

I. C. 7534

196. ERTL, T. Oil-Shale Mining. Pres. at annual meeting, Petrol. Sec., Am. Inst. Min. and Met. Eng., Denver, Colo., Sept. 29-Oct. 1, 1947, 6 pp.
197. - - - Sodium Bicarbonate from Colorado Oil Shale. Am. Mineral, vol. 32, 1947, pp. 117-120.
198. GARDNER, E. D. Progress of Mining Studies at Bureau of Mines Oil-Shale Mine, Anvil Points, Rifle, Colo. Am. Inst. Min. and Met. Eng. Pub. 2286, November 1947, 11 pp.
199. KRUG, J. Report of the Secretary of the Interior on the Synthetic Liquid Fuels Act, 1947, pp. iv, v; Oil-Shale Demonstration Plant, pp. 1-28; Oil-Shale Research and Development, pp. 51-80; Oil-Shale Mining, pp. 6-12.
200. LANKFORD, J. D., AND GUTHRIE, B. Oil-Shale Processing. Pres. at annual meeting, Petrol. Sec., Am. Inst. Min. and Met. Eng., Denver, Colo., Sept. 29-Oct. 1, 1947, 21 pp.
201. SHAW, R. J. Specific Heat of Colorado Oil Shales. Bureau of Mines Rept. of Investigations 4151, 1947, 9 pp.
202. ERTL, T., WAGNER, J. R., JR., AND BURGH, E. E. Development of a Successful Hard-Surfaced Bit for Drilling Oil Shale. Bureau of Mines Rept. of Investigations 4177, 1948, 8 pp.
203. GARDNER, E. D. Mining Program, Bureau of Mines Oil-Shale Project, Rifle, Colo. Bureau of Mines Rept. of Investigations 4269, 1948, 19 pp.
204. KLOSKY, S. An Index of Shale-Oil Patents. Bureau of Mines Bull. 467, 1948, 360 pp. 75 cents.
205. - - - Russia's Oil-Shale Industry. Chem. Eng. News, vol. 26, Mar. 22, 1948, pp. 862-864.
206. KRAEMER, A. J. Liquid Fuels from Oil Shale. Bureau of Mines Program. World Oil, vol. 128, No. 8, December 1948, pp. 48-54.
207. SHAW, R. J. Method and Apparatus for Educting Oil from Oil Shale by Use of Superheated Steam. U. S. Patent 2,434,815, Jan. 20, 1948.
208. TRIPP, J. G., AND GUTHRIE, B. Require Severe Treating Methods for Oils Extracted from Shale. Petrol. Processing, vol. 3, 1948, p. 404.

COAL, LIGNITE, AND TAR

Utilization

209. LEWIS, R. S., AND VARLEY, T. The Mineral Industry of Utah, Bull. Univ. Utah, vol. 10, No. 11, December 1919, 208 pp.
210. VARLEY, T., WRIGHT, C. A., SOPER, E. K., AND LIVINGSTON, D. C. A Preliminary Report on the Mining Districts of Idaho. Bureau of Mines Bull. 166, 1919, 113 pp.
211. FIELDNER, A. C. Results of Analysis of Standard Sample of Mixed Coal and Water Gas Submitted to Various Laboratories. Am. Gas Assoc. Monthly, vol. 3, 1921, pp. 365-369.
212. MINING CONGRESS JOURNAL. Economies Promised to Coal Industry by New Mining Laboratory. November 1921, p. 513.

