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MISCELLANEOUS PUBLICATION

No. 9

# LIST OF PUBLICATIONS

OF THE

UNITED STATES

DEPARTMENT OF AGRICULTURE

FROM JANUARY, 1901, TO DECEMBER, 1925, INCLUSIVE

COMPILED BY COMPARISON WITH THE ORIGINALS

BY

MABEL G. HUNT

*Head Indexer, Office of Information  
United States Department of Agriculture*

Supplementary to Bulletin No. 6, Division of Publications  
issued in 1902, but duplicating that list for  
Months of January-June, 1901



UNITED STATES  
GOVERNMENT PRINTING OFFICE  
WASHINGTON

1927



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## GENERAL PUBLICATIONS

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1. Medical milk commissions and certified milk. Ernest Kelly. 1913. Revision of Bureau of Animal Industry Bul. 104.
2. The fish-scrap fertilizer industry of the Atlantic coast. J. W. Turrentine. 1913.
3. A normal days' work for various farm operations. H. H. Mowry. 1913.
4. The reseeded of depleted grazing lands to cultivated forage plants. Arthur W. Sampson. (Prefatory note by Frederick V. Coville.) 1913.
5. The southern corn rootworm, or budworm. F. M. Webster. 1913.
6. The agricultural utilization of acid lands by means of acid-tolerant crops. Frederick V. Coville. 1913.
7. Agricultural training courses for employed teachers, with a suggested reading course in agriculture based on farmers' bulletins. Edwin R. Jackson. 1913.
8. The western corn rootworm. F. M. Webster. 1913.
9. An economic study of acacias. Charles Howard Shinn. 1913.
10. Progress report of cooperative irrigation experiments at California University farm, Davis, Calif., 1909-1912. S. H. Beckett. 1913.
11. Forest management of loblolly pine in Delaware, Maryland, and Virginia. W. D. Sterrett. 1914.
12. Uses of Commercial Woods of the United States. Beech, birches, and maples. H. Maxwell. 1913.
13. White pine under forest management. E. H. Frothingham. 1914.
14. The migratory habit of the housefly larvae as indicating a favorable remedial measure—an account of progress. Robert H. Hutchison. 1914.
15. A sealed paper carton to protect cereals from insect attack. William B. Parker. 1913.
16. The culture of flue-cured tobacco. E. H. Mathewson. 1913.
17. The refrigeration of dressed poultry in transit. M. E. Pennington, A. D. Greenlee, H. C. Pierce, E. Witner, H. A. McAleer, M. K. Jenkins, J. S. Hepburn, M. O. Stafford, H. C. Robertson, and E. L. Connolly. 1913.
18. A report on the phosphate fields of South Carolina. Wm. H. Waggaman. 1913.
19. The grape leafhopper in the Lake Erie Valley. Fred Johnson. 1914.
20. The management of sheep on the farm. Edward L. Shaw and Lewis L. Heller. 1913.
21. The commercial fattening of poultry. Alfred R. Lee. 1914.
22. Game laws for 1913. A summary of the provisions relating to seasons, exports, sale, limits, and licenses. T. S. Palmer, W. F. Bancroft, and Frank L. Earnshaw. 1913.
23. Vitrified brick as a paving material for country roads. Vernon M. Pierce and Charles H. Moorefield. 1913.
24. Cottonwood in the Mississippi Valley. A. W. Williamson. 1913.
25. The shrinkage in weight of beef cattle in transit. I. Southwestern shrinkage work of 1910-1911. W. F. Ward. II. Northwestern shrinkage work of 1911-1912. James E. Downing. III. Northwestern and southwestern shrinkage work of 1911. W. F. Ward. IV. Summary of the three years' shrinkage work. W. F. Ward. 1913.
26. American medicinal flowers, fruits, and seeds. Alice Henkel. 1913.
27. Bouillon cubes; their contents and food value compared with meat extracts and homemade preparations of meat. F. C. Cox. 1913.
28. Experiments in bulb growing at the United States bulb garden at Bellingham, Wash. P. H. Dorsett. 1913.
29. Crew work, costs and returns in commercial orcharding in West Virginia. J. H. Arnold. 1913.
30. Cereal investigations at the Nephel Substation. P. V. Cardon. 1913.
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34. Range improvement by deferred and rotation grazing. Arthur W. Sampson. 1913.
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52. The anthracnose of the mango in Florida. S. M. McMurrin. 1914.
53. Object lesson and experimental roads and bridge construction, 1912-1913. Contribution from the Office of Public Roads. 1913.
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57. Water supply, plumbing, and sewage disposal for country homes. Robert W. Trullinger. 1914.
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70. Immunization tests with glanders vaccine. John R. Mohler and Adolph Eichhorn. 1914.
71. The wet lands of southern Louisiana and their drainage. Charles W. Okey. 1914.
72. Suitability of longleaf pine for paper pulp. Henry E. Surface and Robert E. Cooper. 1914.
73. Raising and fattening beef calves in Alabama. Dan T. Gray and W. F. Ward. 1914.
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91. Cost and method of clearing land in the Lake States. Harry Thompson and Earl D. Strait. 1914.
92. Destruction of germs of infectious bee diseases by heating. G. F. White. 1914.
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95. Insect damage to the cones and seeds of Pacific coast conifers. John M. Miller. 1914.
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102. Acidity as a factor in determining the degree of soundness in corn. H. J. Besley and G. H. Baston. 1914.
103. Alum in foods. Report of the referee board of consulting scientific experts. 1914.
104. Thrips as pollinators of beet flowers. Harry B. Shaw. 1914.
105. Progress reports of experiments in dust prevention and road preservation, 1913. 1914.
106. The granular venereal disease and abortion in cattle. W. L. Williams. 1914.
107. Birds in relation to the alfalfa weevil. E. R. Kalmbach. 1914.

108. Harmful effects of aldehydes in soils. Oswald Schreiner and J. J. Skinner. 1914.
109. The molds of cigars and their prevention. R. H. True. 1914.
110. Fattening cattle in Alabama. Dan T. Gray and W. F. Ward. 1914.
111. The Sequoia pitch moth, a menace to pine in western Montana. Joseph Brunner. 1914.
112. The cat apbis. J. J. Davis. 1914.
113. The lesser bud-moth. E. W. Scott and J. H. Paine. 1914.
114. Report upon the black and boggy swamps drainage district, Hampton and Jasper Counties, S. C. F. G. Eason. 1914.
115. Gate structures for irrigation canals. Fred C. Scobey. 1914.
116. New facts concerning the white-pine blister rust. Perley Spaulding. 1914.
117. Profits in farming on irrigated areas in Utah Lake Valley. E. H. Thomson and H. M. Dixon. 1914.
118. Experiments in the destruction of fly larvae in horse manure. F. C. Cook, R. H. Hutchison, and F. M. Scales. 1914.
119. Five oriental species of beans. (Aduki bean, rice bean, mung bean, urd bean, and moth bean.) C. V. Piper and W. J. Morse. 1914.
120. Apple powdery mildew and its control in the Pajara Valley. W. S. Ballard and W. H. Volek. 1914.
121. Spinning tests of upland long-staple cottons. Fred Taylor and Wells A. Sherman. 1914.
122. The inorganic composition of some important American soils. W. O. Robinson. 1914.
123. Extension course in vegetable foods for self-instructed classes in movable schools of agriculture. Anna Barrows. 1914.
124. The alfalfa caterpillar. V. L. Wildermuth. 1914.
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133. Experiments with crops under fall irrigation at the Scottsbluff reclamation project experiment farm. Fritz Knorr. 1914.
134. Citrus fruit insects in the Mediterranean countries. H. J. Quayle. 1914.
135. Experiments in the production of crops on alkali land on the Huntley reclamation project, Montana. Dan Hansen. 1914.
136. Highway bonds. A compilation of data and an analysis of economic features affecting construction and maintenance of highways financed by bond issues and the theory of highway bond calculations. Laurence I. Hewes and James W. Glover. 1915.
137. Some distinction in our cultivated barleys, with reference to their use in plant breeding. Harry V. Harlan. 1914.
138. Commercial Turkestan alfalfa seed. Edgar Brown. 1914.
139. Norway pine in the Lake States. Theodore S. Woelsey, jr., and Herman H. Chapman. 1914.
140. Soils of Massachusetts and Connecticut, with especial reference to apples and peaches. Henry J. Wilder. 1915.
141. The Clyde series of soils. J. A. Bonsteel. 1914.
142. The Miami series of soils. J. A. Bonsteel. 1914.
143. The production and fertilizer value of citric-soluble phosphoric acid and potash. William H. Waggaman. 1914.
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151. Experiments in crop production on fallow land at San Antonio. C. R. Letteer. 1915.
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153. Forest planting in the eastern United States. C. R. Tillotson. 1915.
154. The life history of lodgepole pine in the Rocky Mountains. D. T. Mason. 1915.
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156. Wireworms attacking cereal and forage crops. J. A. Hyslop. 1915.
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180. Soil erosion in the South. R. O. E. Davis. 1915.
181. A report on the methods and costs of reclaiming the overflowed lands along the Big Black River, Miss. Lewis A. Jones, W. J. Schlick, and C. E. Ramser. 1915.
182. Agricultural alcohol: Studies of its manufacture in Germany. Edward Kremers. 1915.
183. Morphology of the barley grain, with reference to its enzym-secreting areas. Albert Mann and H. V. Harlan. 1915.
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185. Bird migration. Wells W. Cooke. 1915.
186. A method of fumigating seed. E. R. Sasser and Lon A. Hawkins. 1915.
187. Preliminary census of birds of the United States. Wells W. Cooke. 1915.
188. The importance of thick seeding in the production of milo in the San Antonio region. Stephen H. Hastings. 1915.
189. Studies of the codling moth in the central Appalachian region. F. E. Brooks and E. B. Blakeslee. 1915.
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191. Demurrage information for farmers. G. C. White. 1915.
192. Insects affecting vegetable crops in Porto Rico. Thomas H. Jones. 1915.
193. The drainage of Jefferson County, Tex. H. A. Kipp, A. G. Hall, and S. W. Frescoln. 1915.
194. The flow of water in irrigation channels. Fred C. Scobey. 1915.
195. Potato breeding and selection. William Stuart. 1915.
196. Methods followed in the commercial canning of foods. A. W. Bitting. 1915.
197. Homemade lime-sulphur concentrate. E. W. Scott. 1915.
198. Report upon the Cypress Creek drainage district, Desha and Chicot Counties, Ark. S. H. McCrory, O. G. Baxter, D. L. Yarnell, L. A. Jones, and W. J. Schlick. 1915.
199. Loss in tonnage of sugar beets by drying. Harry B. Shaw. 1915.
200. A maggot trap in practical use: An experiment in house-fly control. R. H. Hutchison. 1915.
201. Native pasture grasses of the United States. David Griffiths, George L. Bidwell, and Charles E. Goodrich. 1915.
202. The alcohol test in relation to milk. S. Henry Ayres and William T. Johnson, jr. 1915.
203. Field studies of the crown-gall of sugar beets. C. O. Townsend. 1915.
204. Report on the gipsy moth work in New England. A. F. Burgess. 1915.
205. Eleven important wild duck foods. W. L. McAtee. 1915.
206. The wool grower and the wool trade. F. R. Marshall and L. L. Heller. 1915.
207. The cypress and juniper trees of the Rocky Mountain Region. George B. Sudworth. 1915.
208. Yields of native prickly pear in southern Texas. David Griffiths. 1915.
209. Testing grape varieties in the vinifera regions of the United States. George C. Husmann. 1915.
210. Seed production of western white pine. Raphael Zon. 1915.
211. Factors affecting range management in New Mexico. E. O. Wooton. 1915.
212. Observations on the pathology of the jack pine. James R. Weir. 1915.
213. The use of land in teaching agriculture in secondary schools. Eugene Merritt. 1915.
214. Spring wheat in the Great Plains area: Relation of cultural methods to production. E. C. Chilcott, J. S. Cole, and W. W. Burr. 1915.
215. Composition of corn (maize) meal manufactured by different processes and the influence of composition on the keeping qualities. A. L. Winton, W. C. Burnet, and J. H. Bornmann. 1915.
216. Cotton warehouses: Storage facilities now available in the South. Robert L. Nixon. 1915.
217. Mortality among waterfowl around Great Salt Lake, Utah. (Preliminary report.) Alex Wetmore. 1915.
218. Oats in the Great Plains area: Relation of cultural methods to production. E. C. Chilcott, J. S. Cole, and W. W. Burr. 1915.
219. Corn in the Great Plains area: Relation of cultural methods to production. E. C. Chilcott, J. S. Cole, and W. W. Burr. 1915.
220. Road models. 1915.
221. The southern corn leaf-beetle. E. O. G. Kelly. 1915.
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223. Botanical characters of the leaves of date palm used in distinguishing cultivated varieties. Silas C. Mason. 1915.
224. A study of the preparation of frozen and dried eggs in the producing section. M. E. Pennington, M. K. Jenkins, W. A. Stocking, S. H. Ross, E. Q. St. John, Norman Hendrickson, and W. B. Hicks. 1915.
225. A system of accounting for cooperative fruit associations. G. A. Nahstoll and W. H. Kerr. 1915.
226. The verbena bud moth. D. E. Fink. 1915.

227. The toxicity to fungi of various oils and salts, particularly those used in wood preservation. C. J. Humphrey and Ruth M. Fleming. 1915.
228. Effect of frequent cutting on the water requirement of alfalfa and its bearing on pasturage. Lyman J. Briggs and H. L. Shantz. 1915.
229. The naval stores industry. A. W. Schorger and H. S. Betts. 1915.
230. Oil-mixed Portland cement concrete. Logan Waller Page. 1915.
231. Recent studies of the Mexican cotton boll weevil. B. R. Coad. 1915.
232. The production of lumber in 1913. 1915.
233. Relation of the Arizona wild cotton weevil to cotton planting in the arid West. B. R. Coad. 1915.
234. Utilization and management of lodgepole pine in the Rocky Mountains. D. T. Mason. 1915.
235. Control of dried-fruit insects in California. William B. Parker. 1915.
236. A system of accounts for farmers' cooperative elevators. John R. Humphrey and W. H. Kerr. 1915.
237. Strawberry supply and distribution in 1914. Wells A. Sherman, Houston F. Walker, and O. W. Schleussner. 1915.
238. Sugar beets: Preventable losses in culture. Harry B. Shaw. 1915.
239. The eggplant lace-bug. David E. Fink. 1915.
240. Pasteurizing milk in bottles and bottling hot milk pasteurized in bulk. S. Henry Ayres and W. T. Johnson, jr. 1915.
241. Studies on fruit juices. H. C. Gore. 1915.
242. Corn, milo, and kafir in the southern Great Plains area: Relation of cultural methods to production. E. F. Chilcott, W. D. Griggs, and C. A. Burmeister. 1915.
243. Cone beetles: Injury to sugar pine and western yellow pine. John M. Miller. 1915.
244. Life history of short-leaf pine. Wilbur R. Mattoon. 1915.
245. Further experiments in the destruction of fly larvae in horse manure. F. C. Cook, R. H. Hutchison, and F. M. Scales. 1915.
246. Vitrified brick pavements for country roads. Vernon M. Peirce and Charles H. Moorefield. 1915.
247. A disease of pines caused by *Cronartium pyriforme*. George G. Hedgcock and William H. Long. 1915.
248. Fleas. F. C. Bischoff. 1915.
249. Portland cement concrete pavements for country roads. Charles H. Moorefield and James T. Voshell. 1915.
250. Food plants of the gipsy moth in America. F. H. Mosher. 1915.
251. The calosoma beetle (*Calosoma sycophanta*) in New England. A. F. Burgess and C. W. Collins. 1915.
252. Life history of the codling moth in Maine. E. H. Siegler and F. L. Simanton. 1915.
253. The effect of different times of plowing small-grain stubble in eastern Colorado. O. J. Grace. 1915.
254. The sharp-headed grain leafhopper. Edmund H. Gibson. 1915.
255. Douglas fir pitch moth. Josef Brunner. 1915.
256. Katydid injurious to oranges in California. J. R. Horton and C. E. Pemberton. 1915.
257. Progress reports of experiments in dust prevention and road preservation, 1914, 1915.
258. Lessons in elementary agriculture for Alabama schools outlined by months. E. A. Miller. 1915.
259. Studies on changes in the degree of oxidation of arsenic in arsenical dipping baths. Robert M. Chapin. 1915.
260. The dog as a carrier of parasites and disease. Maurice C. Hall. 1915.
261. American plum borer. E. B. Blakeslee. 1915.
262. The pandora borer as an orchard enemy. Fred E. Brooks. 1915.
263. The cranberry rootworm. H. B. Scammell. 1915.
264. The violet rove-beetle. F. H. Chittenden. 1915.
265. The dock false-worm; An apple pest. E. J. Newcomer. 1916.
266. Outlets and methods of sale for shippers of fruits and vegetables. J. W. Fisher, jr., J. H. Collins, and Wells A. Sherman. 1915.
267. Methods of wholesale distribution of fruits and vegetables on large markets. J. H. Collins, J. W. Fisher, jr., and Wells A. Sherman. 1915.
268. Crop production in the Great Plains area: Relation of cultural methods to yields. E. C. Chilcott, J. S. Cole, and W. W. Burr. 1915.
269. Farmers' institute work in the United States in 1914, and notes on agricultural extension work in foreign countries. J. M. Stedman. 1912.
270. Cereal experiments at the Williston Station. F. Ray Babcock. 1915.
271. Dates of Egypt and the Sudan. S. C. Mason. 1915.
272. The southern cypress. Wilbur R. Mattoon. 1915.
273. Dispersion of the gipsy moth larvae by the wind. C. W. Collins. 1915.
274. Factors governing the successful shipment of red raspberries from the Puyallup Valley. H. J. Ramsey. 1915.
275. Forest pathology in forest regulation. E. P. Meinecke. 1916.
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281. Correlating agriculture with the public school subjects in the Northern States. C. H. Lane and F. E. Heald. 1915.
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286. Strength tests of structural timbers treated by commercial wood-preserving processes. H. S. Betts and J. A. Newlin. 1915.
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288. Custom ginning as a factor in cottonseed deterioration. D. A. Saunders and P. V. Cardon. 1915.
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290. Rail shipments and distribution of fresh tomatoes, 1914. Wells A. Sherman, Paul Froehlich, and Houston F. Walker. 1915.
291. Breeding millet and sorgo for drought adaptation. A. C. Dillman. 1916.
292. Distribution and migration of North American gulls and their allies. Wells W. Cooke. 1915.
293. The grasshopper outbreak in New Mexico during the summer of 1913. Harrison E. Smith. 1915.
294. Lessons on cotton for rural common schools. C. H. Lane. 1915.
295. The Zimmerman pine moth. Josef Brunner. 1915.
296. Our foreign trade in farm and forest products. Perry Elliott. 1915.
297. Cereal investigations on the Belle Fourche experiment farm. Cecil Salmon. 1915.
298. Peach supply and distribution in 1914. Wells A. Sherman, Houston F. Walker, and L. Herbert Martin. 1915.
299. The ashes: Their characteristics and management. W. D. Sterrett. 1915.
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301. Silver fox farming in eastern North America. Ned Dearborn. 1915.
302. Apple market investigations, 1914-15. Clarence W. Moomaw and M. M. Stewart. 1915.
303. A bacteriological study of retail ice cream. S. Henry Ayers and William T. Johnson, jr. 1915.
304. Land drainage by means of pumps. S. M. Woodward and C. W. Okey. 1915.
305. Exercises with plants and animals for southern rural schools. E. A. Miller. 1915.
306. Some effects of selection on the production of alkaloids in belladonna. A. F. Sievers. 1915.
307. Tests of corn varieties on the Great Plains. L. L. Zook. 1915.
308. Short-leaf pine: Its economic importance and forest management. Wilbur R. Mattoon. 1915.
309. Zaccaton as a paper-making material. Charles J. Brand and Jason L. Merrill. 1915.
310. Digestibility of some animal fats. C. F. Langworthy and A. D. Holmes. 1915.
311. The handling and marketing of the Arizona Egyptian cotton of the Salt River Valley. J. G. Martin. 1915.
312. Phosphate rock and methods proposed for its utilization as a fertilizer. William H. Waggaman and William H. Fry. 1915.
313. Features of the sheep industries of the United States, New Zealand, and Australia compared. F. R. Marshall. 1915.
314. Methods for the examination of bituminous road materials. Prévost Hubbard and Charles S. Reeve. 1915.
315. Cantaloupe marketing in the larger cities, with car-lot supply, 1914. Wells A. Sherman, A. Dexter Gail, jr., and Faith L. Yearw. 1915.
316. Willows: Their growth, use, and importance. George N. Lamb. 1915.
317. Larch mistletoe: Some economic considerations of its injurious effects. James R. Weir. 1916.
318. The bonavist lablab, or hyacinth bean. C. V. Piper and W. J. Morse. 1915.
319. Fermented milks. L. A. Rogers. 1916.
320. Farm practice in the cultivation of corn. H. R. Cates. 1916.
321. Cost of fencing farms in the North Central States. H. N. Humphrey. 1916.
322. Utilization of American flax straw in the paper and fiber-board industry. Jason L. Merrill. 1916.
323. Importance and character of the milled rice imported into the United States. F. B. Wise. 1915.
324. Community production of Durango cotton in the Imperial Valley. Argyle McLachlan. 1915.
325. Honeybees: Wintering, yields, imports, and exports of honey. Samuel A. Jones. 1915.
326. Birds of Porto Rico. Alex Wetmore. 1916.
327. The spruce and balsam fir trees of the Rocky Mountain region. George B. Sudworth. 1916.
328. Milling and baking tests of wheat containing admixtures of rye, corn, cockle, king-head, and vetch. R. C. Miller. 1915.
329. Notes on five North American buffalo gnats of the genus simulium. Arthur W. Jobbins-Pomeroy. 1916.
330. The milling of rice and its mechanical and chemical effect upon the grain. F. B. Wise and A. W. Broomell. 1916.
331. The handling and shipping of fresh cherries and prunes from the Willamette Valley. H. J. Ramsey. 1916.
332. Community production of Egyptian cotton in the United States. C. S. Scofield, T. H. Kearney, C. J. Brand, O. F. Cook, and W. T. Swingle. 1916.
333. Termites, or "white ants," in the United States: Their damage and methods of prevention. Thomas E. Snyder. 1916.
334. Directions for blueberry culture, 1916. Frederick V. Coville. 1915.
335. Development of sugar and acid in grapes during ripening. William B. Allwood, B. J. Hartman, J. R. Eoff, M. J. Ingle, and S. F. Sherwood. 1916.
336. Cereal experiments in Maryland and Virginia. T. R. Stanton. 1916.
337. A study of the tenant system of farming in the Yazoo-Mississippi delta. E. A. Boeger and E. A. Goldenweiser. 1916.
338. Machinery cost of farm operations in western New York. H. H. Mowry. 1916.
339. Experiments on the economical use of irrigation water in Idaho. Don H. Bark. 1916.
340. Experiments in vaccination against anthrax. Adolph Eichhorn. 1915.
341. Farm management practice of Chester County, Pa. W. J. Spillman, H. M. Dixon, and G. A. Billings. 1916.



