Fast P Waves from Surface Disturbances", *Bulletin, Seismological Society of America*, Vol. 38, No. 1, 33-39, bib., Berkeley, Jan., 1948.
- WRIGLEY, Walter, and DRAPER, C. S., "An Instrument for Measuring Low Frequency Accelerations in Flight". See No. 6762 of this list.
6856. YEPINAT'EVA, A. M., "Average Speed of Propagation of Elastic Waves under Conditions in the Eastern Apsheron Region", *Izvestiia Akademia Nauk SSSR—Serii Geograficheskaia i Geofizicheskaia*, Vol. 12, No. 1, Jan.-Feb., 1948.
- H. E. L.
6857. ZÁTOPEK, A., "Erdbebenbeobachtungen in der Slowakei und in Ehem. Karpatenrussland 1923-1938. Zemětřesna Pozorování na Slovensku a Býv. Podkarpatské Rusi 1923-1938. Observations des tremblements de terre en Slovaquie et Ancienne Russie Subcarpathique 1923-1938", *Publikace Geofyzikálního Ústavu v Praze*, No. 2, 1-79, 10 fig., bib., Prague, 1940.

ERRATA

Errors in translation in Vol. XIV, No. 1, of the *Bibliography* have been called to our attention as follows:

- No. 6468: "The epicentres of the earthquakes in Switzerland and Algeria indicate the active faults of the Alpine chain" should read:— "indicate the active foldings of the Alpine chain".
- No. 6470: "The hypothesis relates the building of the continents with the sinking of the Atlantic" should be:— "the hypothesis conciliates the drift theory of the continents with the sinking of the Atlantide".

LIST OF COLLABORATORS

The initials appended to various items throughout the *Bibliography* indicate, in each case, the contribution by the respective collaborator. Seismologists who receive publications which are not listed in the *Bibliography* are asked to send details of these publications to the Editor so that all seismological work may be included in this one list. Prepared forms for reporting publications will be forwarded on request.

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