213. FIELDNER, A. C., AND BROWN, R. L. The Complete Utilization of Coal and Motor Fuel. Oil, Paint, and Drug Reporter, vol. 108, pt. 2, Oct. 5, 1925, pp. xii-xiii; Am. Gas Jour., vol. 124, 1926, pp. 448-452; Blast Furnace and Steel Plant, vol. 14, 1926, pp. 138-140 and 148.
214. FIELDNER, A. C. The Complete Utilization of Coal and Motor Fuel. Modern Min., vol. 3, 1926, pp. 83-86.
215. - - - Practical Value of Fundamental Research on Coal. Proc. Internat. Conf. Bituminous Coal, 1926, pp. 92-101; Fuel in Sci. and Practice, vol. 6, 1927, pp. 52-56.
216. - - - Research Activities on Coal in a World-Wide Picture of Bituminous-Coal Research. Bull. Nat. Coal Assoc., April 1927, pp. 9-34.
217. - - - Recent Developments in the Production of Motor Fuels from Coal. Bureau of Mines Inf. Circ. 6075, 1928, 18 pp.; Fuel in Sci. and Practice, vol. 7, 1928, pp. 492-501.
218. - - - Research Activities on Coal. An Outline of Work in Progress during 1927, in America and Abroad, as Reported to the National Coal Association. Bull. Nat. Coal Assoc., 1928, pp. 5-36.
219. THIESSEN, R. Recently Developed Methods of Research in the Constitution of Coal and Their Application to Illinois Coals. Coop. Min. Series Bull. 33, 1930; Fuel in Sci. and Practice, vol. 10, No. 2, 1931, pp. 72-94; Illinois State Geol. Bull. 60, 1931, pp. 117-147.
220. FIELDNER, A. C. Application of Results of Coal Investigations. U. S. Daily, vol. 7, Mar. 29, 1932, p. 8.
221. - - - What Research Offers the Coal Industry. Min. and Met., vol. 14, 1933, pp. 253-256.
222. SELVIG, W. A. Coal Classification, Testing and Utilization. Canadian Purchaser, vol. 15, 1936, No. 9, pp. 29-56.
223. CHEMICAL AND METALLURGICAL ENGINEERING. U. S. Looks into Coal Hydrogenation. Vol. 44, 1937, p. 472.
224. FIELDNER, A. C. Bureau of Mines and Coal Research. Proc. 19th Fuel Eng. Meeting, Appalachian Coals, Inc., May 19, 1937.
225. - - - Oil from Coal. Sci. Digest, February 1937, pp. 68-70.
226. - - - Resume of Research and Technologic Work Relating to Coal Conducted by the Technologic Branch During 1936. Bureau of Mines Inf. Circ. 6935, 1937, 14 pp.; Fuel in Sci. and Practice, vol. 16, No. 8, 1937, pp. 242-246.
227. - - - Annual Report of Research and Technologic Work on Coal, Fiscal Year 1937. Bureau of Mines Inf. Circ. 6992, 1938, pp. 37-44.
228. FIELDNER, A. C., AND RICE, W. E. Advances in Coal Research and Technology. Min. Cong. Jour., vol. 24, No. 2, 1938, pp. 50 and 51; vol. 25, No. 2, 1939, pp. 38-40.
229. FIELDNER, A. C. Annual Report of Research and Technologic Work on Coal, Fiscal Year 1938. Bureau of Mines Inf. Circ. 7052, 1939, pp. 38-44.