342. The present status of the Pasteurization of milk. S. Henry Ayers. 1916.
343. Ground wood pulp: Part I. The grinding of cooked and uncooked spruce. Part II. Substitutes for spruce in the manufacture of ground-wood pulp. J. H. Thickers and G. C. McNaughton. 1916.
344. Studies on the biology of the Arizona wild cotton weevil. B. R. Coad. 1916.
345. Notes on the preoviposition period of the house fly, *Musca domestica* L. R. H. Hutchison. 1916.
346. Home projects in secondary courses in agriculture. H. P. Barrows. 1916.
347. Methods for the determination of the physical properties of road-building rock. Frank H. Jackson, jr. 1916.
348. Relation of mineral composition and rock structure to the physical properties of road materials. E. C. E. Lord. 1916.
349. The raisin industry. George C. Husmann. 1916.
350. The utilization of cherry by-products. Frank Rabak. 1916.
351. The terrapin scale: An important insect enemy of peach orchards. F. L. Simanton. 1916.
352. The cherry leaf-beetle, a periodically important enemy of cherries. R. A. Cushman and Dwight Isely. 1916.
353. Moisture content and shrinkage of forage, and the relation of these factors to the accuracy of experimental data. H. N. Vinall and Roland McKee. 1916.
354. Forests of Porto Rico, past, present, and future, and their physical and economic environment. Louis S. Murphy. 1916.
355. Extension course in soils for self-instructed classes in movable schools of agriculture. A. R. Whitson and H. B. Hendrick. 1916.
356. Milk and cream contests. Ernest Kelly, L. B. Cook, and J. A. Gamble. 1916.
357. Alaska and Stoner, or "miracle" wheats: Two varieties much misrepresented. Carleton R. Ball and Clyde E. Leighty. 1916.
358. Studies of the Mexican boll weevil in the Mississippi Valley. R. W. Howe. 1916.
359. Comparative spinning tests of the different grades of Arizona-Egyptian with Sea Island and Sakellaridis Egyptian cottons. Fred Taylor and William S. Dean. 1916.
360. Mistletoe injury to conifers in the Northwest. James R. Weir. 1916.
361. Comparison of the bacterial count of milk with the sediment or dirt test. H. C. Campbell. 1916.
362. A system of accounts for primary grain elevators. John R. Humphrey and W. H. Kerr. 1916.
363. The pink corn-worm: An insect destructive to corn in the crib. F. H. Chittenden. 1916.
364. Forest conservation for States in the southern pine region. J. Girvin Peters. 1916.
365. Larkspur poisoning of livestock. C. Dwight Marsh, A. B. Clawson, and Hadleigh Marsh. 1916.
366. Manufacturing tests of cotton fumigated with hydrocyanic-acid gas. William S. Dean. 1916.
367. Carrying capacity of grazing ranges in southern Arizona. E. O. Wooton. 1916.
368. Brown-rot of prunes and cherries in the Northwest. Charles Brooks and D. F. Fisher. 1916.
369. Bacteria in commercial bottled waters. Maud Mason Obst. 1916.
370. The results of physical tests of road-building rock. Prévost Hubbard and Frank H. Jackson, jr. 1916.
371. Patronage dividends in cooperative grain companies. John R. Humphrey and W. H. Kerr. 1916.
372. Commercial production of thymol from horsemint (*Monarda punctata*). S. C. Hood. 1916.
373. Brick roads. Vernon M. Peirce and Charles H. Moorefield. 1916.
374. The intrinsic values of grain, cottonseed, flour, and similar products, based on the dry matter content. E. G. Boerner. 1916.
375. Disadvantages of selling cotton in the seed. Charles F. Creswell. 1916.
376. The flow of water in wood-stave pipe. Fred C. Scobey, Gardner S. Williams, Theron A. Noble, D. C. Henry, E. A. Moritz, E. W. Schoder, and L. M. Hoskins. 1916.
377. The Argentine ant: Distribution and control in the United States. Ernest R. Barber. 1916.
378. Fish meal: Its use as a stock and poultry food. F. C. Weber. 1916.
379. Dust explosions and fires in grain separators in the Pacific Northwest. David J. Price and E. B. McCormick. 1916.
380. *Endothia parasitica* and related species. C. L. Shear, Neil E. Stevens, and Ruby J. Tiller. 1917.
381. Business practice and accounts for cooperative stores. J. A. Bexell and W. H. Kerr. 1916.
382. Cotton boll-weevil control in the Mississippi Delta, with special reference to square picking and weevil picking. B. R. Coad. 1916.
383. New sorghum varieties for the central and southern Great Plains. H. N. Vinall and R. W. Edwards. 1916.
384. Costs and sources of farm-mortgage loans in the United States. C. W. Thompson. 1916.
385. School credit for home practice in agriculture. F. E. Heald. 1916.
386. Public road mileage and revenues in the Middle Atlantic States, 1914.
387. Public road mileage and revenues in the Southern States, 1914.
388. Public road mileage and revenues in the New England States, 1914.
389. Public road mileage and revenues in the Central, Mountain, and Pacific States, 1914.
390. Public road mileage and revenues in the United States, 1914.
391. Accuracy in commercial grading of opened eggs. M. K. Jenkins and Norman Hendrickson. 1918.
392. Lessons on tomatoes for rural schools. E. A. Miller. 1916.
393. Economic surveys of county highway improvement. J. E. Pennybacker and M. O. Eldridge. 1916.
394. A survey of typical cooperative stores in the United States. J. A. Bexell, Hector McPherson, and W. H. Kerr. 1916.
395. Peach scab and its control. G. W. Keitt. 1917.

396. Second annual report of bird counts in the United States, with discussion of results. Wells W. Cooke. 1916.
397. The grazing industry of the bluegrass region. Lyman Carrier. 1916.
398. Cereal experiments at the Judith Basin Substation, Moccasin, Mont. N. C. Donaldson. 1916.
399. The production of sweet-orange oil and a new machine for peeling citrus fruits. Possibility of the commercial production of sweet-orange oil from waste oranges. S. C. Hood and G. A. Russell. 1916.
400. Experiments with Marquis wheat. Carleton R. Bail and J. Allen Clark. 1916.
401. Marketing and distribution of western muskmelons in 1915. O. W. Schleussner and C. W. Kitchen. 1916.
402. Cereal experiments at the Akron Field Station, Akron, Colo. George A. McMurdo. 1916.
403. A system of accounts for livestock shipping associations. John R. Humphrey and W. H. Kerr. 1916.
404. Hemp hurds as paper-making material. Lyster H. Dewey and Jason L. Merrill. 1916.
405. Lupines as poisonous plants. C. D. Marsh, A. B. Clawson, and Hadleigh Marsh. 1916.
406. Distinguishing characters of the seeds of Sudan grass and Johnson grass. F. H. Hillman. 1916.
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408. Experiments during 1915 in the destruction of fly larvae in horse manure. F. C. Cook and R. H. Hutchison. 1916.
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410. Value to farm families of food, fuel, and use of house. W. C. Funk. 1916.
411. Systems of renting truck farms in southwestern New Jersey. Howard A. Turner. 1916.
412. The normal day's work of farm implements, workmen, and crews in western New York. H. H. Mowry. 1916.
413. Influence of age on the value of dairy cows and farm work horses. J. C. McDowell. 1916.
414. Convict labor for road work. J. E. Pennybacker, H. S. Fairbank, and W. F. Draper. 1916.
415. The recovery of potash from alunite. W. H. Waggaman and J. A. Cullen. 1916.
416. Red spider on cotton. E. A. McGregor and F. L. McDonough. 1917.
417. The genus *calosoma*. A. F. Burgess and C. W. Collins. 1917.
418. Western yellow pine in Oregon. Thornton T. Munger. 1917.
419. The grape leaf folder. J. F. Strauss. 1916.
420. Cooling hot-bottled Pasteurized milk by forced air. S. Henry Ayres, John T. Bowen, and W. T. Johnson, jr. 1916.
421. The sugar-beet thrips. Wm. H. White. 1916.
422. The eggplant tortoise beetle. Thomas H. Jones. 1916.
423. Labor requirements of dairy farms as influenced by milking machines. Harold N. Humphrey. 1916.
424. The Cottonwood borer. F. B. Milliken. 1916.
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426. Sugar pine. Louis T. Larsen and T. D. Woodbury. 1916.
427. The potato tuber moth. J. E. Graf. 1917.
428. *Medicago falcata*, a yellow-flowered alfalfa. R. A. Oakley and Samuel Garver. 1917.
429. Life history of the codling moth in the Pecos Valley, New Mexico. A. L. Quaintance and E. W. Geyer. 1917.
430. Cereal experiments on the Cheyenne Experiment Farm, Archer, Wyoming. Jenkin W. Jones. 1916.
431. Sachbrood. G. F. White. 1917.
432. The spike-borne leaf miner, an enemy of grains and grasses. Philip Luginbill and T. D. Urbahn. 1916.
433. Changes in fresh beef during cold storage above freezing. Ralph Hoagland, Charles N. McBryde, and Wilmer C. Powick. 1917.
434. Judging the dairy cow as a subject of instruction in secondary schools. H. P. Barrows and H. P. Davis. 1916.
435. The apple leaf-sewer. E. R. Leach. 1916.
436. The desert corn flea-beetle. V. L. Wildermuth. 1917.
437. Flat-headed borers affecting forest trees in the United States. H. E. Burke. 1917.
438. The pear leaf-worm. R. L. Nougaret, W. M. Davidson, and E. J. Newcomer. 1916.
439. The soybean, with special reference to its utilization for oil, cake, and other products. C. V. Piper and W. J. Morse. 1916.
440. Lumbering in the sugar and yellow pine region of California. Swift Berry. 1917.
441. The action of manganese under acid and neutral soil conditions. J. J. Skinner and F. R. Reid. 1916.
442. Possibility of the commercial production of lemon-grass oil in the United States. S. C. Hood. 1917.
443. The New Mexico range caterpillar and its control. V. L. Wildermuth and D. J. Caffrey. 1916.
444. False blossom of the cultivated cranberry. C. L. Shear. 1916.
445. The navel orange of Bahia; with notes on some little-known Brazilian fruits. P. H. Dorsett, A. D. Shamel, and Wilson Popenoe. 1917.
446. The cost of producing apples in the Wenatchee Valley, Wash. G. H. Miller and S. M. Thomson. 1917.
447. Water penetration in the gumbo soils of the Belle Fourche reclamation project. O. E. Mathews. 1916.
448. Separation and identification of food coloring substances. W. E. Mathewson. 1917.
449. A study of the electrolytic method of silver cleaning. H. L. Lang and C. F. Walton, jr. 1916.
450. Improvement of Ghirka spring wheat in yield and quality. J. Allen Clark. 1916.
451. The chemical composition of lime-sulphur animal dips. Robert M. Chapin. 1916.

452. The chemical composition of American grapes grown in the Central and Eastern States. William B. Alwood, B. G. Hartmann, J. R. Eoff, S. F. Sherwood, J. O. Carrero, and T. S. Harding. 1916.
453. The control of damping-off of coniferous seedlings. Carl Hartley and Roy G. Pierce. 1917.
454. The effect of cultural and climatic conditions on the yield and quality of peppermint. Frank Rabak. 1916.
455. The drying for milling purposes of damp and garlicky wheat. J. H. Cox. 1916.
456. Marketing creamery butter. Roy C. Potts and H. F. Meyer. 1917.
457. Relation between primary market prices and qualities of cotton. Fred Taylor. 1916.
458. Handling and marketing Durango cotton in the Imperial Valley. J. G. Martin and G. C. White. 1917.
459. The use of energy values in the computation of rations for farm animals. Revision of Farmers' Bulletin 346. Henry Prentiss Armsby. 1916.
460. The pine trees of the Rocky Mountain region. George B. Sudworth. 1917.
461. The identification of grasses by their vegetative characters. Lyman Carrier. 1917.
462. Irrigation in Florida. F. W. Stanley. 1917.
463. Earth, sand-clay, and gravel roads. Charles H. Moorefield. 1917.
464. Lessons on poultry for rural schools. F. E. Heald. 1916.
465. Propagation of wild duck foods. W. L. McAtee. 1917.
466. Maple sugar: Composition methods of analysis, effect of environment. A. Hugh Bryan, M. N. Straughn, C. G. Church, A. Given, and S. F. Sherwood. 1917.
467. The food value and uses of poultry. Helen W. Atwater. 1916.
468. Potatoes, sweet potatoes, and other starchy roots as food. C. F. Langworthy. 1917.
469. Fats and their economical use in the home. A. D. Holmes and H. L. Lang. 1916.
470. Studies on the digestibility of the grain sorghums. C. F. Langworthy and A. D. Holmes. 1916.
471. Eggs and their value as food. C. F. Langworthy. 1917.
472. Improved apparatus for determining the test weight of grain, with a standard method of making the test. E. G. Boerner. 1916.
473. Production of sugar in the United States and foreign countries. Perry Elliott. 1917.
474. True mahogany. C. D. Mell. 1917.
475. Reforestation on the national forests. C. R. Tillotson. 1917.
476. A study of cotton-market conditions in North Carolina with a view to their improvement. O. J. McConnell and W. R. Camp. 1917.
477. Marketing and distribution of strawberries in 1915. O. W. Schleussner and J. C. Gilbert. 1917.
478. The origin, characteristics, and quality of humpback wheat. Levi M. Thomas. 1916.
479. Nursery practice on the national forests. C. R. Tillotson. 1917.
480. Solid-stream spraying against the gipsy moth and the brown-tail moth in New England. L. H. Worthley. 1917.
481. The status and value of farm wood lots in the eastern United States. E. H. Frothingham. 1917.
482. Farming in the bluegrass region. J. H. Arnold and Frank Montgomery. 1917.
483. Statistics of fruits in the principal countries: Production, exports, and imports for the United States and foreign countries. H. D. Ruddiman. 1917.
484. Control of the gipsy moth by forest management. G. E. Clement and Willis Munro. 1917.
485. Apples: Production estimates and important commercial districts and varieties. H. P. Gould and Frank Andrews. 1917.
486. Sugar-cane culture for sirup production in the United States. P. A. Yoder. 1917.
487. Judging horses as a subject of instruction in secondary schools. H. P. Barrows. 1917.
488. Experiments in the disposal of irrigated crops through the use of hogs. James A. Holden. 1917.
489. A survey of beekeeping in North Carolina. E. G. Carr. 1916.
490. A preliminary report on the occurrence of western red-rot in *Pinus ponderosa*. W. H. Long. 1917.
491. The melon fly in Hawaii. E. A. Back and C. E. Pemberton. 1917.
492. An economic study of farming in Sumter County, Ga. H. M. Dixon and H. W. Hawthorne. 1917.
493. A study of American beers and ales. L. M. Tolman and J. Garfield Riley. 1917.
494. A humidifier for lemon curing rooms. A. D. Shamek. 1917.
495. Spray irrigation. Milo B. Williams. 1917.
496. Investigations of the rotting of slash in Arkansas. W. H. Long. 1917.
497. Tests of western yellow pine car sills, joists, and small clear pieces. C. W. Zimmerman. 1917.
498. Experiments with spring cereals at the eastern Oregon dry farming substation, Moro, Oreg. David E. Stephens. 1917.
499. The mulched-basin system of irrigated citrus culture and its bearing on the control of mottle-leaf. Lyman J. Briggs, C. A. Jensen, and J. W. McLane. 1917.
500. The cost of producing apples in western Colorado. S. M. Thomson and G. H. Miller. 1917.
501. A study in the cost of producing milk on four dairy farms, located in Wisconsin, Michigan, Pennsylvania, and North Carolina. Morton O. Cooper, C. M. Bennett and L. M. Church. 1917.
502. The drainage of irrigated shale land. Dalton G. Miller and L. T. Jessup. 1917.
503. Turnips, beets, and other succulent roots and their use as food. C. F. Langworthy. 1917.
504. The theory of correlation as applied to farm-survey data on fattening baby beef. H. R. Tolley. 1917.
505. Digestibility of some vegetable fats. C. F. Langworthy and A. D. Holmes. 1917.

506. Production of lumber, lath, and shingles in 1915 and lumber in 1914. J. C. Nellis. 1917.
507. Studies on the digestibility of some animal fats. C. F. Langworthy and A. D. Holmes. 1917.
508. Yields from the destructive distillation of certain hardwoods. R. C. Palmer. 1917.
509. The theory of drying and its application to the new humidity-regulated and recirculating dry kiln. Harry D. Tiemann. 1917.
510. Timber storage conditions in the Eastern and Southern States with reference to decay problems. C. J. Humphrey. 1917.
511. Farm practice in the cultivation of cotton. H. R. Cates. 1917.
512. Prevention of the erosion of farm lands by terracing. C. E. Ramser. 1917.
513. Fumigation of ornamental greenhouse plants with hydrocyanic-acid gas. E. R. Sasser and A. D. Borden. 1917.
514. Wheat, yields per acre and prices, by States, 50 years, 1866-1915. 1917.
515. Corn, yields per acre and prices, by States, 50 years, 1866-1915. 1917.
516. Table for converting weights of mechanical separations into percentages of the sample analyzed. E. G. Boerner. 1916.
517. An intradermal test for *bacterium pullorum* infection in fowls. Archibald R. Ward and Bernard A. Gallagher. 1917.
518. The cost of producing apples in the Hood River Valley. S. M. Thomson and G. H. Miller. 1917.
519. Poles purchased, 1915. Arthur M. McCreight. 1917.
520. A system of accounts for cotton warehouses. Roy L. Newton and John R. Humphrey. 1917.
521. Courses in secondary agriculture for southern schools. (First and second years.) H. P. Barrows. 1917.
522. Characteristics and quality of Montana-grown wheat. Levi M. Thomas. 1917.
523. Utilization of ash. W. D. Sterrett. 1917.
524. Detection of lime used as a neutralizer in dairy products. H. J. Wichmann. 1917.
525. Experiments in the determination of the digestibility of millets. C. F. Langworthy and A. D. Holmes. 1917.
526. Experiments with single-stalk cotton culture in Louisiana, Arkansas, and North Carolina. P. V. Cardon. 1918.
527. Some exercises in farm handicraft for rural schools. H. O. Sampson. 1917.
528. Seasonal distribution of farm labor in Chester County, Pa. George A. Billings. 1917.
529. Validity of the survey method of research. W. J. Spillman. 1917.
530. The organization and management of a farmers' mutual fire insurance company. V. N. Valgren. 1917.
531. Rhizopus rot of strawberries in transit. Neil E. Stevens and R. B. Wilcox. 1917.
532. The expansion and contraction of concrete and concrete roads. A. T. Goldbeck and F. H. Jackson, Jr. 1917.
533. Extension of cotton production in California. O. F. Cook. 1917.
534. Apple blotch and its control. John W. Roberts. 1917.
535. The horse-radish flea beetle: Its life history and distribution. F. H. Chittenden and Neale F. Howard. 1917.
536. The Mediterranean fruit fly in Hawaii. E. A. Back and C. E. Pemberton. 1918.
537. The results of physical tests of road-building rock in 1916, including all compression tests. Prévost Hubbard and Frank H. Jackson, Jr. 1917.
538. Shrimp: Handling, transportation, and uses. Ernest D. Clark and Leslie McNaughton. 1917.
539. The lesser corn stalk-borer. Philip Luginbill and George G. Ainslie. 1917.
540. A first-year course in home economics for southern agricultural schools. Louise Stanley. 1917.
541. Cooperative organization by-laws. C. E. Bassett and O. B. Jesness. 1918.
542. The pollination of the mango. Wilson Popenoe. 1917.
543. Control of peach bacterial spot in southern orchards. John W. Roberts. 1917.
544. The red spruce: Its growth and management. Louis S. Murphy. 1917.
545. Important range plants: Their life history and forage value. Arthur W. Sampson. 1917.
546. Effect of fall irrigation on crop yields at Belle Fourche, S. Dak. F. D. Farrell and Beyer Aune. 1917.
547. Cooperative purchasing and marketing organizations among farmers in the United States. O. B. Jesness and W. H. Kerr. 1917.
548. The business of ten dairy farms in the Bluegrass region of Kentucky. J. H. Arnold. 1917.
549. Crossies purchased and treated in 1915. Arthur M. McCreight. 1917.
550. Control of the grape-berry moth in the Erie-Chautauqua grape belt. Dwight Isely. 1917.
551. Variation in the chemical composition of soils. W. O. Robinson, L. A. Steinkoenig, and William H. Fry. 1917.
552. The seasoning of wood. Harold S. Betts. 1917.
553. The chicken mite: Its life history and habits. H. P. Wood. 1917.
554. The cranberry girdler. H. B. Scammell. 1917.
555. Standard forms for specifications, tests, reports, and methods of sampling for road materials. 1917.
556. Mechanical properties of woods grown in the United States. J. A. Newells and R. C. Wilson. 1917.
557. A comparison of several classes of American wheats and a consideration of some factors influencing quality. L. M. Thomas. 1917.
558. Marketing grain at country points. George Livingston and K. B. Seeds. 1917.
559. Accounting records for country creameries. John R. Humphrey and G. A. Nahstoll. 1917.
560. Cost of keeping farm horses and cost of horse labor. M. R. Cooper. 1917.
561. Feed cost of egg production. Harry M. Lamon and Alfred R. Lee. 1917.
562. The control of tobacco wilt in the flue-cured district. W. W. Garner, F. A. Wolf, and E. G. Mcss. 1917.
563. The determination of bacteria in ice cream. S. Henry Ayers and W. T. Johnson, Jr. 1917.

564. Collection of weevils and infested squares as a means of control of the cotton boll weevil in the Mississippi Delta. B. R. Coad and T. F. McGehee. 1917.
565. How to candle eggs. M. E. Pennington, M. K. Jenkins, and H. M. P. Betts. 1918.
566. The European earwig and its control. D. W. Jones. 1917.
567. Increased yield of turpentine and rosin from double chipping. A. W. Schorger and R. L. Pettigrew. 1917.
568. The presence of arsenic in hops. W. W. Stockberger and W. D. Collins. 1917.
569. The sanitary control of tomato-canning factories. Burton J. Howard and Charles H. Stephenson. 1917.
570. The by-products of rice milling. J. B. Reed and F. W. Liepsner. 1917.
571. The pecan leaf case-bearer. John B. Gill. 1917.
572. The recovery of potash as a by-product in the cement industry. William H. Ross, Albert R. Merz, and C. R. Wagner. 1917.
573. The sheep industry on the Minidoka reclamation project. E. F. Rinehart. 1917.
574. The conversion of the weights of mechanical separations of corn, wheat, and other grains into percentages. E. G. Boerner. 1917.
575. Stock-poisoning plants of the range. C. D. Marsh. 1918.
576. The manufacture of cottage cheese in creameries and milk plants. Arnold O. Dahlberg. 1917.
577. Experiments in the control of potato leak. Lon A. Hawkins. 1917.
578. A study of haymaking crews and labor costs. H. B. McClure. 1918.
579. Celery storage experiments. H. C. Thompson. 1917.
580. Effects of grazing upon western yellow pine reproduction in the national forests of Arizona and New Mexico. Robert R. Hill. 1917.
581. Microscopical studies on tomato products. Burton J. Howard and Charles H. Stephenson. 1917.
582. Farm management and farm profits on irrigated land in the Provo area. (Utah Lake Valley.) L. G. Connor. 1918.
583. Report on the experimental convict road camp, Fulton County, Ga. H. S. Fairbank, R. H. Eastham, and W. F. Draper. 1918.
584. The control of hog cholera, with a discussion of the results of field experiments. A. D. Melvin and M. Dorset. 1917.
585. A guide for formulating a milk ordinance. Bureau of Animal Industry and Bureau of Chemistry. 1917.
586. Progress reports of experiments in dust prevention and road preservation, 1916. 1918.
587. The handling and storing of apples in the Pacific Northwest. H. J. Ramsey, A. W. McKay, E. L. Markell, and H. S. Bird. 1917.
588. Increased cattle production on southwestern ranges. James T. Jardine and L. C. Hurtt. 1917.
589. The 28-hour law regulating the interstate transportation of livestock: Its purpose, requirements, and enforcement. Harry Goding and A. Joseph Raub. 1918.
590. A system of accounting for fruit shipping organizations. G. A. Nahstoll and John R. Humphrey. 1918.
591. Manufacturing tests of the official cotton standards for grade. William S. Dean and Fred Taylor. 1917.
592. Courses in secondary agriculture for southern schools. (Third and fourth years.) H. P. Barrows. 1917.
593. Judging sheep as a subject of instruction in secondary schools. H. P. Barrows. 1917.
594. Geography of wheat prices. L. B. Zapoleon. 1918.
595. Winter wheat in the Great Plains area: Relation of cultural methods to production. E. C. Chilcott, John S. Cole, and J. B. Kuska. 1917.
596. Feeding dried pressed potatoes to swine. Frank G. Ashbrook and R. E. Gongwer. 1917.
597. Some biological and control studies of *Gastrophilus haemorrhoidalis* and other bots of horses. W. E. Dove. 1918.
598. Orchard injury by the hickory tiger-moth. Dwight Isely. 1918.
599. The striped peach worm. H. G. Ingerson. 1918.
600. The relation of some of the rarer elements in soils and plants. W. O. Robinson, L. A. Steinkoenig, and C. F. Miller. 1917.
601. The handling and precooling of Florida lettuce and celery. H. J. Ramsey and E. L. Markell. 1917.
602. Value of a small plot of ground to the laboring man. A study of the food raised by operatives in southern cotton-mill towns. W. C. Funk. 1918.
603. A study of share-rented dairy farms in Green County, Wisconsin, and Kane County, Illinois. E. A. Boeger. 1918.
604. Incense cedar. J. Alfred Mitchell. 1918.
605. Lumber used in the manufacture of wooden products. J. C. Nellis. 1918.
606. Relative resistance of various hardwoods to injection with creosote. Clyde H. Teesdale and J. D. MacLean. 1918.
607. Tests of the absorption and penetration of coal tar and creosote in longleaf pine. Clyde H. Teesdale and J. D. MacLean. 1918.
608. Varieties of cheese: Descriptions and analyses. C. F. Doane and H. W. Lawson. 1918.
609. The sweet-potato leaf-folder. Thomas H. Jones. 1917.
610. Fish meal as a feed for swine. Frank G. Ashbrook. 1917.
611. Walnut blight in the Eastern United States. S. M. McMurrin. 1917.
612. The digestibility of the dasheen. C. F. Langworthy and A. D. Holmes. 1917.
613. Digestibility of certain miscellaneous animal fats. Arthur D. Holmes. 1919.
614. Cost of producing apples in Yakima Valley, Wash. G. H. Miller and S. M. Thomson. 1918.
615. The economical winter feeding of beef cows in the Corn Belt. J. S. Cotton and Edmund H. Thompson. 1917.
616. The citrus thrips. J. R. Horton. 1918.

617. Australian saltbush. Roland McKee. 1919.
618. Experiments with durum wheat. Carleton R. Ball and J. Allen Clark. 1918.
619. Food habits of the swallows; a family of valuable native birds. F. E. L. Beal. 1918.
620. Effect of varying certain cooking conditions in the production of sulphite pulp from spruce. S. E. Lunak. 1918.
621. The crow and its relation to man. E. R. Kalmbach. 1913.
622. The identification of varieties of barley. Harry V. Harlan. 1918.
623. Citrus-fruit improvement: A study of bud variation in the Washington navel orange. A. D. Shamel, L. B. Scott, and C. S. Pomeroy. 1918.
624. Citrus-fruit improvement: A study of bud variation in the Valencia orange. A. D. Shamel, L. B. Scott, and C. S. Pomeroy. 1918.
625. Cropping systems for the moister portion of eastern Washington and Oregon and northern Idaho. Lee W. Fluharty. 1918.
626. Pasture land on farms in the United States. E. A. Goldenweiser and J. S. Ball. 1918.
627. Cost of harvesting wheat by different methods. Arnold P. Yerkes and L. M. Church. 1918.
628. Wintering and fattening beef cattle in North Carolina. W. F. Ward, R. S. Curtis, and F. T. Peden. 1918.
629. Greenhouse experiments on the rust resistance of oat varieties. John H. Parker. 1918.
630. Studies on the digestibility of some nut oils. A. D. Holmes. 1918.
631. Five years' calf-feeding work in Alabama and Mississippi. W. F. Ward and S. S. Jerdan. 1918.
632. The utilization of waste tomato seeds and skins. Frank Rabak. 1917.
633. Factors of successful farming near Monett, Mo. W. J. Spillman. 1918.
634. A physical and chemical study of the Kafr kernel. George L. Bidwell. 1918.
635. The commercial freezing and storing of fish. Ernest D. Clark and Lloyd H. Almy. 1918.
636. Cost of production of apples in the Payette Valley, Idaho. S. M. Thomson and G. H. Müller. 1918.
637. A method of calculating economical balanced rations. J. C. Rundles. 1918.
638. Forestry and community development. Samuel T. Dana. 1918.
639. The market milk business of Detroit, Mich., in 1915. Clarence E. Clement and Gustav P. Warber. 1918.
640. The Mediterranean fruit fly. E. A. Back and C. E. Pemberton. 1918.
641. Farm practice in the production of hay in Steuben County, N. Y., and Washington County, Pa. H. B. McClure. 1918.
642. The four essential factors in the production of milk of low bacterial content. S. Henry Ayers, Lee B. Cook, and Paul W. Clemmer. 1918.
643. The melon fly. E. A. Back and C. E. Pemberton. 1918.
644. Lint percentage and lint index of cotton and methods of determination. G. S. Meloy. 1918.
645. Some reasons for spraying to control insect and mite enemies of citrus trees in Florida. W. W. Yothers. 1918.
646. Lessons on pork production for elementary rural schools. E. A. Miller. 1918.
647. The Argentine ant in relation to citrus groves. J. R. Horton. 1918.
648. A farm management survey in Brooks County, Ga. E. S. Haskell. 1918.
649. Experiments on the digestibility of fish. A. D. Holmes. 1918.
650. Lease contracts used in renting farms on shares. A study of the distribution of investments, expenses, and incomes between landlord and tenant. E. V. Wilcox. 1918.
651. A farm-management study in Anderson County, S. C. A. G. Smith. 1918.
652. The wet lands of southern Louisiana and their drainage. Charles W. Okey. 1918.
653. Lessons on corn for rural elementary schools. C. H. Laue. 1918.
654. Farm organization in the irrigated valleys of southern Arizona. R. W. Clothier. 1918.
655. Influence on linseed oil of the geographical source and variety of flax. Frank Rabak. 1918.
656. Concord grape juice: Manufacture and chemical composition. B. G. Hartman and L. M. Tolman. 1918.
657. A wheatless ration for the rapid increase of flesh on young chickens. M. E. Pennington, H. A. McAleer, A. D. Greenlee, F. X. Dailey, and H. C. Albin. 1918.
658. Forest disease surveys. James R. Weir and Ernest E. Hubert. 1918.
659. A farm management study of cotton farms of Ellis County, Tex. Rex E. Willard. 1918.
660. Highway cost keeping. James J. Tobin and A. R. Losh. 1918.
661. The manufacture of casein from buttermilk or skim milk. Arnold O. Dahlberg. 1918.
662. Vesicular stomatitis of horses and cattle. John R. Mohler. 1918.
663. The installation and equipment of an egg breaking plant. M. K. Jenkins and M. E. Pennington. 1918.
664. The prevention of breakage of eggs in transit when shipped in car lots. M. E. Pennington, H. A. McAleer, A. D. Greenlee, F. X. Dailey, and H. C. Albin. 1918.
665. Status of farming in the lower Rio Grande irrigated district of Texas. Rex E. Willard. 1918.
666. The effect of alkali treatment on cocoas. Eugene Bloomberg. 1918.
667. Car-lot shipments of fruits and vegetables in the United States in 1916. Paul Froelich. 1918.
668. Nurse planting select cotton seed. P. V. Cardon. 1918.
669. The manufacture of Neufchatel and cream cheese in the factory. K. J. Matheson and F. R. Cammack. 1918.
670. The results of physical tests of road-building rock in 1916 and 1917. Prévost Hubbard and Frank H. Jackson, Jr. 1918.
671. The diagnosis of bee diseases by laboratory methods. Arthur H. McCray and G. F. White. 1918.
672. The duck sickness in Utah. Alexander Wetmore. 1918.