1. C. 7534

230. FIELDNER, A. C., TRYON, F. G., AND YANCEY, H. F. Conservation in Use. Energy Resources and National Policy. Rept. of Energy Resources Comm. to Nat. Resources Comm., January 1939, pt. 3, sec. 3, pp. 370-377; House Doc. 160, 76th Cong., 1939, pp. 370-377. 21
231. FIELDNER, A. C. Developments in Coal Research and Technology in 1937 and 1938. Bureau of Mines Tech. Paper 613, 1940, pp. 44 and 66-86. 21
232. FIELDNER, A. C., AND BREWER, R. E. Annual Report of Research and Technologic Work on Coal, Fiscal Year 1939. Bureau of Mines Inf. Circ. 7105, 1940, pp. 51-58. 2
233. FIELDNER, A. C., AND RICE, W. E. Annual Report of Research and Technologic Work on Coal, Fiscal Year 1940. Bureau of Mines Rept. of Investigations 7143, 1941, pp. 44-50. 2
234. FIELDNER, A. C., AND SCHMIDT, L. D. Annual Report of Research and Technologic Work on Coal, Fiscal Year 1941. Bureau of Mines Inf. Circ. 7190, 1941, pp. 49-60. 2
235. FIELDNER, A. C. Bibliography of Bureau of Mines Investigations of Coal and Its Products, 1935-1940. Tech. Paper 639, 1942, 43 pp. 10 cents. 2
236. - - - Gasoline Substitutes from Coal. Jour. West. Soc. Eng., vol. 31, 1926, pp. 306-314; disc., pp. 314 and 315; Production of Gasoline Substitutes from Coal. Jour. Soc. Auto. Eng., vol. 20, 1927, pp. 98-103; disc., pp. 103 and 104. 25
237. - - - Coal Developments in Washington, D. C. Proc. 1st Fuel Eng. Conf. of Coal Bureau, Upper Monongahela Valley Assoc., Morgantown, W. Va., July 24, 1942, pp. 35-37. 2
238. - - - Production of Gasoline from Coal and Other Products. Statement at hearings before subcommittee of the Committee on Mines and Mining, House of Representatives, 77th Cong., 2d sess. on the production of gasoline, fuel oils, plastics, rubber, and other materials from coal and other products, 1942, pp. 2-17. 2
239. STORCH, H. H. Production of Gasoline from Coal and Other Products. Statement at hearings before subcommittee of the Committee on Mines and Mining, House of Representatives, 77th Cong., 2d sess., on the production of gasoline, fuel oils, plastics, rubber, and other materials from coal and other products, 1942, pp. 38-44. 2
240. FIELDNER, A. C., AND RICE, W. E. Annual Report of Research and Technologic Work on Coal, Fiscal Year 1942. Bureau of Mines Inf. Circ. 7241, 1943, pp. 57-63. 2
241. YOUNG, W. H., ANDERSON, R. L., AND ISAAC, L. H. Bituminous Coal and Lignite. Chapters from Bureau of Mines Minerals Yearbooks, 1943, pp. 832-943; 1944, pp. 823-908; 1945, pp. 833-915. 2
242. FIELDNER, A. C., BELTZ, J. C., AND FISHER, P. L. Annual Report of Research and Technologic Work on Coal (1943). Bureau of Mines Inf. Circ. 7272, 1944, pp. 6, 9, 10, 18, 19, 40, 43, 49, 54-57. 2

243. FIELDNER, A. C. Discussion on "Research for the Coal Industry," by C. E. Leshner. Trans. Am. Inst. Min. and Met. Eng., Coal Div., vol. 157, 1944, p. 373.
244. FIELDNER, A. C., FISHER, P. L., AND BREWER, R. E. Annual Report of Research and Technologic Work on Coal (1944). Bureau of Mines Inf. Circ. 7322, 1945, pp. 1, 2, 6, 7, 22, 41-53, 61, 72-79.
245. RILEY, H. L. Chemicals from Coal in the North. Coal Processing Industries' Report. Chem. Age (Brit.), vol. 53, 1945, pp. 565-568.
246. YANCEY, H. F. Mining in Europe: Wartime Coal Production and Utilization. Coal Age, vol. 50, December 1945, pp. 115-118.
247. - - - Solid Fuels in Germany. Chem. Eng. News, vol. 23, Dec. 10, 1945, p. 2193.
248. DECARLO, J. A., CORGAN, J. A., AND OTERO, M. M. Coke and Coal Chemicals. Preprint from Minerals Yearbook, 1946, 57 pp. 15 cents.
249. FIELDNER, A. C. Coal Research for 1946. Mech., February 1946, pp. 105-109.
250. FIELDNER, A. C., AND BREWER, R. E. Annual Report of Research and Technologic Work on Coal (1945). Bureau of Mines Inf. Circ. 7352, 1946, pp. 6-8, 15-18, 53, 54, 71-83, 95-103.
251. FIELDNER, A. C., AND AMBROSE, P. M. Annual Report of Research and Technologic Work on Coal (1946). Bureau of Mines Inf. Circ. 7417, 1947, pp. 5, 7, 8, 15-17, 82-141.
252. PARRY, V. F. Resume of Bureau of Mines Research and Development Work on Western Coals, 1942-1947. Proc. Rocky Mountain Coal Min. Inst., Salt Lake City, Utah, 1947, pp. 18-30; Bureau of Mines Rept. of Investigations 4171, 1948, 9 pp.
253. FIELDNER, A. C., AND AMBROSE, P. M. Annual Report of Research and Technologic Work on Coal (1947). Bureau of Mines Inf. Circ. 7446, 1948, pp. 6, 8, 9, 15-17, 49, 50, 61-113.