673. Production of lumber, lath, and shingles in 1916. Franklin H. Smith and Albert H. Pierson. 1918.
674. Hemorrhagic septicemia. Henry J. Washburn. 1918.
675. Range preservation and its relation to erosion control on western grazing lands. Arthur W. Sampson and Leon H. Weyl. 1918.
676. The relation of the shrinkage and strength properties of wood to its specific gravity. J. A. Newlin and T. R. C. Wilson. 1919.
677. Soils of southern New Jersey and their uses. J. A. Bonsteel. 1918.
678. Influence of a city on farming. (A study of types of farms and their organizations in Jefferson County, Ky.) J. H. Arnold and Frank Montgomery. 1918.
679. The application of optical methods of identification to alkaloids and other organic compounds. Edgar T. Wherry. 1918.
680. Miscellaneous conifers of the Rocky Mountain region. George B. Sudworth. 1918.
681. Grain-dust explosions, investigations in the experimental attrition mill at the Pennsylvania State College. B. W. Dedrick, R. B. Fehr, and David J. Price. 1918.
682. A study of prices and quality of creamery butter. G. P. Warber. 1918.
683. Utilization of elm. W. D. Brush. 1918.
684. The sources of apple bitter-rot infections. John W. Roberts. 1918.
685. Honey bees and honey production in the United States. S. A. Jones. 1918.
686. Further studies of the rots of strawberry fruits. Neil E. Stevens and R. B. Wilcox. 1918.
687. Digestibility of some seed oils. A. D. Holmes. 1918.
688. Marketing berries and cherries by parcel post. C. C. Hawbaker and Charles A. Burmeister. 1918.
689. The southern green plant-bug. Thos. H. Jones. 1918.
690. Marketing practices of Wisconsin and Minnesota creameries. Roy C. Potts. 1918.
691. Typical specifications for bituminous road materials. Prevost Hubbard and Charles S. Reeve. 1918.
692. The agricultural species of bent grasses. Part I. Rhode Island bent and related grasses. Part II. The seeds of red top and other bent grasses. Charles V. Piper and F. H. Hillman. 1918.
693. Farm practice in growing sugar beets for three districts in Utah and Idaho, 1914-15. L. A. Moorhouse, T. H. Summers, R. S. Washburn, and James W. Jones. 1918.
694. A study of farm management problems in Lenawee County, Mich. H. M. Dixon and J. A. Drake. 1918.
695. Potatoes: Acreage, production, foreign trade, supply, and consumption. George K. Holmes. 1918.
696. Geographical phases of farm prices: Corn. L. B. Zapoleon. 1918.
697. Citrus-fruit improvement: A study of bud variation in the marsh grapefruit. A. D. Shamal, L. B. Scott, and C. S. Pomeroy. 1918.
698. Grain-sorghum experiments in the Panhandle of Texas. Carleton R. Ball and Benton E. Rothgeb. 1918.
699. Analysis of experimental work with ground raw rock phosphate as a fertilizer. W. H. Waggaman, C. R. Wagner, and R. F. Gardiner. 1918.
700. Climate and plant growth in certain vegetative associations. Arthur W. Sampson. 1918.
701. The chemical analysis of wheat-flour substitutes and the breads made therefrom. J. A. Le Clerc and H. L. Wessling. 1918.
702. Efficiency of commercial egg candling. M. K. Jenkins and C. A. Bengtson. 1918.
703. Miscellaneous truck-crop insects in Louisiana. I. Insects injurious to the globe artichoke in Louisiana. II. The granulated cutworm, an important enemy of the vegetable crop. III. Experiments in controlling the tomato fruit-worm with arsenicals. Thomas H. Jones. 1918.
704. Typical specifications for nonbituminous road materials. Prevost Hubbard and Frank H. Jackson, jr. 1918.
705. Profitable management of general farms in the Willamette Valley, Oreg. Byron Hunter and S. O. Jayne. 1918.
706. American sumac: A valuable tanning material and dyestuff. F. P. Veitch and J. S. Rogers. 1918.
707. Results of experiments with miscellaneous substances against bed-bugs, cockroaches, clothes moths, and carpet beetles. E. W. Scott, W. S. Abbott, and J. E. Dudley, jr. 1918.
708. Shuck protection for ear corn. C. H. Kyle. 1918.
709. Reports of storage holdings of certain food products. John O. Bell and I. C. Franklin. 1918.
710. Stagger grass (*Chrotopherma muscatoricum*) as a poisonous plant. C. Dwight Marsh, A. B. Clawson, and Hadleigh Marsh. 1918.
711. Logging in the Douglas fir region. William H. Gibbons. 1918.
712. Apple powdery mildew and its control in the arid regions of the Pacific Northwest. D. F. Fisher. 1918.
713. A study of farming in southwestern Kentucky. J. H. Arnold. 1918.
714. Spoilage of cranberries after harvest. C. L. Shear, Neil E. Stevens, R. B. Wilcox, and B. A. Rudolph. 1918.
715. Attracting birds to public and semipublic reservations. W. L. McAtee. 1918.
716. A five-year farm management survey in Palmer Township, Washington County, Ohio, 1912-1916. H. W. Hawthorne. 1918.
717. Digestibility of protein supplied by soy-bean and peanut press-cake flours. Arthur D. Holmes. 1918.
718. Small sawmills: Their equipment, construction, and operation. Daniel F. Seerey. 1918.
719. Women's rural organizations and their activities. Anne M. Evans. 1918.
720. Food habits of the mallard ducks of the United States. W. L. McAtee. 1918.
721. The beet-sugar industry in the United States. C. O. Townsend. 1918.
722. A study of heart-rot in the western hemlock. James R. Weir and Ernest E. Hubert. 1918.
723. The pink bollworm, with special reference to steps taken by the Department of Agriculture to prevent its establishment in the United States. W. D. Hunter. 1918.

724. Drainage methods and foundations for county roads. E. W. James, Vernon M. Pierce, and Charles H. Moorefield. 1918.
725. A preliminary study of the bleaching of oats with sulphur dioxide. George H. Baston. 1918.
726. Farm practice in growing sugar beets for three districts in Colorado, 1914-15. L. A. Moorhouse, R. S. Washburn, T. H. Summers, and S. B. Nuckols. 1918.
727. Anthracnose of cucurbits. M. W. Gardner. 1918.
728. Certain desert plants as emergency stock feed. E. O. Wooton. 1918.
729. Suitable storage conditions for certain perishable food products: Apples, potatoes, sweet potatoes, onions, cabbage, eggs, poultry, butter, and fish. 1918.
730. Papers on deciduous-fruit insects. I. The grape curculio. Fred E. Brooks. II. The grape root-borer. Fred E. Brooks. III. Experiments in the control of the root form of the woolly apple aphid. B. R. Leach. 1918.
731. Recent experimental work on poisoning cotton-boll weevils. B. R. Coad. 1918.
732. Smyrna fig culture. G. P. Rixford. 1918.
733. Length of cotton lint, crops, 1916 and 1917. W. L. Pryor. 1918.
734. Nematode galls as a factor in the marketing and milling of wheat. D. A. Coleman and S. A. Regan. 1918.
735. Farm practice in growing sugar beets in the Billings region of Montana. S. B. Nuckols and E. L. Currier. 1918.
736. The open shed compared with closed barn for dairy cows. T. E. Woodward, W. F. Turner, W. R. Hale, and J. B. McNulty. 1918.
737. The tobacco beetle: An important pest in tobacco products. G. A. Runner and Adam G. Böving. 1919.
738. Effect of grazing upon western yellow pine reproduction in central Idaho. W. N. Sparhawk. 1918.
739. The significance of the colon count in raw milk. S. Henry Ayers and Paul W. Clemmer. 1918.
740. A study of some of the chemical changes which occur in oysters during their preparation for market. Edward E. Smith. 1919.
741. Effect of grazing upon aspen reproduction. Arthur W. Sampson. 1919.
742. Production of American Egyptian cotton. C. S. Scofield, T. H. Kearney, C. J. Brand, O. F. Cook, and W. T. Swingle. 1919.
743. The avocado in Guatemala. Wilson Popenoe. 1919.
744. Cooling milk and storing and shipping it at low temperatures. James A. Gamble and John T. Bowen. 1919.
745. Chopped soapweed as emergency feed for cattle on southwestern ranges. C. L. Forsling. 1919.
746. The sugar-cane moth borer. T. E. Holloway and U. C. Loftin. 1919.
747. The economical use of fuel in milk plants and creameries. John T. Bowen. 1919.
748. Farm practice in growing sugar beets in Michigan and Ohio. R. S. Washburn, L. A. Moorhouse, T. H. Summers, and C. O. Townsend. 1919.
749. Production of goats on far western ranges. W. R. Chapline. 1919.
750. A method for preparing a commercial grade of calcium arsenate. J. K. Haywood and C. M. Smith. 1918.
751. Experiments on the digestibility of wheat bran in a diet without wheat flour. Arthur D. Holmes. 1919.
752. The utilization of irrigated field crops for hog pasturing. F. D. Farrell. 1919.
753. The use of wood for fuel. 1919.
754. Inheritance of the waxy endosperm in maize. J. H. Kempton. 1919.
755. Geographical phases of farm prices: Oats. L. B. Zapolon. 1919.
756. Pecan rosettes in relation to soil deficiencies. S. M. McMurrin. 1919.
757. Farm practices in grain farming in North Dakota. C. M. Hennis and Rex E. Willard. 1919.
758. Pulpwood consumption and wood-pulp production in 1917. Franklin H. Smith. 1919.
759. The leaf-spot disease of alfalfa and red clover caused by the fungi *Pseudopeziza medicaginis* and *Pseudopeziza trifolii*, respectively. Fred Reuel Jones. 1919.
760. Farm practice in growing sugar beets in three California districts. T. H. Summers, L. A. Moorhouse, R. S. Washburn, and C. O. Townsend. 1919.
761. A comparison of concentrates for fattening steers in the South. W. F. Ward, S. S. Jerdan, and E. R. Lloyd. 1919.
762. A comparison of roughages for fattening steers in the South. W. F. Ward, Dan T. Gray, and E. R. Lloyd. 1919.
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765. Strains of white burley tobacco resistant to root-rot. James Johnson and R. H. Milton. 1919.
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795. The adulteration of insect powder with powdered daisy flowers (*Chrysanthemum leucanthemum* L.). R. C. Roark and G. L. Keenan. 1919.
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810. European foulbrood. G. F. White. 1920.
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1034. Farm management and farm organization in Sumter County, Ga. H. W. Hawthorne, H. M. Dixon, and Frank Montgomery. 1922.
1035. The red spider on the avocado. G. F. Mozzette. 1922.
1036. Coal tar and water-gas tar creosotes: Their properties and methods of testing. Ernest Bateman. 1922.
1037. The control of sap-stain, mold, and incipient decay in green wood with special reference to vehicle stock. Nathaniel O. Howard. 1922.
1038. Pecan rosette, its histology, cytology, and relations to other chlorotic diseases. Frederick V. Rand. 1922.
1039. Experiments with cereals on the Belle Fourche Experiment Farm, Newell, S. Dak. John H. Martin. 1922.
1040. Control of the citrophilus mealybug. R. S. Woglum and A. D. Borden. 1922.
1041. A study of sweet-potato varieties with special reference to their canning quality. C. A. Magoon and C. W. Culpepper. 1922.
1042. Effect of winter rations on pasture gains of calves: I. Winter rations and their influence on pasture gains of calves; II. Cost of rations for wintering calves. E. W. Sheets and R. H. Tuckwiller. 1922.
1043. Crop insurance: risks, losses, and principles of protection. V. N. Valgren. 1922.
1044. Self-service in the retailing of food products. F. E. Chaffee and McFall Kerbey. 1922.
1045. The sunflower as a silage crop. H. N. Vinall. 1922.
1046. Rust resistance in winter-wheat varieties. Leo E. Melchers and John H. Parker. 1922.
1047. Farm mortgage loans by banks, insurance companies, and other agencies. V. N. Valgren and Elmer E. Engelbert. 1921.
1048. Bank loans to farmers on personal and collateral security. V. N. Valgren and Elmer E. Engelbert. 1922.
1049. Game as a national resource. T. S. Palmer. 1922.
1050. The identification of true mahogany, certain so-called mahoganies, and some common substitutes. Arthur Koehler. 1922.
1051. Red cedar chests as protectors against moth damage. E. A. Back and Frank Rabak. 1922.
1052. Rations for feeding poultry in the packing house. J. S. Hepburn and R. C. Holder. 1922.
1053. Studies of certain fungi of economic importance in the decay of building timbers with special reference to the factors which favor their development and dissemination. Walter H. Snell. 1922.

1054. Comparison of corn oils obtained by expeller and benzol extraction methods. A. F. Sievers. 1922.
1055. Methods of manufacturing potato chips. Margaret Connor Vosbury. 1922.
1056. Marketing cotton seed for planting purposes. J. E. Barr. 1922.
1057. The chaulmoogra tree and some related species. A survey conducted in Siam, Burma, Assam, and Bengal. Joseph F. Rock. 1922.
1058. Sterility of oats. Charlotte Elliott. 1922.
1059. Research methods in the study of forest environment. Carlos G. Bates and Raphael Zon. 1922.
1060. Sitka spruce: Its uses, growth, and management. N. Leroy Carey. 1922.
1061. Longleaf pine. Wilbur R. Mattoon. 1922.
1062. Relation of the character of the endosperm to the susceptibility of dent corn to root rotting. John F. Trost. 1922.
1063. Sweet-potato storage studies. H. C. Thompson and James H. Beattie. 1922.
1064. Oleoresin production: A microscopic study of the effects produced on the woody tissues of Southern pines by different methods of turpentineing. Eloise Gerry. 1922.
1065. The test weight of grain: A simple method of determining the accuracy of the testing apparatus. E. G. Boerner and E. H. Ropes. 1922.
1066. Curculios that attack the young fruits and shoots of walnut and hickory. Fred E. Brooks. 1922.
1067. Tests of drainage pumping plants in the Southern States. W. B. Gregory. 1922.
1068. Farm ownership and tenancy in the Black Prairie of Texas. J. T. Sanders. 1922.
1069. Relation of production to income from dairy cows. J. C. McDowell. 1922.
1070. Farm management in Catawba County, N. C. J. M. Johnson and E. D. Strait. 1922.
1071. Influence of season of freshening on production and income from dairy cows. J. C. McDowell. 1922.
1072. The handling, shipping, and cold storage of Bartlett pears in the Pacific Coast States. J. R. Magness. 1922.
1073. Some changes in the composition of California avocados during growth. C. G. Church and E. M. Chace. 1922.
1074. Classification of American wheat varieties. J. Allen Clark, John H. Martin, and Carleton R. Ball. 1922.
1075. The whipping quality of cream. C. J. Babcock. 1922.
1076. Biology of the lotus borer (*Pyrausta nivalis* Grote). George G. Ainslie and W. B. Cartwright. 1922.
1077. Portland cement concrete roads. James T. Voshell and R. E. Toms. 1922.
1078. Beaver habits, beaver control, and possibilities in beaver farming. Vernon Bailey. 1922.
1079. Experiments with spray solutions for preventing insect injury to green logs. F. C. Craighead. 1922.
1080. Effect of low temperature on the hatching of gipsy-moth eggs. John N. Summers. 1922.
1081. Biology of the papaya fruit fly, *Toxotrypana curvicauda*, in Florida. Arthur C. Mason. 1922.
1082. The production of tulip bulbs. David Griffiths. 1922.
1083. Farm and terminal market prices: Wheat, corn, and oats. Crop movement year, 1920-21. I. W. Strowbridge. 1922.
1084. Inspection of fruit and vegetable canneries. F. B. Linton. 1922.
1085. Broad-nosed grain weevil. Richard T. Cotton. 1922.
1086. Shrinkage of soft pork under commercial conditions. L. B. Burk. 1922.
1087. Alfalfa root studies. Samuel Garver. 1922.
1088. *Zygothrips nidicola*, an important parasite of the brown tail moth. C. F. W. Meusebeck. 1922.
1089. Reindeer in Alaska. Seymour Hadwen and Lawrence J. Palmer. 1922.
1090. The effects of inbreeding and crossbreeding on guinea pigs: I. Decline in vigor; II. Differentiation among inbred families. Sewall Wright. 1922.
1091. Life history of the kangaroo rat. Charles T. Norhies and Walter P. Taylor. 1922.
1092. Pedigreed fiber flax. Robert L. Davis. 1922.
1093. The gipsy moth on cranberry bogs. Charles W. Minott. 1922.
1094. Methods of winter-wheat production at the Fort Hays branch station. John S. Cole and A. L. Hallsted. 1922.
1095. Producers' cooperative milk-distributing plants. O. B. Jesness, W. H. Barber, A. V. Swartout, and C. E. Clement. 1922.
1096. By-products from crushing peanuts. J. B. Reed. 1922.
1097. The effect of silage on flavor and odor of milk. James A. Gamble and Ernest Kelly. 1922.
1098. Impounding water in a bayou to control breeding of malaria mosquitoes. D. L. Van Dine. 1922.
1099. Frost injury to tomatoes. R. B. Harvey and R. C. Wright. 1922.
1100. Method of determining grease and dirt in wool. D. A. Spencer, J. I. Hardy, and Mary J. Brandon. 1922.
1101. Unit requirements for producing market milk in Delaware. J. B. Bain and Ralph P. Hotis. 1922.
1102. Kernel-spot of the pecan and its cause. J. B. Demaree. 1922.
1103. Summary of insect conditions throughout the United States during 1921. J. A. Hyslop. 1922.
1104. Internal browning of the yellow Newtown apple. W. S. Ballard, J. R. Magness, and Lon A. Hawkins. 1922.
1105. Natural reproduction of western yellow pine in the Southwest. G. A. Pearson. 1923.
1106. Legal phases of cooperative associations. L. S. Hulbert. 1922. Rev. 1923.
1107. The lead-cable borer or short-circuit beetle in California. H. E. Burke, R. D. Hartman, and T. E. Snyder. 1922.
1108. Tables for the microscopic identification of inorganic salts. William H. Fry. 1922.
1109. Sales methods and policies of a growers' national marketing agency. Asher Hobson and J. Burton Chaney. 1923.

1110. The farmer's short-box measuring flume. Carl Rohwer. 1922.  
1111. One-variety cotton communities. O. F. Cook. 1922.  
1112. The western yellow pine mistletoe. Effect on growth and suggestions for control. Clarence F. Korsjian and W. H. Long. 1922.  
1113. Development of cooperative shelter-belt demonstrations on the northern Great Plains. Robert Wilson and F. E. Cobb. 1923.  
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1120. Investigations of heat canker of flax. C. S. Reddy and W. E. Brentzel. 1922.  
1121. The effects of inbreeding and crossbreeding on guinea pigs: III. Crosses between highly inbred families. Sewall Wright. 1922.  
1122. Absorption by colloidal and noncolloidal soil constituents. M. S. Anderson, W. H. Fry, P. L. Gile, H. E. Middleton, and W. O. Robinson. 1922.  
1123. Proportioning the ingredients for ice cream and other frozen products by balance method. O. E. Williams. 1922.  
1124. The marketing of mill feeds. G. C. Wheeler. 1922.  
1125. The Saily date of Egypt: A variety of first rank adapted to commercial culture in the United States. S. C. Mason. 1923.  
1126. The effect of borax on the growth and yield of crops. J. J. Skinner, B. E. Brown, and F. R. Reid. 1923.  
1127. Some new varieties of rice. Charles E. Chambliss and J. Mitchell Jenkins. 1923.  
1128. Decays and discolorations in airplane woods. J. S. Boyce. 1923.  
1129. Physical and chemical study of milo and feterita kernels. George L. Bidwell, Leslie E. Bopst, and John D. Bowling. 1922.  
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1134. Self-fertilization and cross-fertilization in Pima cotton. Thomas H. Kearney. 1923.  
1135. Spinning tests of cotton compressed to different densities. William R. Meadows and William G. Blair. 1923.  
1136. Kiln drying handbook. Rolf Thelen. 1923.  
1137. Symptoms of wheat rosette compared with those produced by certain insects. Harold H. McKinney and Walter H. Larrimer. 1923.  
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1145. Migration records from wild ducks and other birds banded in the Salt Lake Valley, Utah. Alexander Wetmore. 1923.  
1146. The influence of copper sprays on yield and composition of Irish potato tubers. F. C. Cook. 1923.  
1147. Chemical, physical, and insecticidal properties of arsenicals. F. C. Cook and N. E. Melndoo. 1923.  
1148. Comparative spinning tests of superior varieties of cotton grown under weevil condition, in Southeastern States, crop of 1921. William R. Meadows and William G. Blair. 1923.  
1149. Absorption and retention of hydrocyanic acid by fumigated food products [pt. 1]. (For pt. 2 see Bulletin 1307.) E. L. Griffin, I. E. Neifert, N. Perrine, and A. B. Duckett. 1923.  
1150. Accounting records and business methods for livestock shipping associations. Frank Robotka. 1923.  
1151. Silver-fox farming. Frank G. Ashbrook. 1923.  
1152. Soy and related fermentations. Margaret B. Church. 1923.  
1153. Boll-weevil cotton in Texas. O. F. Cook. 1923.  
1154. Feeding habits of the Japanese beetle which influence its control. Loren B. Smith. 1923.  
1155. Rice experiments at the Biggs rice field station in California. Jenkin W. Jones. 1923.  
1156. Investigations of potato wart. Freeman Weiss, C. R. Orton, and R. E. Hartman. 1923.  
1157. Influence of spacing on productivity in single-ear and prolific types of corn. E. B. Brown and H. S. Garrison. 1923.  
1158. Production of sirup from sweet potatoes. H. C. Gore, H. C. Reese, and J. O. Reed. 1923.  
1159. Coloring Satsuma oranges in Alabama. R. C. Wright. 1923.  
1160. Studies on contact insecticides. Charles H. Richardson and C. R. Smith. 1923.  
1161. Effect of composition on the palatability of ice-cream. Owen E. Williams and George R. Campbell. 1923.  
1162. The rôle of the genus *Rhamnus* in the dissemination of crown rust. S. M. Dietz. 1923.  
1163. A study of decay in Douglas fir in the Pacific Northwest. J. S. Boyce. 1923.

1164. Segregation and correlation of characters in upland-Egyptian cotton hybrid. Thomas H. Kearney. 1923.
1165. Report on bird censuses in United States, 1916-1920. May Thacher Cooke. 1923.
1166. Apple by-products as stock foods. G. P. Walton and G. L. Bidwell. 1923.
1167. Cultivation of the true yams in the Gulf region. Robert A. Young. 1923.
1168. Wearing qualities of shoe leathers. F. P. Veitch, R. W. Frey, and I. D. Clarke. 1923.
1169. Further studies with paradichlorobenzene for peach-borer control, with special reference to its use on young peach trees. Oliver I. Snapp and Charles H. Alden. 1923.
1170. Effects of different systems and intensities of grazing upon native vegetation at the Northern Great Plains Field Station. J. T. Sarvis. 1923.
1171. The manufacture of Camembert cheese. Kenneth J. Matheson and S. A. Hall. 1923.
1172. Cereal experiments at Chico, Calif. Victor H. Florell. 1923.
1173. Experiments in wheat production on the dry lands of the western United States. David E. Stephens, Max A. McCall, and Aaron E. Bracken. 1923.
1174. Hungarian vetch. Roland McKee and H. A. Schoth. 1923.
1175. Grain-sorghum experiments at the Woodward Field Station in Oklahoma. John B. Sieglinger. 1923.
1176. Some results of cutting in the Sierra forests of California. Duncan Dunning. 1923.
1177. Irrigation district operation and finance. Wells A. Hutchins. 1923.
1178. Bordeaux-oil emulsion. John R. Winston, John J. Bowman, and W. W. Yothers. 1923.
1179. Investigations of the manufacture of phosphoric acid by the volatilization process. William H. Waggaman, Henry W. Easterwood, and Thomas B. Turley. 1923.
1180. Field experiments with atmospheric-nitrogen fertilizers. F. E. Allison, J. M. Braham, and J. E. McMurtrey, jr. 1924.
1181. Labor requirements of Arkansas crops. A. D. McNair. 1924.
1182. The imported pine sawfly. William Middleton. 1923.
1183. Milling and baking experiments with American wheat varieties. J. H. Shollenberger and J. Allen Clark. 1924.
1184. Utilization of Pima cotton. Horace H. Willis. 1923.
1185. Flax-stem anatomy in relation to retting. Robert L. Davis. 1923.
1186. White-pine blister rust in western Europe. W. Stuart Moir. 1924.
1187. Experimental milling and baking (including chemical determinations). J. H. Shollenberger, Walter K. Marshall, and D. A. Coleman. 1924.
1188. Costs and farm practices in producing potatoes on 461 farms in Minnesota, Wisconsin, Michigan, New York, and Maine for the crop year 1919. W. C. Funk. 1924.
1189. Fruits in West Virginia, Kentucky, and Tennessee. George M. Darrow. 1923.
1190. Effect of feeding green alfalfa and green corn on flavor and odor of milk. C. J. Babcock. 1923.
1191. Potash from kelp: Early development and growth of giant kelp, *Macrocystis pyrifera*. R. P. Brandt and J. W. Turrentine. 1923.
1192. Improvement of Kubanka durum wheat by pure-line selection. Ralph W. Smith, L. W. Waldron and J. Allen Clark. 1923.
1193. Estimation of colloidal material in soils by adsorption. P. L. Gile, H. E. Middleton, W. D. Robinson, W. H. Fry, and M. S. Anderson. 1924.
1194. Chemical and structural study of mesquite, carob, and honey locust beans. G. P. Walton. 1923.
1195. Sterilities of wild and cultivated potatoes with reference to breeding from seed. A. B. Stout and C. F. Clark. 1924.
1196. Food and economic relations of North American grebes. Alexander Wetmore. 1924.
1197. Experiments with emmer, spelt, and einkorn. John H. Martiu and Clyde E. Leighty. 1924.
1198. Cost of producing winter wheat in central Great Plains region of the United States. R. S. Washburn. 1924.
1199. List of bulletins of the agricultural experiment stations in the United States from their establishments to the end of 1920. 1924.
1199. Supplement I. List of bulletins of agricultural experiment stations for the calendar years 1921 and 1922. Catherine E. Pennington. 1924.
1200. The natural regeneration of Douglas fir in the Pacific Northwest. Julius V. Hofmann. 1924.
1201. Plants tested for or reported to possess insecticidal properties. N. E. McIndoo and A. F. Sievers. 1924.
1202. Tractors and horses in the winter wheat belt, Oklahoma, Kansas, Nebraska. H. R. Tolley and W. R. Humphries. 1924.
1203. Experimental production of straw gas. Harry E. Roethe. 1923.
1204. Dusting cotton from airplanes. B. R. Coad, E. Johnson and G. L. McNeil. 1924.
1205. Dusting and spraying peach trees after harvest for control of the plum curculio. Oliver I. Snapp and C. H. Alden. 1924.
1206. Marketing southern-grown sweet potatoes. George O. Gatlin. 1924.
1207. Drainage district assessments. George R. Boyd and R. A. Hart. 1924.
1208. Effect of feeding turnips on the flavor and odor of milk. C. J. Babcock. 1923.
1209. Effects of selection on the yield of a cross between varieties of corn. Frederick D. Richey. 1924.
1210. Summary of literature on bunt, or stinking smut, of wheat. Horace M. Woolman and Harry B. Humphrey. 1924.
1211. Sources of supply and conditions of employment of harvest labor in the wheat belt. Don D. Leschier. 1924.
1212. The woolly-pod-milkweed (*Asclepias eriocarpa*) as a poisonous plant. C. Dwight Marsh and A. B. Clawson. 1924.
1213. Digestibility of raw starches and carbohydrates. C. F. Langworthy and Alice Thompson Merrill. 1924.
1214. Family living in farm homes. An economic study of 402 farm families in Livingston Co., N. Y. E. L. Kirkpatrick, Helen W. Atwater, and Ilena M. Bailey. 1924.
1215. The Chinese jujube. C. C. Thomas and C. G. Church. 1924.
1216. Tentative standard methods of sampling and testing highway materials. 1924.



1217. Mixing emulsified mineral lubricating oils with deep-well waters and lime-sulphur solutions. W. W. Yothers and J. R. Winston. 1924.
1218. Horse-flies: Biologies and relation to western agriculture. J. L. Webb and R. W. Wells. 1924.
1219. Delinting and recleaning cottonseed for planting purposes. J. E. Barr. 1924.
1220. Farm labor in Massachusetts, 1921. Josiah C. Folsom. 1924.
1221. Capillary distribution of moisture in soil columns of small cross section. W. W. McLaughlin. 1924.
1222. Growth and feeding of honeybee larvae. James A. Nelson, Arnold P. Sturtevant, and Bruce Lineburg. 1924.
1223. The European elm scale in the West. Frank B. Herbert. 1924.
1224. Relation of land income to land value. Clyde R. Chambers. 1924.
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1230. Conditions affecting the demand for harvest labor in the wheat belt. Don D. Lescohier. 1924.
1231. Tests of methods of protecting woods against termites or white ants. Thomas E. Snyder. 1924.
1232. Damage to termites in the Canal Zone and Panama and how to prevent it. Thomas E. Snyder and James Zetek. 1924.
1233. Forest types in the central Rocky Mountains as affected by climate and soil. Carlos G. Bates. 1924.
1234. Agricultural survey of Europe: The Danube Basin. Pt. 1. Louis G. Michael. 1924.
1235. Life history of codling moth in Yakima Valley of Washington. E. J. Newcomer and W. D. Whitcomb. 1924.
1236. Farming the logged-off uplands in western Washington. E. R. Johnson and E. D. Strait. 1924.
1237. Organization and development of a cooperative citrus-fruit marketing agency. A. W. McKay and W. Mackenzie Stevens. 1924.
1238. The canker worms. B. A. Porter and C. H. Alden. 1924.
1239. Studies in the physiology and control of bunt, or stinking smut, of wheat. Horace M. Woolman and Harry B. Humphrey. 1924.
1240. The meadow death camas (*Zygadenus venenosus*) as a poisonous plant. C. Dwight Marsh and A. B. Clawson. 1924.
1241. How the United States can meet its present and future pulp-wood requirements. Earle H. Clapp and Charles W. Boyce. 1924.
1242. Marketing cabbage. Alexander E. Cance and George B. Flske. 1924.
1243. Studies of the Mexican bean beetle in the Southeast. Neale F. Howard and L. L. English. 1924.
1244. Forage crops in relation to the agriculture of the semiarid portion of the northern Great Plains. R. A. Oakley and H. L. Westover. 1924.
1245. Stock-poisoning plants of the range. C. D. Marsh. 1924.
1246. Market classes and grades of dressed beef. W. C. Davis and C. V. Whalin. 1924.
1247. Turos and yautias: Promising new food plants for the South. Robert A. Young. 1924.
1248. Size of potato sets: Comparisons of whole and cut seed. William Stuart, P. M. Lombard, Margaret Connor Vosbury, G. Corder, W. C. Edmundson, C. F. Clark, and G. W. Dewey. 1924.
1249. Food habits of some winter bird visitants. Ira N. Gabrielson. 1924.
1250. Relation between the composition of California cantaloupes and their commercial maturity. E. M. Chace, C. G. Church, and F. E. Denny. 1924.
1251. Effect of winter rations on pasture gains of 2-year-old steers. E. W. Sheets and R. H. Tuckwiller. 1924.
1252. Prune and cherry brown-rot investigations in the Pacific Northwest. Charles Brooks and D. F. Fisher. 1924.
1253. Diseases of apples on the market. D. H. Rose. 1924.
1254. Farm motor-truck operation in the New England and Central Atlantic States. L. M. Church. 1924.
1255. Inheritance of composition in fruit through vegetative propagation. Bud variants of Eureka and Lisbon lemons. E. M. Chace, C. G. Church, and F. E. Denny. Pp. 19. 1924.
1256. Tobacco diseases and their control. James Johnson. 1924.
1257. Land reclamation policies in the United States. R. P. Teele. 1924.
1258. Farm organization and management in Clinton Co., Ind. A business analysis of 100 farms in Forest and Johnson Townships for 8 years, 1910, and 1913-1919. H. W. Hawthorne and H. M. Dixon. 1924.
1259. Standard specifications for steel highway bridges. 1924.
1260. Sorghum experiments on the Great Plains. H. N. Vinal, R. E. Getty, and A. B. Cron. 1924.
1261. Operating methods and expense of cooperative citrus-fruit marketing agencies. A. W. McKay and W. Mackenzie Stevens. 1924.
1262. Effect of kiln drying, steaming, and air seasoning on certain fungi in wood. Ernest E. Hubert. 1924.
1263. Relative resistance of tree seedlings to excessive heat. Carlos G. Bates and Jacob Roesser, jr. 1924.
1264. Forest planting in the intermountain region. C. F. Korstian and F. S. Baker.
1265. Scalding, precooking, and chilling, as preliminary canning operations. C. A. Magoon and C. W. Culpepper. 1924.
1266. Agricultural cooperation in Denmark. Chris. L. Christensen. 1924.
1267. The rough-headed corn stalk-beetle. W. J. Phillips and Henry Fox. 1924.
1268. Returns from banded birds, 1920 to 1923. Frederick C. Lincoln. 1924.

1269. Relation of land tenure to plantation organization. C. O. Brannen. 1924.
1270. The production of narcissus bulbs. David Griffiths. 1924.
1271. A study of farm organization in southwestern Minnesota. George A. Pond and Jesse W. Tapp. 1924.
1272. Values of various new feeds for dairy cows. T. E. Woodward, H. T. Converse, W. R. Hale, and J. B. McNulty. 1924.
1273. The bud-moth. B. A. Porter. 1924.
1274. Cockleburrs (species of *Xanthium*) as poisonous plants. C. Dwight Marsh, Glenwood C. Roe, and A. B. Clawson. 1924.
1275. Varietal susceptibility of oats to loose and covered smuts. George M. Reed, Marion A. Griffiths, and Fred N. Briggs. 1925.
1276. Varietal experiments with hard red winter wheats in the dry areas of the western United States. J. Allen Clark and John H. Martin. 1925.
1277. Input as related to output in farm organization and cost-of-production studies. H. R. Tolley, J. D. Black, and M. J. B. Ezekiel. 1924.
1278. Production of henequen fiber in Yucatan and Campeche. H. T. Edwards. 1924.
1279. Rural highway mileage, income, and expenditures, 1921 and 1922. Andrew P. Anderson. 1925.
1280. The computation of fertilizer mixtures from concentrated materials. Albert R. Merz and William H. Ross. 1924.
1281. Relative utilization of energy in milk production and body increase of dairy cows. J. August Pries, Winfred Waite Braman, and Donald C. Cochrane. 1924.
1282. Almond varieties in the United States. Milo N. Wood. 1924.
1283. The marketing and distribution of American-grown Bermuda onions. W. Mackenzie Stevens. 1925.
1284. Sorghum smuts and varietal resistance in sorghums. George M. Reed and Leo E. Melchers. 1925.
1285. Truck-farm labor in New Jersey, 1922. Josiah C. Folsom. 1925.
1286. South American leaf disease of Para rubber. R. D. Rands. 1924.
1287. Experiments with cereals at the Akron (Colo.) Field Station in the 15-year period, 1908 to 1922, inclusive. Franklin A. Coffman. 1925.
1288. The control of tomato leaf-spot. Fred J. Pritchard and W. S. Porte. 1924.
1289. Common vetch and its varieties. Roland McKee and Harry A. Scoth. 1925.
1290. Transportation of citrus fruit from Porto Rico. R. G. Hill and Lon A. Hawkins. 1924.
1291. Aspen in Central Rocky Mountain region. Frederick S. Baker. 1925.
1292. Field and crop labor on Georgia farms (coastal plain area). L. A. Reynoldson. 1925.
1293. Tillage and rotation experiments at Dickinson, Hettinger, and Williston, N. Dak. Leroy Moomaw. 1925.
1294. The rôle of fire in the California pine forests. S. B. Show and E. I. Kotok. 1924.
1295. Land settlement and colonization in the Great Lakes States. John D. Black and L. C. Gray. 1925.
1296. A study of farm organization in central Kansas. W. E. Grimes, J. A. Hodges, R. D. Nichols, and Jesse W. Tapp. 1925.
1297. Effect of feeding cabbage and potatoes on flavor and odor of milk. C. J. Babcock. 1924.
1298. Control of decay in pulp and pulp wood. Otto Kress, C. J. Humphrey, C. A. Richards, M. W. Bray, and J. A. Staidl. 1925.
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421. The control of blowing soils. E. E. Free and J. M. Westgate. 1910.
422. Demonstration work on southern farms. S. A. Knapp. 1910.
423. Forest nurseries for schools. Walter M. Moore and Edwin R. Jackson. 1910.
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426. Canning peaches on the farm. H. P. Gould and W. F. Fletcher. 1910.
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428. Testing farm seeds in the home and in the rural school. F. H. Hillman. 1911.
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432. How a city family managed a farm. J. H. Arnold. 1911.
433. Cabbage. L. C. Corbett. 1911.
434. The home production of onion seed and sets. W. R. Beattie. 1911.
435. Experiment station work—LXII. 1911.
436. Winter oats for the South. C. W. Warburton. 1911.
437. A system of tenant farming and its results. J. W. Frole and C. Beaman Smith. 1911.
438. Hog houses. J. A. Warren. 1911.
439. Anthrax: With special reference to its suppression. Henry J. Washburn. 1911.
440. Spraying peaches for control of brown rot, scab, and curculio. W. M. Scott and A. L. Quaintance. 1911.
441. Lespedeza or Japan clover. A. D. McNair and W. R. Mercier. 1911.
442. The treatment of bee diseases. E. F. Phillips. 1911.
443. Barley: Growing the crop. H. B. Derr. 1911.
444. Remedies and preventives against mosquitoes. L. O. Howard. 1911.
445. Marketing eggs through the creamery. Rob. R. Slocum. 1911.
446. The choice of crops for alkali lands. Thomas H. Kearney. 1911.
447. Bees. E. F. Phillips. 1911. Supersedes Farmers' Bulletins 59 and 397.
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450. Some facts about malaria. L. O. Howard. 1911.
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452. Capons and caponizing. Rob. R. Slocum. 1911.
453. Danger of general spread of the gipsy and brown-tail moths through imported nursery stock. C. L. Marlatt. 1911.