Preparation

254. McMILLAN, E. R. Coal-Washing Work at Northwest Experiment Station. Bureau of Mines Rept. of Investigations 2184, 1920, 2 pp.; Coal Ind., vol. 4, 1921, p. 310.
255. RALSTON, O. C., AND WICHMAN, A. P. The Froth Flotation of Coal. Chem. Met. Eng., vol. 26, Mar. 15, 1922, p. 500.
256. RALSTON, O. C., AND YAMADE, G. Froth Flotation Tests on Bituminous Coking Coal. Chem. Met. Eng., vol. 26, No. 23, June 7, 1922, p. 1081.
257. McMILLAN, E. R., AND BIRD, B. M. Coal-Washing Problems of the Pacific Northwest. Univ. Washington Eng. Exp. Sta. Bull. 28, Nov. 1, 1924, 234 pp.
258. HOOD, O. P., AND ODELL, W. W. Investigations of the Preparation and Use of Lignite, 1918-1925. Bureau of Mines Bull. 255, 1926, 204 pp.

259. BIRD, B. M., AND YANCEY, H. F. Hindered-Settling Classification of the Feed to Coal Washing Tables. Am. Inst. Min. and Met. Eng. Tech. Pub. 76, February 1928; Trans. Am. Inst. Min. and Met. Eng., vol. 88, pp. 250-271; Coll. Guard., vol. 136, 1928, pp. 2041 and 2042.
260. - - - - - Re-Treating Middlings from Coal-Washing Tables by Hindered-Settling Classification. Am. Inst. Min. and Met. Eng. Tech. Pub. 77, February 1928, 11 pp.; Trans. Am. Inst. Min. and Met. Eng., vol. 88, 1930, pp. 272-282.
261. BIRD, B. M., AND DAVIS, H. S. The Role of Stratification in the Separation of Coal and Refuse on a Coal-Washing Table. Bureau of Mines Rept. of Investigations 2950, 1929, 19 pp.
262. YANCEY, H. F., AND FRASER, T. Coal-Washing Investigations; Methods and Tests. Bureau of Mines Bull. 300, 1929, 259 pp.
263. YANCEY, H. F. Determination of Shapes of Particles in Coal and Their Influence on the Treatment of Coal by Tables. Am. Inst. Min. and Met. Eng. Tech. Pub. 341, July 1930; Trans. Am. Inst. Min. and Met. Eng., vol. 94, 1931, pp. 355-368.
264. FIELDNER, A. C., AND DAVIS, J. D. Effect of Blending and Washing Coal. Proc. Am. Gas Assoc., 1931, pp. 861-907.
265. YANCEY, H. F. Discussion of Paper by D. R. Mitchell entitled "Coal Preparation Problems in the Illinois Field." Trans. Am. Inst. Min. and Met. Eng., vol. 94, 1931, p. 309.
266. YANCEY, H. F., AND BLACK, C. G. The Effect of Certain Operating Variables on the Efficiency of the Coal-Washing Table. Bureau of Mines Rept. of Investigations 3111, 1931, 13 pp.; Coll. Guard., vol. 144, 1932, p. 309.
267. FIELDNER, A. C. Recent Developments in Coal Preparation and Utilization. Chapters from Bureau of Mines Minerals Yearbooks, 1932-1933, pp. 433-450; Fuel in Sci. and Practice, vol. 13, No. 5, May 1934, pp. 131-137; 1934, pp. 627-643; 1935, pp. 691-709; 1936, pp. 625-648, and 1937, pp. 935-954.
268. YANCEY, H. F. Discussion of Paper by T. W. Guy entitled "Growth of Coal Preparation in the Smokeless Fields of West Virginia." Trans. Am. Inst. Min. and Met. Eng., vol. 101, 1932, pp. 68 and 69.
269. YANCEY, H. F., AND PORTER, C. B. Pneumatic Tabling of Coal; Effect of Specific Gravity, Size, and Shape. Bureau of Mines Tech. Paper 536, 1932, 18 pp.; Coll. Guard., vol. 146, 1933, p. 968.
270. YANCEY, H. F., AND TAYLOR, J. A. Flotation Processes for Cleaning Fine Coal. Bureau of Mines Inf. Circ. 6714, 1933, 31 pp.; Coll. Guard., vol. 147, 1933, pp. 1155-1157, 1208, and 1209.
271. YANCEY, H. F., AND ZANE, R. E. The Relationship Between Round and Square Hole Screens for Coal. Trans. Am. Inst. Min. and Met. Eng., vol. 108, 1934, pp. 295-302.