454. A successful New York farm. M. C. Burritt. 1911.  
 455. Red clover. J. M. Westgate and F. H. Hillman. 1911.  
 456. Our grosbeaks and their value to agriculture. W. L. McAtee. 1911.  
 457. Experiment station work—LXIV. 1911.  
 458. The best two sweet sorghums for forage. A. B. Conner. 1911.  
 459. House flies. L. O. Howard. 1911.  
 460. Frames as a factor in truck growing. W. R. Beattie. 1911.  
 461. The use of concrete on the farm. 1911.  
 462. The utilization of logged-off land for pasture in western Oregon and western Washington. Byron Hunter and Harry Thompson. 1911.  
 463. The sanitary privy. C. W. Stiles and L. L. Lumsden. 1911.  
 464. The eradication of quack-grass. J. S. Cates. 1911.  
 465. Experiment station work—LXV. 1911.  
 466. Winter emmer. Mark Alfred Carleton. 1911.  
 467. The control of the chestnut bark disease. Haven Metcalf and J. Franklin Collins. 1911.  
 468. Forestry in nature study. Edwin R. Jackson. 1911.  
 469. Experiment station work—LXVI. 1911.  
 470. Game laws for 1911. Henry Oldys, C. E. Brewster, and F. L. Earnshaw. 1911.  
 471. Grape propagation, pruning, and training. George C. Husmann. 1911.  
 472. Systems of farming in central New Jersey. George A. Billings and J. C. Beavers. 1911.  
 473. Tuberculosis. Prepared by Commission of the American Veterinary Medical Association. 1911.  
 474. The use of paint on the farm. Percy H. Walker. 1911.  
 475. Ice houses. L. C. Corbett. 1911.  
 476. The dying of pine in the Southern States: Cause, extent, and remedy. A. D. Hopkins. 1911.  
 477. Sorghum sirup manufacture. A. Hugh Bryan. 1912.  
 478. How to prevent typhoid fever. Logan Waller Page, John R. Mohler, Erwin F. Smith. 1911.  
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 480. Practical methods of disinfecting stables. George W. Pope. 1912.  
 481. Concrete construction on the livestock farm. 1912.  
 482. The pear and how to grow it. G. B. Brackett. 1912.  
 483. The thornless prickly pears. David Griffiths. 1912.  
 484. Some common mammals of western Montana in relation to agriculture and spotted fever. Clarence Birdseye. 1912.  
 485. Sweet clover. J. M. Westgate and H. N. Vinal. 1912.  
 486. Experiment station work—LXVIII. 1912.  
 487. Cheese and its economical use in the diet. C. F. Langworthy and Caroline L. Hunt. 1912.  
 488. Diseases of cabbage and related crops and their control. L. L. Harter. 1912.  
 489. Two dangerous imported plant diseases. Perley Spaulding and Ethel C. Field. 1912.  
 490. Bacteria in milk. L. A. Rogers. 1912.  
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 492. The more important insect and fungous enemies of the fruit and foliage of the apple. A. L. Quaintance and W. M. Scott. 1912.  
 493. The English sparrow as a pest. Ned Dearborn. 1912.  
 494. Lawn soils and lawns. Oswald Schreiner, J. J. Skinner, L. C. Corbett, and F. L. Mulford. 1912.  
 495. Alfalfa seed production. J. M. Westgate, Roland McKee, and M. W. Evans. 1912.  
 496. Raising Belgian hares and other rabbits. David E. Lantz. 1912.  
 497. Some common game, aquatic and rapacious birds in relation to man. W. L. McAtee and F. E. L. Beal. 1912.  
 498. Methods of exterminating the Texas fever tick. H. W. Graybill. 1912. Revision of Farmers' Bulletin 378.  
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 500. The control of the boll weevil. W. D. Hunter. 1912.  
 501. Cotton improvement under weevil conditions. O. F. Cook. 1912.  
 502. Timothy production on irrigated land in the Northwestern States. M. W. Evans. 1912.  
 503. Comb honey. Geo. S. Demuth. 1912.  
 504. Experiment station work—LXX. 1912.  
 505. Benefits of improved roads. 1912.  
 506. Food of some well-known birds of forest, farm, and garden. F. E. L. Beal and W. L. McAtee. 1912.  
 507. The smuts of wheat, oats, barley, and corn. Edward C. Johnson. 1912.  
 508. Market hay. Harry B. McClure. 1912.  
 509. Forage crops for the cotton region. S. M. Tracy. 1912.  
 510. Game laws for 1912. T. S. Palmer, C. E. Brewster, and Frank L. Earnshaw. 1912.  
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 516. The production of maple sirup and sugar. A. Hugh Bryan and Wm. F. Hubbard. 1912.  
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 518. Winter barley. H. B. Derr. 1912.  
 519. An example of intensive farming in the Cotton Belt. M. A. Crosby. 1913.  
 520. The storage and marketing of sweet potatoes. W. R. Beattie. 1912.  
 521. Canning tomatoes at home and in club work. J. F. Breazeale and O. H. Benson. 1913.



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523. Tobacco curing. W. W. Garner. 1913.
524. Tile drainage on the farm. A. G. Smith. 1913.
525. Raising guinea pigs. David E. Lantz. 1913.
526. Mutton and its value in the diet. C. F. Langworthy and Caroline L. Hunt. 1913.
527. Experiment station work—LXXIV. 1913.
528. Hints to poultry raisers. Harry M. Lamon. 1913.
529. Vetch growing in the South Atlantic States. A. G. Smith. 1913.
530. Important poultry diseases. D. E. Salmon. 1913.
531. Larkspur, or "poison weed." C. Dwight Marsh, A. B. Clawson, and Hadleigh Marsh. 1913.
532. Experiment station work—LXXV. 1913.
533. Good seed potatoes and how to produce them. William Stuart. 1913.
534. Durum wheat. Cecil Salmon and J. Allen Clark. 1913.
535. Sugar and its value as food. Mary Hinman Abel. 1913.
536. Stock poisoning due to scarcity of food. C. Dwight Marsh. 1913.
537. How to grow an acre of corn. C. P. Hartley. 1913.
538. Sites, soils, and varieties of citrus groves in the Gulf States. P. H. Rolfs. 1913.
539. Propagation of citrus trees in the Gulf States. P. H. Rolfs. 1913.
540. The stable fly. F. C. Bishopp. 1913.
541. Farm butter making. J. R. Keithley. 1913.
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543. Common white grubs. John J. Davis. 1913.
544. Potato-tuber diseases. W. A. Orton. 1913.
545. Controlling Canada thistles. H. R. Cox. 1913.
546. How to manage a corn crop in Kentucky and West Virginia. J. H. Arnold. 1913.
547. The yellow fever mosquito. L. O. Howard. 1913.
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550. Crimson clover: Growing the crop. J. M. Westgate. 1913.
551. The cultivation of American ginseng. Walter Van Fleet. 1913.
552. Kafir as a grain crop. Carleton R. Ball and Benton E. Rothgeb. 1913.
553. Pop corn for the home. C. P. Hartley and J. G. Willier. 1913.
554. Pop corn for the market. C. P. Hartley and J. G. Willier. 1913.
555. Cotton anthracnose and how to control it. W. W. Gilbert. 1913.
556. The making and feeding of silage. T. E. Woodward, George M. Rommel, W. F. Ward, and E. L. Shaw. 1913.
557. The potato-tuber moth. F. H. Chittenden. 1913.
558. Agricultural outlook: Weather conditions during the past month (August) with relation to crops. September, 1913.
559. Use of corn, kafir, and cowpeas in the home. C. F. Langworthy and Caroline L. Hunt. 1913.
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561. Bean growing in eastern Washington and Oregon and northern Idaho. Lee W. Fluharty. 1913.
562. The organization of boys' and girls' poultry clubs. Harry M. Lamon. 1913.
563. The agricultural outlook: Crop production in the United States. October, 1913.
564. The gipsy moth and the brown-tail moth, with suggestions for their control. A. F. Burgess. 1913.
565. Corn meal as a food and ways of using it. C. F. Langworthy and Caroline L. Hunt. 1914.
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567. Sugar-beet growing under irrigation. C. O. Townsend. 1914.
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569. Texas or tick fever. John R. Mohler. 1914.
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571. Tobacco culture. W. W. Garner. 1914.
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573. The angora goat. L. L. Heller. 1914.
574. Poultry house construction. Alfred R. Lee. 1914.
575. The agricultural outlook: Livestock of the United States. (As on January 1.) 1914.
576. Breeds of sheep for the farm. F. R. Marshall. 1914.
577. Growing Egyptian cotton in the Salt River Valley, Ariz. E. W. Hudson. 1914.
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580. Beef production in the South. W. F. Ward and Dan T. Gray. 1914.
581. The agricultural outlook. 1914.
582. Uses for chestnut timber killed by the bark disease. J. C. Nellis. 1914.
583. The common mole of the eastern United States. Theo. H. Scheffer. 1914.
584. The agricultural outlook. 1914.
585. Natural and artificial incubation of hens' eggs. Harry M. Lamon. 1914.
586. Collection and preservation of plant material for use in the study of agriculture. H. B. Derr and C. H. Lane. 1914.
587. Economic value of North American skunks. D. E. Lantz. 1914.
588. Economic cattle feeding in the Corn Belt. J. S. Cotton and W. F. Ward. 1914.
589. Homemade silos. Helmer Rabild, A. K. Risser, and K. E. Parks. 1914.
590. The agricultural outlook. 1914.
591. The classification and grading of cotton. D. E. Earle and W. S. Dean. 1914.
592. Stock-watering places on western grazing lands. Will C. Barnes. 1914.
593. How to use farm credit. T. N. Carver. 1914.
594. Shipping eggs by parcel post. Lewis B. Flohr. 1914.
595. Arsenate of lead as an insecticide against the tobacco hornworms in the dark tobacco districts. A. C. Morgan and D. C. Farman. 1914.
596. The culture of winter wheat in the eastern United States. Clyde E. Leighty. 1914.

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599. Pasture and grain crops for hogs in the Pacific Northwest. Byron Hunter. 1914.
600. An outfit for boring tapped stumps for blasting. Harry Thompson. 1914.
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603. Arsenical cattle dips. Robert M. Chapin. 1914.
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605. Sudan grass as a forage crop. H. N. Vinal. 1914.
606. Collection and preservation of insects and other material for use in the study of agriculture. L. O. Howard. 1914.
607. The farm kitchen as a workshop. Anna Barrows. 1914.
608. The removal of garlic flavor from milk and cream. S. Henry Ayers and W. T. Johnson. 1914.
609. Bird houses and how to build them. Ned Dearborn. 1914.
610. Wild onion: Methods of eradication. H. R. Cox. 1914.
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612. Breeds of beef cattle. W. F. Ward. 1914.
613. Goldenseal under cultivation. Walter Van Fleet. 1914.
614. A corn-belt farming system which saves harvest labor by hogging down crops. J. A. Drake. 1914.
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616. Winter wheat varieties for the eastern United States. Clyde E. Leighty. 1914.
617. School lessons on corn. C. H. Lane. 1914.
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619. Breeds of draft horses. G. Arthur Bell. 1914.
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621. How to attract birds in northeastern United States. W. L. McAtee. 1915. Rev. 1921.
622. Basket willow culture. George N. Lamb. 1914.
623. Ice houses and the use of ice on the dairy farm. John T. Bowen and Guy M. Lambert. 1915.
624. Natural and artificial brooding of chickens. Harry M. Lamon. 1915.
625. Cotton wilt and root knot. W. W. Gilbert. 1914.
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628. Game laws for 1914. T. S. Palmer, W. F. Bancroft, and Frank L. Earnshaw. 1914.
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630. Some common birds useful to the farmer. F. E. L. Beal. 1915.
631. Growing peaches: Sites, propagation, planting, tillage, and maintenance of soil fertility. H. P. Gould. 1915.
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635. What the farm contributes directly to the farmers' living. W. C. Funk. 1914.
636. The chalcis-fly in alfalfa seed. Theodore D. Urbahn. 1914.
637. The grasshopper problem and alfalfa culture. F. M. Webster. 1915.
638. Laboratory exercise in farm mechanics for agricultural high schools. Daniels Scoates. 1915.
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642. Tomato growing in the South. H. C. Thompson. 1915.
643. Blackberry culture. George M. Darrow. 1915.
644. Manufacture and use of unfermented grape juice. George C. Husmann. 1915.
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648. The control of root-knot. Ernest A. Bessey and L. P. Byars. 1915.
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650. The San José scale and its control. A. L. Quaintance. 1915.
651. The agricultural outlook. (January 1, 1915.) 1915.
652. The sheep-killing dog. V. O. McWhorter. 1915.
653. Honey and its uses in the home. Caroline L. Hunt and Helen W. Atwater. 1915.
654. How farmers may improve their personal credit. C. W. Thompson. 1915.
655. Cottonseed meal for feeding beef cattle. W. F. Ward. 1915.
656. The community egg circle. C. E. Bassett. 1915.
657. The chinch bug. F. M. Webster. 1915.
658. Cockroaches. C. L. Marlatt. 1915.
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660. Weeds: How to control them. H. R. Cox. 1915.
661. A method of analyzing the farm business. E. H. Thompson and H. M. Dixon. 1915.
662. The apple-tree tent caterpillar. A. L. Quaintance. 1915.
663. Drug plants under cultivation. W. W. Stockberger. 1915.
664. Strawberry growing in the South. H. C. Thompson. 1915.
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666. Foot-and-mouth disease. John R. Mohler. 1915.
667. Breaking and training colts. V. G. Stambaugh. 1915.
668. The squash-vine borer. F. H. Chittenden. 1915.
669. Fiber flax. Frank C. Miles. 1915.
670. Field mice as farm and orchard pests. D. E. Lantz. 1915.
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673. Irrigation practice in rice growing. C. G. Haskell. 1915.
674. Control of the citrus thrips in California and Arizona. J. R. Horton. 1915.
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689. A plan for a small dairy house. Ernest Kelly and Karl E. Parks. 1915.
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693. Bur clover. Charles V. Piper and Roland McKee. 1915.
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696. Handling and shipping citrus fruits in the Gulf States. H. J. Ramsay. 1915.
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698. Trenching machinery used for the construction of trenches for tile drains. D. L. Yarnell. 1915.
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703. Suggestions for parcel-post marketing. Lewis B. Flohr and C. T. More. 1916.
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712. School lunches. Caroline L. Hunt and Mabel Ward. 1916.
713. Sheep scab. Marion Imes. 1916.
714. Sweet potato diseases. L. L. Harter. 1916.
715. Measuring and marketing woodlot products. Wilbur R. Mattoon and Wm. B. Barrows. 1916.
716. Management of sandy-land farms in northern Indiana and southern Michigan. J. A. Drake. 1916.
717. Food for young children. Caroline L. Hunt. 1916.
718. Cooperative livestock shipping associations. S. W. Doty and L. D. Hall. 1916.
719. An economic study of the farm tractor in the Corn Belt. Arnold P. Yerkes and L. M. Church. 1916.
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733. The corn and cotton wireworm in its relation to cereal and forage crops, with control measures. Edmund H. Gibson. 1916.
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743. The feeding of dairy cows. Helmer Rabid, H. P. Davis, and W. E. Brainerd. 1916.
744. The preservative treatment of farm timbers. George M. Hunt. 1916.
745. Waste land and wasted land on farms. James S. Ball. 1916.
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751. Peanut oil. H. C. Thompson and H. S. Bailey. 1916.
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753. Commercial handling, grading, and marketing of potatoes. C. T. More and C. R. Dorland. 1917.
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760. How to attract birds in northwestern United States. W. L. McAtee. 1916.
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773. Corn growing under droughty conditions. C. P. Hartley and L. L. Zook. 1916.
774. Game laws for 1916. T. S. Palmer, W. F. Bancroft, and Frank L. Earnshaw. 1916.
775. Losses from selling cotton in the seed. Charles F. Creswell. 1916.
776. Growing cherries east of Rocky Mountains. H. P. Gould. 1916.
777. Feeding and management of dairy calves and young dairy stock. W. K. Brainerd and H. P. Davis. 1917.
778. Powder-post damage by lyctus beetles to seasoned hardwood. A. D. Hopkins and T. E. Snyder. 1917.
779. How to select a sound horse. H. H. Reese. 1917.
780. Castration of young pigs. Frank G. Ashbrook. 1916.
781. Tuberculosis of hogs. John R. Mohler and Henry J. Washburn. 1917.
782. Use of diary for farm accounts. E. H. Thomson. 1917.
783. Laws relating to fur-bearing animals, 1916. D. E. Lantz. 1916.
784. Anthrax or charbon. Henry J. Washburn. 1917.
785. Seed-flax production. Charles H. Clark. 1917.
786. Fall-sown grains in Maryland and Virginia. T. R. Stanton. 1917.
787. Sea-island cotton. W. A. Orton. 1916.
788. The windbreak as a farm asset. Carlos G. Bates. 1917.
789. Mushroom pests and how to control them. C. H. Popenoe. 1917.
790. Contagious abortion of cattle. Adolph Eichhorn and George M. Potter. 1917.
791. Turkey raising. Andrew S. Weiant. 1917.
792. How Federal farm loan act benefits farmers. C. W. Thompson. 1917.
793. Foxtail millet: Its culture and utilization in the United States. H. N. Vinall. 1917.
794. Citrus fruit improvements: How to secure and use tree performance records. A. D. Shamel. 1917.
795. The domesticated silver fox. Ned Dearborn. 1917.
796. Some common edible and poisonous mushrooms. Flora W. Patterson and Vera K. Charles. 1917.
797. Sweet clover: Growing the crop. H. S. Coe. 1917.
798. Sheep tick and its eradication by dipping. Marion Imes. 1917.
799. Carbon disulphid as an insecticide. W. E. Hinds. 1917.
800. Grains for the dry lands of Oregon. L. R. Brethaupt. 1917.
801. Mites and lice on poultry. F. C. Bishopp and H. P. Wood. 1917.
802. Classification of American upland cotton. D. E. Earle and Fred Taylor. 1917.
803. Horse-breeding suggestions for farmers. H. H. Reese. 1917.
804. Aphids injurious to orchard fruits. Currant, gooseberry, and grape. A. L. Quaintance and A. C. Baker. 1917.
805. The drainage of irrigated farms. R. A. Hart. 1917.
806. Standard varieties of chickens. I. The American class. Rob R. Slocum. 1917.
807. Bread and bread making in the home. Caroline L. Hunt and Hannah L. Wessling. 1917.
808. How to select foods: I. What the body needs. Caroline L. Hunt and Helen W. Atwater. 1917.