272. YANCEY, H. F., FURSE, O. L., AND BLACKBURN, R. A. Estimation of the Grindability of Coal. Presented Am. Inst. Min. and Met. Eng., February 1934, New York; Trans. Am. Inst. Min. and Met. Eng., vol. 108, 1934, pp. 267-294.
273. YANCEY, H. F., AND TAYLOR, J. A. Froth Flotation of Coal: Sulfur and Ash Reduction. Bureau of Mines Rept. of Investigations 3263, 1935, 20 pp.
274. YANCEY, H. F., AND GEER, M. R. Further Investigation of Methods for Estimating the Grindability of Coal. Am. Inst. Min. and Met. Eng. Contrib. 94, March 1936, 17 pp.; Trans. Am. Inst. Min. and Met. Eng., vol. 119, 1936, pp. 353-369, disc., 369-379; Combustion, vol. 7, March 1936, pp. 37-39.
275. GEER, M. R., AND YANCEY, H. F. Expression and Interpretation of the Size Composition of Coal. Am. Inst. Min. and Met. Eng. Tech. Pub. 948, June 1938, 20 pp.; Trans. Am. Inst. Min. and Met. Eng., vol. 139, pp. 250-269.
276. YANCEY, H. F. Review of book by C. Berthelot entitled "Purification, Drying, Agglomeration, and Crushing of Coal." Ind. Eng. Chem. (News Ed.), vol. 16, October 1938, p. 540.
277. YANCEY, H. F., AND GEER, M. R. Ball-Mill Grindability Indexes of Some American Coals. Bureau of Mines Rept. of Investigations 3409, 1938, 9 pp.; Grindability of Some American Coals; Combustion, vol. 10, September 1938, pp. 37 and 38.
278. - - - - Performance of a Baum-Type Coal-Washing Jig. Bureau of Mines Rept. of Investigations 3371, 1938, 18 pp.
279. YANCEY, H. F., GEER, M. R., AND SHINKOSKEY, R. E. Performance of a Pulsator-Type Coal-Washing Jig. Bureau of Mines Rept. of Investigations 3372, 1938, 19 pp.
280. YANCEY, H. F., ZANE, R. E., WOOD, W., AND CANNARELLA, J. T. H. Flocculation as an Aid in the Clarification of Coal Washery Water. Bureau of Mines Rept. of Investigations 3494, 1940, 13 pp.; Coll. Guard., vol. 160, Mar. 17, 1940, pp. 711 and 712.
281. FIELDNER, A. C., AND RICE, W. E. Research and Progress in the Production and Use of Coal. Nat. Resources Planning Board Tech. Paper 4, 1941, 49 pp.; Mining, by A. L. Toenges, pp. 1-16; Preparation, H. F. Yancey, pp. 17-19; Combustion, by P. Nicholls and J. F. Barkley, pp. 20-27; Carbonization, by D. A. Reynolds, pp. 28-32; Gasification, by M. A. Elliott, pp. 33-44; Hydrogenation, by H. H. Storch, pp. 45-49.
282. DEKAY, H. E., JR., TURNBULL, L. A., SCUDDER, J. N., AND TOENGES, A. L. Control of Sulfur and Ash in Mine-Run Metallurgical Coal. Bureau of Mines Rept. of Investigations 3742, 1943, 28 pp.
283. FRASER, T., AND ABREU, A. D. P. Washability of Brazilian Coal. Ministerio Agr. Dept.; Produção Mineral, Lab. Produção Mineral (Brazil), Bull. 13, 1943, pp. 1-185.
284. FRASER, T., AND JOHNSON, J. S. Screening. Am. Inst. Min. and Met. Eng., Seeley W. Mudd Series, Coal Prep., chap. 5, 1943, pp. 127-183.

I. C. 7534

285. GANDRUD, B. W. Concentrating Tables. Am. Inst. Min. and Met. Eng., Seeley W. Mudd Series, Coal Prep., chap. 13, 1943, pp. 425-456.
286. SCOTT, G. S. Application of the Rosin-Rammler Law to the "Missing Sizes" in Screened Coal. Bureau of Mines Rept. of Investigations 3732, 1943, 9 pp.
287. DEAN, R. S., AND AMBROSE, P. M. Development and Use of Certain Flotation Reagents. Bureau of Mines Bull. 449, 1944, 39 pp. 15 cents.
288. YANCEY, H. F., AND GEER, M. R. Coal-Cleaning Performance: Comparison of Pneumatic Jig, Pneumatic Table, and Baum-Type Jig. Am. Inst. Min. and Met. Eng. Tech. Pub. 1888, 1945, 16 pp.; Trans. Am. Inst. Min. and Met. Eng., vol. 168, pp. 208-223.
289. - - - - - Hardness, Strength, and Grindability of Coal. Chemistry of Coal Utilization, vol. 1, John Wiley & Sons, Inc., New York, 1945, pp. 145-159.
290. - - - - - Preparation Tests of Lignite from a Deposit Near Toledo, Lewis County, Washington. Bureau of Mines Rept. of Investigations 3795, 1945, 14 pp.
291. - - - - - The Cleaning of Coal. Chemistry of Coal Utilization, vol. 1, John Wiley & Sons, Inc., New York, 1945, pp. 572-599.
292. FRASER, T., AND ABREU, A. Hand Preparation of Coal in Southern Brazil. Trans. Am. Inst. Min. and Met. Eng., 1946, pp. 260-271; Am. Inst. Min. and Met. Eng. Tech. Paper 1884, 1946.
293. FRASER, T., AND CRENTZ, W. L. Washing Characteristics of the Pittsburgh Coal in a High-Sulfur Area in Greene County, Pa. Bureau of Mines Tech. Paper 689, 1946, 85 pp. 15 cents.
294. FRASER, T., AND DRIESSEN, M. G. Coal-Preparation Practice in Western Germany. Bureau of Mines Inf. Circ. 7389, 1946, 70 pp.
295. GEER, M. R., AND YANCEY, H. F. Washability Characteristics and Washing of Coals from the Matanuska Field of Alaska. Bureau of Mines Rept. of Investigations 3840, 1946, 17 pp.
296. LANDERS, W. S., AND REID, W. T. Graphical Form for Applying the Rosin and Rammler Equation to the Size Distribution of Broken Coal. Bureau of Mines Inf. Circ. 7346, 1946, 5 pp.
297. YANCEY, H. F., AND FRASER, T. Coal Preparation in Germany and the Netherlands. Am. Inst. Min. and Met. Eng. Tech. Pub. 2112, 1946, 14 pp.; Trans. Am. Inst. Min. and Met. Eng., vol. 168, 1946.
298. DRIESSEN, M. G. Recent Developments in Coal Washing in the Netherlands. Coll. Eng., Nov. 24, 1947, pp. 356-359.
299. GEER, M. R., AND YANCEY, H. F. Preliminary American Tests of a Cyclone Coal Washer Developed in the Netherlands. Am. Inst. Min. and Met. Eng. Tech. Pub. 2136, 1947, 20 pp.; Coll. Guard., vol. 175, 1947, pp. 244-248.
300. CRENTZ, W. L., AND FRASER, T. Preparation Characteristics of Maryland Coals. Bureau of Mines Tech. Paper 701, 1948, 65 pp. 15 cents.