809. Marketing livestock in the South: Suggestions for improvement. S. W. Doty. 1917.
810. Equipment for farm sheep raising. V. O. McWhorter. 1917.
811. Production of baby beef. S. H. Ray. 1917.
812. How livestock is handled in the bluegrass region of Kentucky. J. H. Arnold. 1917.
813. Construction and use of farm weirs. Victor M. Cone. 1917.
814. Bermuda grass. Samuel M. Tracy. 1917.
815. Organization, financing, and administration of drainage districts. H. S. Yohe. 1917.
816. Minor articles of farm equipment. H. N. Humphrey and A. P. Yerkes. 1917.
817. How to select foods: II. Cereals. Caroline L. Hunt and Helen W. Atwater. 1917.
818. Small vegetable garden: Suggestions for utilizing limited areas. 1917.
819. The tobacco budworm and its control in the southern tobacco districts. A. C. Morgan and F. L. McDonough. 1917.
820. Sweet clover: Utilization. H. S. Coe. 1917.
821. Watermelon diseases. W. A. Orton. 1917.
822. Livestock classifications at county fairs. S. H. Ray. 1917.
823. Sugar-beet sirup. C. O. Townsend and H. C. Gore. 1917.
824. How to select foods: III. Foods rich in protein. Caroline L. Hunt and Helen W. Atwater. 1917.
825. Pit silos. T. Pryse Metcalfe and George A. Scott. 1917.
826. Eradicating tall larkspur on cattle ranges in the national forests. A. E. Aldous. 1917.
827. Shallu, or "Egyptian wheat." Benton E. Rothgeb. 1917.
828. Farm reservoirs. Samuel Fortier. 1917.
829. Asparagus. H. C. Thompson. 1917.
830. Marketing eggs by parcel post. Lewis B. Flohr. 1917.
831. The red spider on cotton and how to control it. E. A. McGregor. 1917.
832. Trapping moles and utilizing their skins. With especial reference to the Pacific coast. Theo. H. Scheffer. 1917.
833. Methods of controlling or eradicating the wild oat in the hard spring wheat area. H. R. Cates. 1917.
834. Hog cholera: Prevention and treatment. M. Dorset and O. B. Hess. 1917.
835. How to detect outbreaks of insects and save the grain crops. W. R. Walton. 1917.
836. Sweet clover: Harvesting and thrashing the seed crop. H. S. Coe. 1917.
837. The asparagus beetles and their control. F. H. Chittenden. 1917.
838. Harvesting hay with the sweep-rake: A means by which eastern hay growers may save labor. Arnold P. Yerkes and H. B. McClure. 1917.
839. Home canning by the one-period cold-pack method. O. H. Benson. 1917.
840. Farm sheep raising for beginners. F. R. Marshall and R. B. Millin. 1917.
841. Drying fruits and vegetables in the home: With recipes for cooking. 1917.
842. Modern methods of protection against lightning. Roy N. Covert. 1917.
843. Important pecan insects and their control. John B. Gill. 1917.
844. How to attract birds in the Middle Atlantic States. W. L. McAtee. 1917.
845. The gipsy moth and the brown-tail and their control. A. F. Burgess. 1917.
846. The tobacco beetle and how to prevent damage by it. G. A. Runner. 1917.
847. Potato storage and storage houses. William Stuart. 1917.
848. The boll-weevil problem. With special reference to means of reducing damage. W. D. Hunter. 1917.
849. Capons and caponizing. Rob R. Slocum. 1917.
850. How to make cottage cheese on the farm. K. J. Matheson and F. R. Cammack. 1917.
851. The house fly. L. O. Howard and R. H. Hutchison. 1917.
852. Management of common storage houses for apples in the Pacific Northwest. H. J. Ramsey and S. J. Dennis. 1917.
853. Home canning of fruits and vegetables. Mary E. Creswell and Ola Powell. 1917.
854. Strawberry culture in Tennessee, Kentucky, and West Virginia. George M. Darrow. 1917.
855. Homemade silos. Helmer Rabild and K. E. Parks. 1917.
856. Control of diseases and insect enemies of the home vegetable garden. W. A. Orton and F. H. Chittenden. 1917.
857. Screw-worms and other nagbots affecting animals. F. C. Bishopp, J. D. Mitchell, and D. C. Parman. 1917.
858. The guinea fowl. Andrew S. Weiant. 1917.
859. Home uses for Muscadine grapes. Charles Dearing. 1917.
860. Cranberry insect problems and suggestions for solving them. H. B. Scammell. 1917.
861. Removal of stains from clothing and other textiles. Harold L. Lang and Anna H. Whittelsey. 1917.
862. The common mealybug and its control in California. R. S. Woglum and J. D. Neuls. 1917.
863. Irrigation of grain. Walter W. McLaughlin. 1917.
864. Practical information for beginners in irrigation. Samuel Fortier. 1917.
865. Irrigation of alfalfa. Samuel Fortier. 1917.
866. The use of windmills in irrigation in the semiarid West. P. E. Fuller. 1917.
867. Tobacco hornworm insecticides: Recommendations for use of powdered arsenate of lead in dark-tobacco district. A. C. Morgan. 1917.
868. How to increase the potato crop by spraying. F. H. Chittenden and W. A. Orton. 1917.
869. The muskrat as a fur bearer: With notes on its use as food. David E. Lantz. 1917.
870. The community fair. J. Sterling Moran. 1917.
871. Fresh fruits and vegetables as conservers of other staple foods. Caroline L. Hunt. 1917.
872. The bollworm or corn earworm. F. C. Bishopp. 1917.
873. Utilization of farm wastes in feeding livestock. S. H. Ray. 1917.
874. Swine management. Revision of Farmers' Bulletin 205. George M. Rommel and F. G. Ashbrook. 1917.

875. The rough-headed corn-stalk beetle in the Southern States and its control. W. P. Phillips and Henry Fox. 1917. Rev. 1918.
876. Making butter on the farm. William White. 1917.
877. Human food from an acre of staple farm products. Morton O. Cooper and W. J. Spillman. 1917.
878. Grains for western North and South Dakota. F. Ray Babcock, John H. Martin, and Ralph W. Smith. 1917.
879. Home storage of vegetables. James H. Beattie. 1917.
880. Fumigation of ornamental greenhouse plants with hydrocyanic acid gas. E. R. Sasser and A. D. Borden. 1917.
881. Preservation of vegetables by fermentation and salting. L. A. Round and H. L. Lang. 1917.
882. Irrigation of orchards. Samuel Fortier. 1917.
883. Grains for the Utah dry lands. Jenkin W. Jones and Aaron F. Bracken. 1917.
884. Saving vegetable seeds for the home and market garden. W. W. Tracy, sr. 1917.
885. Wheat growing in the Southeastern States. Clyde E. Leighty. 1917.
886. Harvesting soy-bean seed. W. J. Morse. 1917.
887. Raspberry culture. George M. Darrow. 1917.
888. Advice to forest planters in the plains region. Seward D. Smith. 1917.
889. Back-yard poultry keeping. Rob R. Slocum. 1917.
890. How insects affect the cotton plants and means of combating them. W. Dwight Pierce. 1917.
891. The corn root-aphid and methods of controlling it. John J. Davis. 1917.
892. Spring oat production. C. W. Warburton. 1917.
893. Breeds of dairy cattle. H. P. Davis. 1917.
894. Rye growing in the Southeastern States. Clyde E. Leighty. 1917.
895. Growing winter wheat on the Great Plains. E. C. Chilcott and John S. Cole. 1917.
896. House rats and mice. David E. Lantz. 1917.
897. Fleas and their control. Revision of Farmers' Bulletin 653. F. C. Bishopp. 1917.
898. Standard varieties of chickens: II. The Mediterranean and continental classes. Rob R. Slocum. 1917.
899. Surface irrigation for eastern farms. F. W. Stanley. 1917.
900. Homemade fruit butters. C. P. Close. 1917.
901. Everbearing strawberries. George M. Darrow. 1917.
902. The silverfish or "slicker": An injurious household insect. E. A. Back. 1917.
903. Commercial evaporation and drying of fruits. James H. Beattie and H. P. Gould. 1917.
904. Fire-prevention and fire fighting on the farm. H. R. Tolley and A. P. Yerkes. 1918.
905. Ways of making southern mountain farms more productive. J. H. Arnold. 1918.
906. The self-feeder for hogs. F. G. Ashbrook and R. E. Gongwer. 1917.
907. Bean growing in eastern Washington and Oregon and northern Idaho. Lee W. Fluharty and Byron Hunter. 1917. Revision of Farmers' Bulletin 561.
908. Information for fruit growers about insecticides, spraying apparatus, and important insect pests. A. L. Quaintance and E. H. Siegler. 1918.
909. Cattle lice and how to eradicate them. Marion Imes. 1918.
910. Game laws for 1917. George A. Lawyer, W. F. Bancroft, and Frank L. Earnshaw. 1917.
911. Laws relating to fur-bearing animals, 1917. David E. Lantz. 1917.
912. How to attract birds in the East Central States. W. L. McAtee. 1918.
913. Killing hogs and curing pork. F. G. Ashbrook and G. A. Anthony. 1917.
914. Control of the melon aphid. F. H. Chittenden. 1918.
915. How to reduce weevil waste in southern corn. C. H. Kyle. 1918.
916. A successful community drying plant. C. W. Pugsley. 1917.
917. Growing peaches: Sites and cultural methods. (Revision and combination of F. B. 631 and 632.) H. P. Gould. 1918.
918. Peach varieties and their classification. H. P. Gould. 1918. Revision of Farmers' Bulletin 633.
919. The application of dockage in the marketing of wheat. Bureau of Markets. 1917.
920. Milk goats. Edward L. Shaw. 1918.
921. The principles of the liming of soils. Edmund C. Shorey. 1918.
922. Parcel post business methods. C. C. Hawbaker and John W. Law. 1918.
923. Fumigation of citrus trees. R. S. Woglum. 1918.
924. A simple way to increase crop yields. H. A. Miller. 1918.
925. Cabbage diseases. L. L. Harter and L. R. Jones. 1918.
926. Some common disinfectants. Revision of Farmers' Bulletin 345. M. Dorset. 1918.
927. Farm home conveniences. Madge J. Reese. 1918.
928. Control of the Argentine ant in orange groves. J. R. Horton. 1918.
929. The place of sheep on New England farms. F. H. Branch. 1918.
930. Marketing butter and cheese by parcel post. Lewis B. Flohr and Roy C. Potts. 1918.
931. Soy beans in systems of farming in the Cotton Belt. A. G. Smith. 1918.
932. Rodent pests of the farm. David E. Lantz. 1918.
933. Spraying for the control of insects and mites attacking citrus trees in Florida. W. W. Yothers. 1918.
934. Home gardening in the South. H. C. Thompson. 1918.
935. The sheep-killing dog. J. F. Wilson. 1918.
936. The city and suburban vegetable garden. H. M. Conolly. 1918.
937. The farm garden in the North. James H. Beattie. 1918.
938. Apple bitter-rot and its control. John W. Roberts and Leslie Pierre. 1918.
939. Cereal smuts and the disinfection of seed grain. Harry B. Humphrey and Alden A. Potter. 1918.
940. Common white grubs. John J. Davis. 1918. Revision of Farmers' Bulletin 543.
941. Water systems for farm homes. George M. Warren. 1918.
942. Controlling the clover-flower midge in the Pacific Northwest. C. W. Creel and L. P. Rockwood. 1918.
943. Haymaking. H. B. McClure. 1918.

944. Controlling the garden webworm in alfalfa fields. E. O. G. Kelly and T. S. Wilson. 1918.
945. Eradication of Bermuda grass. Albert A. Hansen. 1918.
946. Care and repair of farm implements: No. 3. Plows and barrows. E. B. McCormick and L. L. Beebe. 1918.
947. Care and repair of farm implements: No. 4. Mowers, reapers, and binders. E. B. McCormick and L. L. Beebe. 1918.
948. The rag-doll seed tester: Its use in determining what ears of corn are fit for seed. George J. Burt, H. Howard Biggar, and Clement E. Trout. 1918.
949. Dehorning and castrating cattle. Frank W. Farley. 1918.
950. The southern corn root worm and farm practices to control it. Philip Luginbill. 1918.
951. Hog pastures for the Southern States. Lyman Carrier and F. G. Ashbrook. 1918.
952. Breeds of light horses. H. H. Reese. 1918.
953. Potato culture under irrigation. William Stuart, C. F. Clark, and George W. Dewey. 1918.
954. The disinfection of stables. George W. Pope. 1918. Revision of Farmers' Bulletin 480.
955. The use of wheat flour substitutes in baking. Hannah L. Wessling. 1918.
956. Curing hay on trucks. A method by which a good quality of hay may be cured during unfavorable weather. H. B. McClure. 1918.
957. Important poultry diseases. D. E. Salmon. 1918.
958. Standard broom corn. Benton E. Rothgeb. 1918.
959. The spotted garden slug. Wm. H. White. 1918.
960. Neufchatel and cream cheese: Farm manufacture and use. K. J. Matheson and F. R. Cammack. 1918.
961. Transferring bees to modern hives. E. L. Secrist. 1918.
962. Velvet beans. S. M. Tracy and H. S. Coe. 1918.
963. Tractor experience in Illinois. A study of the farm tractor under Corn Belt Conditions. Arnold P. Yerkes and L. M. Church. 1918.
964. Farm household accounts. W. C. Funk. 1918.
965. Growing grain sorghums in the San Antonio district of Texas. C. R. Letteer. 1918.
966. A simple hog-breeding crate. J. H. Zeller. 1918.
967. Purple vetch. Roland McKee. 1918.
968. Cultivation and utilization of barley. Harry V. Harlan. 1918.
969. Horse beans. Roland McKee. 1918.
970. Sweet-potato storage. H. C. Thompson. 1918.
971. The control of the clover-flower midge. C. W. Creel and L. P. Rockwood. 1918.
972. How to use sorghum grain. Carleton R. Ball and Benton E. Rothgeb. 1918.
973. The soy bean: Its culture and uses. W. J. Morse. 1918.
974. Clearing land. Earl D. Strait. 1918.
975. The control of European foulbrood. E. F. Phillips. 1918.
976. Cooling milk and cream on the farm. J. A. Gamble. 1918.
977. Hay caps. H. B. McClure. 1918.
978. Handling barnyard manure in eastern Pennsylvania. D. A. Brodie. 1918.
979. Preparation of strawberries for market. C. T. More and H. E. Truax. 1918.
980. The spinose ear tick and methods of treating infested animals. Marion Imes. 1918.
981. Farm practices that increase crop yields in Kentucky and Tennessee. J. H. Arnold. 1918.
982. Control of the green clover worm in alfalfa fields. Charles C. Hill. 1918.
983. Bean and pea weevils. E. A. Back and A. B. Duckett. 1918.
984. Farm and home drying of fruits and vegetables. Joseph S. Caldwell. 1918.
985. Systems of bog farming in the Southeastern States. E. S. Haskell. 1918.
986. Farm practices that increase crop yields in the Gulf Coast region. M. A. Crosby. 1918.
987. Labor saving practices in haymaking. H. B. McClure. 1918.
988. Larkspur, or "poison weed." C. Dwight Marsh, A. B. Clawson, and Hadleigh Marsh. 1918. Revision of Farmers' Bulletin 531.
989. Better use of man labor on the farm. H. R. Tolley and A. P. Yerkes. 1918.
990. Timothy. Morgan W. Evans. 1918.
991. The efficient operation of thrashing machines. H. R. Tolley. 1918.
992. The use of machinery in cutting corn. H. R. Tolley. 1918.
993. Cooperative bull associations. Joel G. Winkjer. 1918.
994. Commercial Bordeaux mixtures: How to calculate their values. Errett Wallace and L. H. Evans. 1918.
995. Preventing wood rot in pecan trees. S. M. McMurran. 1918.
996. Steam sterilization of seed beds for tobacco and other crops. E. G. Reinhart. 1918.
997. Terracing farm lands. C. E. Ramser. 1918.
998. Culture of the logan blackberry and related varieties. George M. Darrow. 1918.
999. Sweet-potato growing. Fred E. Miller. 1919.
1000. Crop systems for Arkansas. A. D. McNair. 1918.
1001. Growing fruit for home use. H. P. Gould and George M. Darrow. 1919.
1002. Canada thistle and methods of eradication. Albert A. Hansen. 1918.
1003. How to control billbugs destructive to cereal and forage crops. A. F. Satterthwait. 1919.
1004. The gas tractor in eastern farming. Arnold P. Yerkes and L. M. Church. 1918.
1005. Sweet clover on Corn Belt farms. J. A. Brake and J. C. Rundles. 1919.
1006. The wheat jointworm and its control. W. J. Phillips. 1918.
1007. Control of the onion thrips. F. H. Chittenden. 1919.
1008. Saving farm labor by harvesting crops with livestock. J. A. Drake. 1918.
1009. Haystackers: How they may be used in the East and South to save labor. H. B. McClure. 1919.
1018. Game laws for 1918. George A. Lawyer and Frank L. Earnshaw. 1918.
1011. The woolly white fly in Florida citrus groves. W. W. Yothers. 1919.
1012. The preparation of bees for outdoor wintering. E. F. Phillips and George S. Demuth. 1918.
1013. Practical hints on running a gas engine. A. P. Yerkes. 1919.
1014. Wintering bees in cellars. E. S. Phillips and George S. Demuth. 1918.

1015. Producing family and farm supplies on the cotton farm. C. L. Goodrich. 1919.  
 1016. Propagation and culture of the date palm. Bruce Drummond. 1919.  
 1017. Cattle scab and methods of control and eradication. Marion Imes. 1918.  
 1018. Hemorrhagic septicaemia, stockyard fever, swine plague, fowl cholera, etc. Henry J. Washburn. 1918.  
 1019. Straining milk. Ernest Kelly and James A. Gamble. 1919.  
 1020. The sweet-potato weevil and its control. F. H. Chittenden. 1919.  
 1021. Alfalfa on Corn Belt farms. J. A. Drake, J. C. Rundles, and Ralph D. Jennings. 1919.  
 1022. Laws relating to fur-bearing animals. 1918. David E. Lantz. 1918.  
 1023. Machinery for cutting firewood. H. R. Tolley. 1919.  
 1024. Currants and gooseberries. George M. Darrow. 1919.  
 1025. The larger corn stalk-borer. George G. Ainslie. 1919.  
 1026. Strawberry culture: South Atlantic and Gulf Coast regions. George M. Darrow. 1919.  
 1027. Strawberry culture: Western United States. George M. Darrow. 1919.  
 1028. Strawberry culture: Eastern United States. George M. Darrow. 1919.  
 1029. Conserving corn from weevils in the Gulf Coast States. E. A. Back. 1919.  
 1030. Feeding horses. G. A. Bell and J. O. Williams. 1919.  
 1031. Fig growing in the South Atlantic and Gulf States. H. P. Gould. 1919.  
 1032. Operating a cooperative motor truck route. H. S. Yohe. 1919.  
 1033. Muscadine grape paste. Charles Dearing. 1919.  
 1034. Growing sugar cane for sirup. P. A. Yoder. 1919.  
 1035. The farm tractor in the Dakotas. Arnold P. Yerkes and L. M. Church. 1919.  
 1036. Care and repair of farm implements: No. 5, Grain separators. Elmer Johnson. 1919.  
 1037. "White ants" as pests in the United States and methods of preventing their damage. T. E. Snyder. 1919.  
 1038. The striped cucumber beetle and its control. F. H. Chittenden. 1919.  
 1039. Commercial comb-honey production. George S. Demuth. 1919.  
 1040. Illustrated poultry primer. Harry M. Lamont and Jos. Wm. Kinghorne. 1919.  
 1041. The earworm disease of wheat and its control. Luther P. Byars. 1919.  
 1042. Saving man labor in sugar-beet fields. L. A. Moorhouse and T. H. Summers. 1919.  
 1043. Strawberry varieties in the United States. George M. Darrow. 1919.  
 1044. The city home garden. W. R. Beattie. 1919.  
 1045. Laying out fields for tractor plowing. H. R. Tolley. 1919.  
 1046. The European corn borer: A menace to the country's corn crop. D. J. Caffrey. 1919.  
 1047. Dry farming for better wheat fields. The Columbia and Snake River Basins. Byron Hunter. 1919.  
 1048. Rhodes grass. S. M. Tracy. 1919.  
 1049. Baling hay. H. B. McClure. 1919.  
 1050. Handling and loading southern new potatoes. A. M. Grimes. 1919.  
 1051. Sheep on irrigated farms in the Northwest. Stephen O. Jayne. 1919.  
 1052. Standard varieties of chickens. III. The Asiatic, English, and French classes. Rob R. Sloum. 1919.  
 1053. Control of cherry leaf-spot. John W. Roberts and Leslie Pierce. 1919.  
 1054. The loco-weed disease. C. Dwight Marsh. 1919.  
 1055. Country hides and skins. R. W. Hickman, C. V. Whalin, R. W. Frey, and F. P. Veitch. 1919. Revised, 1922.  
 1056. Controlling important fungous and insect enemies of the pear in the humid sections of the Pacific Northwest. D. F. Fisher and E. J. Newcomer. 1919.  
 1057. Cattle-fever ticks and methods of eradication. W. P. Ellenberger and Robert M. Chapin. 1919.  
 1058. Destroy the common barberry. E. C. Stakman. 1919.  
 1059. Sweet-potato diseases. L. L. Harter. 1919.  
 1060. Onion diseases and their control. J. C. Walker. 1919.  
 1061. Harlequin cabbage bug and its control. F. H. Chittenden. 1920.  
 1062. Buckwheat. Clyde E. Leighty. 1919.  
 1063. Take-all and flag smut: Two wheat diseases new to the United States. Harry B. Humphrey and Aaron G. Johnson. 1919.  
 1064. Production of late or main crop potatoes. William Stuart. 1919. Rev. 1920.  
 1065. The flat-headed apple-tree borer. Fred E. Brooks. 1919.  
 1066. Determining the age of cattle by the teeth. George W. Pope. 1919.  
 1067. Feeding hens for egg production. Harry M. Lamont and Alfred R. Lee. 1919.  
 1068. Judging beef cattle. E. H. Thompson. 1919.  
 1069. Tuberculosis in live stock. Detection, control, and eradication. John A. Kiernan and Alexander E. Wight. 1919.  
 1070. The fowl tick and how premises may be freed from it. F. C. Bishopp. 1919.  
 1071. Making woodlands profitable in the Southern States. Wilbur R. Mattoon. 1920.  
 1072. Prickly pear as stock feed. David Griffith. 1920.  
 1073. Growing beef on the farm. F. W. Farley. 1919.  
 1074. The bean ladybird and its control. F. H. Chittenden. 1919.  
 1075. Unfermented grape juice: How to make it in the home. Charles Dearing. 1919.  
 1076. California oak worm. H. E. Burke and F. B. Herbert. 1920.  
 1077. Game laws for 1919. Geo. A. Lawyer and Frank L. Earnshaw. 1919.  
 1078. Harvesting and storing ice on the farm. John T. Bowen. 1920.  
 1079. Laws relating to fur-bearing animals, 1919. George A. Lawyer, Frank L. Earnshaw, and Ned Dearborn. 1919.  
 1080. Preparation of barreled apples for market. W. M. Scott, H. C. Hetzel, H. W. Samson, and M. Stockton. 1919.  
 1081. Cranberry diseases and their control. C. L. Shear. 1920.  
 1082. Home supplies furnished by the farm. W. C. Funk. 1920.  
 1083. The Hessian fly and how to prevent losses from it. W. R. Waiton. 1920.  
 1084. Control of American fowlbrood. E. F. Phillips. 1920.  
 1085. Hog-lice and hog mange. Methods of control and eradication. Marion Imes. 1920.  
 1086. How insects affect the rice crop. J. L. Webb. 1920.



1087. Beautifying the farmstead. F. L. Mulford. 1920.  
 1088. Selecting a farm. E. H. Thomson. 1920.  
 1089. Selection and care of clothing. Laura I. Baldt. 1920.  
 1090. Rabbit raising. Ned Dearborn. 1920.  
 1091. Protection of potatoes from cold in transit—Lining and loading cars. 1920.  
 1092. Prairie rice culture in the United States. Charles E. Chambliss. 1920.  
 1093. Influence of the tractor on use of horses. L. A. Reynoldson. 1920.  
 1094. The alfalfa caterpillar. V. L. Wildermuth. 1920.  
 1095. Beet-top silage and other by-products of the sugar beet. James W. Jones. 1919.  
 1096. Frost and the prevention of damage by it. 1920.  
 1097. The stable fly: How to prevent its annoyance and its losses to livestock. F. C. Bishopp. 1920.  
 1098. Dusting machinery for cotton boll weevil control. Elmer Johnson and B. R. Coad. 1920.  
 1099. Home laundering. Lydia Ray Balderston. 1920.  
 1100. Cooperative marketing of woodland products. A. F. Hawes. 1920.  
 1101. The Argentine ant as a household pest. E. R. Barber. 1920.  
 1102. The crow in its relation to agriculture. Is it a farm pest? E. R. Kalmbach. 1920.  
 1103. Growing irrigated grain in southern Idaho. L. C. Aicher. 1920.  
 1104. Book-lice, or psocids. E. A. Back. 1920.  
 1105. Care of mature fowls. Alfred R. Lee. 1920.  
 1106. Incubation of hens' eggs. Harry M. Lamont. 1920.  
 1107. Brood coops and appliances. D. M. Green. 1920.  
 1108. Care of baby chicks. Alfred R. Lee. 1920.  
 1109. Preserving eggs. Jos. Wm. Kinghorne. 1920.  
 1110. Lice, mites, and cleanliness. J. W. Kinghorne and D. M. Green. 1920.  
 1111. Management of growing chicks. J. W. Kinghorne. 1920.  
 1112. Culling for eggs and market. Rob R. Slocum. 1920.  
 1113. Poultry houses. Alfred R. Lee. 1920.  
 1114. Common poultry diseases. D. M. Green. 1920.  
 1115. Selection and preparation of fowls for exhibition. Jos. Wm. Kinghorne. 1920.  
 1116. Selection and care of poultry breeding stock. Rob R. Slocum. 1920.  
 1117. Forestry and farm income. Wilbur R. Mattoon. 1920.  
 1118. Dockage under the Federal wheat grades. Ralph H. Brown. 1920.  
 1119. Fall-sown oats. C. W. Warburton and T. R. Stanton. 1920.  
 1120. Control of apple powdery mildew. D. F. Fisher. 1920.  
 1121. Factors that make for success in farming in the South. C. L. Goodrich. 1920.  
 1122. Citrus-fruit growing in the Gulf States. E. D. Vosbury. 1920.  
 1123. Growing and planting hardwood seedlings on the farm. C. R. Tillotson. 1920.  
 1124. The brown spot of corn with suggestions for its control. W. H. Tisdale. 1920.  
 1125. Forage for the Cotton Belt. S. M. Tracy. 1920.  
 1126. Sudan grass. H. N. Vinall. 1920.  
 1127. Peanut growing for profit. W. R. Beattie. 1920.  
 1128. Control of aphids injurious to orchard fruits, currant, gooseberry, and grape. A. L. Quaintance and A. C. Baker. 1920.  
 1129. Diseases of southern pecans. S. M. McMurrin and J. B. Demaree. 1920.  
 1130. Carpet grass. C. V. Piper and Lyman Carrier. 1920.  
 1131. Tile-trenching machinery. D. L. Yarnell. 1920.  
 1132. Planning the farmstead. M. C. Betts and W. R. Humphries. 1920.  
 1133. Feeding garbage to hogs. F. G. Ashbrook and A. Wilson. 1920.  
 1134. Castrating and docking lambs. G. H. Bedell and E. W. Baker. 1920.  
 1135. The beef calf: Its growth and development. E. W. Sheets. 1920.  
 1136. Baking in the home. Hannah L. Wessling. 1920.  
 1137. Grain sorghums: How to grow them. Benton E. Rothgeb. 1920.  
 1138. Game laws for 1920. Geo. A. Lawyer and Frank L. Earnshaw. 1920.  
 1139. A method of analyzing the farm business. H. M. Dixon and H. W. Hawthorne. 1920.  
 1140. Grasshopper control in the Pacific States. T. D. Urbahns. 1920.  
 1141. Rice growing in California. Charles E. Chambliss. 1920.  
 1142. Growing crimson clover. L. W. Kephart. 1920.  
 1143. Lespedeza as a forage crop. Lyman Carrier. 1920.  
 1144. Cooperative marketing. O. B. Jesness. 1920.  
 1145. Handling and transportation of cantaloupes. A. W. McKay, G. L. Fischer, and A. E. Nelson. 1921.  
 1146. Dourine of horses. J. R. Mohler and H. W. Schoening. 1920.  
 1147. Milo, a valuable grain crop. Benton E. Rothgeb. 1920.  
 1148. Cowpeas: Culture and varieties. W. J. Morse. 1920.  
 1149. Growing corn in the Southeastern States. C. H. Kyle. 1920.  
 1150. Parasites and parasitic diseases of sheep. Maurice C. Hall. 1920.  
 1151. Alsike clover. A. J. Pieters. 1920.  
 1152. Sugar-beet seed growing in the Rocky Mountain States. W. W. Tracy, jr. 1920.  
 1153. Cowpeas: Utilization. W. J. Morse. 1920.  
 1154. The aspen borer and how to control it. George Hofer. 1920.  
 1155. Diseases of sheep. Bernard A. Gallagher. 1921.  
 1156. Angoumois grain moth. E. A. Back. 1920.  
 1157. Waterproofing and mildewproofing of cotton duck. H. P. Holman, B. S. Levine, and T. D. Jarrell. 1920.  
 1158. Growing and utilizing sorghums for forage. H. N. Vinall and R. E. Getty. 1920.  
 1159. Fermented pickles. Edwin LeFevre. 1920.  
 1160. Diseases of apples in storage. Charles Brooks, J. S. Cooley, and D. F. Fisher. 1920.  
 1161. Dodder. Albert A. Hansen. 1921.  
 1162. Proso or hog millet. John H. Martin. 1920.  
 1163. Dry farming in western South Dakota. O. R. Mathews. 1920.  
 1164. The farm lease contract. L. C. Gray and Howard A. Turner. 1920.  
 1165. Laws relating to fur-bearing animals, 1920. George A. Lawyer, Frank L. Earnshaw, and Ned Dearborn. 1920.

1166. Poison ivy and poison sumac and their eradication. C. V. Grant and A. A. Hansen. 1920.
1167. Essentials of animal breeding. George M. Rommel. 1920.
1168. Varieties of winter wheat adapted to the eastern United States. Clyde E. Leighty. 1921.
1169. Insects injurious to deciduous shade trees and their control. Jacob Kotinsky. 1921.
1170. Meadows for the Northern States. C. V. Piper and Lyman Carrier. 1920.
1171. Growing annual flowering plants. L. C. Corbett and F. L. Mulford. 1921.
1172. Farm slaughtering and use of lamb and mutton. C. G. Potts. 1920.
1173. Plans of rural community buildings. W. C. Nason and C. J. Galpin. 1921.
1174. One-register furnaces (pipeless furnaces). A. M. Daniels. 1920.
1175. Better seed corn. C. P. Hartley. 1920.
1176. Control of the root, stalk, and ear rot diseases of corn. James R. Holbert and George N. Hofer. 1920.
1177. The care and improvement of the farm woods. C. R. Tillotson. 1920.
1178. Tree surgery. J. Franklin Collins. 1920.
1179. Feeding cottonseed products to livestock. E. W. Sheets and E. H. Thompson. 1920. Rev. 1924.
1180. Housecleaning made easier. Sarah J. McLeod. 1921.
1181. Raising sheep on temporary pastures. F. R. Marshall and C. G. Potts. 1921.
1182. Farm inventories. J. S. Ball. 1920.
1183. The care of leather. F. P. Veitch, H. P. Holman, and R. W. Frey. 1920.
1184. Ginseng culture. W. W. Stockberger. 1921.
1185. Spraying for the alfalfa weevil. Geo. I. Reeves, T. R. Chamberlin, and K. M. Pack. 1920.
1186. Pork on the farm. Killing, curing, and canning. F. G. Ashbrook, G. A. Anthony, and Franz P. Lund. 1921.
1187. Cotton diseases and their control. W. W. Gilbert. 1921.
1188. The southern pine beetle. A menace to the pine timber of the Southern States. A. D. Hopkins. 1921.
1189. Handling spinach for long-distance shipment. V. W. Ridley. 1921.
1190. How to grow an acre of potatoes. William Stuart. 1921.
1191. Making American cheese on the farm. C. M. Gere. 1921.
1192. Organization of rural community buildings. W. C. Nason. 1921.
1193. The beet leaf-beetle and its control. F. H. Chittenden. 1921.
1194. Operating a home heating plant. A. M. Daniels. 1921.
1195. Rice as food. 1921.
1196. Standard containers for fruits and vegetables. F. P. Downing. 1921.
1197. Protection of mesquite cordwood and posts from borers. F. C. Craighead and George Hofer. 1921.
1198. Swarm control. Geo. S. Demuth. 1921.
1199. Judging sheep. G. H. Bedell. 1921.
1200. Tuberculosis of fowls. Bernard A. Gallagher. 1921.
1201. Motor trucks on eastern farms. H. R. Tolley and L. M. Church. 1921.
1202. An agricultural almanac for 1921. Bristow Adams.
1203. The angora goat. G. P. Williams. 1921.
1204. Northwestern apple packing houses. Raymond R. Palithorp and Harold W. Samson.
1205. Potato production in the South. William Stuart. 1921.
1206. Corn earworm as an enemy of vetch. Philip Luginbill and A. H. Beyer. 1921.
1207. Milk and its uses in the home. 1921.
1208. Trees for town and city streets. F. L. Mulford. 1922.
1209. Planting and care of street trees. F. L. Mulford. 1921.
1210. Measuring and marketing farm timber. Wilbur R. Mattoon and William B. Barrows. 1921.
1211. Home canning of fruits and vegetables. 1921.
1212. Straighthead of rice and its control. W. H. Tisdale and J. Mitchell Jenkins. 1921.
1213. Flag smut of wheat and its control. W. H. Tisdale and Marion A. Griffiths. 1921.
1214. Farm dairy houses. Ernest Kelly and K. E. Parks. 1921.
1215. Beekeeping in the clover region. E. F. Phillips and George S. Demuth. 1922.
1216. Beekeeping in the buckwheat region. E. F. Phillips and George S. Demuth. 1922.
1217. The green-bug or spring grain-aphis: How to prevent its periodical outbreaks. W. R. Walton. 1921.
1218. Beef production in the Corn Belt. W. H. Black. 1921.
1219. Floors and floor coverings. 1921.
1220. Insect and fungous enemies of the grape. A. L. Quantance and C. L. Shear. 1921.
1221. Standard varieties of chickens. IV. The ornamental breeds and varieties. Rob R. Slocum. 1921.
1222. Beekeeping in the tulip-tree region. E. F. Phillips and George S. Demuth. 1922.
1223. The chinch bug and its control. J. R. Horton and A. F. Satterthwait. 1922.
1224. Wheat scab and its control. Aaron G. Johnson and James G. Dickson. 1921.
1225. The potato leafhopper and its control. J. E. Dudley, jr. 1921.
1226. Take-all of wheat and its control. Harry B. Humphrey, Aaron G. Johnson, and Harold H. McKinney. 1921.
1227. Sewage and sewerage of farm homes. George M. Warren. 1922.
1228. A week's food for an average family. Caroline L. Hunt. 1921.
1229. Utilization of alfalfa. R. A. Oakley and H. L. Westover. 1921.
1230. Chimneys and fireplaces. A. M. Daniels. 1921.
1231. Drying crude drugs. G. A. Russell. 1921.
1232. Seed marketing hints for the farmer. George C. Edler. 1921.
1233. Tomatoes for canning and manufacturing. James H. Beattie. 1921.
1234. Gullies: How to control and reclaim them. C. E. Ramser. 1922.
1235. Game laws for 1921. Geo. A. Lawyer and Frank L. Earnshaw. 1921.
1236. Corn and its uses as food. 1923.
1237. Pineapple culture in Florida. E. D. Vosbury and J. R. Winston. 1921.
1238. Laws relating to fur-bearing animals. George A. Lawyer and Frank L. Earnshaw. 1921.

1239. Community bird refuges. W. L. McAtee. 1921.  
1240. How to grow rice in the Sacramento Valley. Jenkin W. Jones. 1924.  
1241. An improved method of making sugar-beet sirup. C. O. Townsend and Sidney F. Sherwood. 1921.  
1242. Permanent fruit and vegetable gardens. W. R. Beattie and C. P. Close. 1921.  
1243. The border method of irrigation. Samuel Fortier. 1922.  
1244. Diseases, ailments, and abnormal conditions of swine. T. P. White. 1923.  
1245. Farmers' telephone companies, organization, financing, and management. I. M. Spasoff and H. S. Beardsley. 1922.  
1246. The peach borer: How to prevent or lessen its ravages; the paradichlorobenzene treatment. A. L. Quaintance. 1921.  
1247. American moles as agricultural pests and as fur producers. Theo. H. Scheffer. 1922.  
1248. The sugar-beet nematode in the Western States. Gerald Thorne and I. A. Giddings. 1922.  
1249. Olive growing in the southwestern United States. C. F. Kinman. 1922.  
1250. Green manuring. C. V. Piper and A. J. Pieters. 1922.  
1251. Standard varieties of chickens. V. The bantam breeds and varieties. Rob R. Slocum. 1921.  
1252. Sawflies injurious to rose foliage. William Middleton. 1922.  
1253. Seed peas for the canner. D. N. Shoemaker. 1922.  
1254. Important cultivated grasses. C. V. Piper. 1922.  
1255. The production of peas for canning. Chester J. Hunn. 1922.  
1256. Slash pine. Wilbur R. Mattoon. 1922.  
1257. Insects injurious to the mango in Florida and how to combat them. G. F. Mozzette. 1922.  
1258. Webworms injurious to cereal and forage crops and their control. Geo. G. Ainslie. 1922.  
1259. A sawfly injurious to young pines. William Middleton. 1922.  
1260. Stored-grain pests. E. A. Back and R. T. Cotton. 1922.  
1261. The avocado: Its insect enemies and how to combat them. G. F. Mozzette. 1922.  
1262. The boll-weevil problem. W. D. Hunter and B. R. Coad. 1922.  
1263. Breeds of swine. E. Z. Russell. 1922.  
1264. Farm manufacture of unfermented apple juice. Joseph S. Caldwell. 1922.  
1265. Business methods of marketing hay. G. A. Collier. 1922.  
1266. Preparation of peaches for market. H. W. Samson. 1922.  
1267. Utilization of flue-heated tobacco barns for sweet-potato storage. Fred E. Miller. 1922.  
1268. Sheep-killing dogs. M. W. Coll. 1922.  
1269. Celery growing. W. R. Beattie. 1922.  
1270. The more important apple insects. A. L. Quaintance and E. H. Siegler. 1922.  
1271. Farm lands available for settlement. B. Henderson. 1922.  
1272. Renting dairy farms. Howard A. Turner. 1922.  
1273. The stock-poisoning death camas. C. Dwight Marsh and A. B. Clawson. 1922.  
1274. Uses of rural community buildings. W. C. Nason. 1922.  
1275. Weevils in beans and peas. E. A. Back. 1922.  
1276. The velvet bean. C. V. Piper. 1922.  
1277. Diseases of watermelons. W. A. Orton and F. C. Meier. 1922.  
1278. Tractors on southern farms. H. R. Tolley and L. M. Church. 1922.  
1279. Plain concrete for farm use. T. A. H. Miller. 1922.  
1280. The hard red winter wheats. J. Allen Clark and John H. Martin. 1922.  
1281. The hard red spring wheats. J. Allen Clark and John H. Martin. 1922.  
1282. Nicotine dust for control of truck-crop insects. Roy E. Campbell. 1922.  
1283. How to grow alfalfa. R. A. Oakley and H. L. Westover. 1922.  
1284. Apple-orchard renovation. H. P. Gould. 1922.  
1285. Lime-sulphur concentrate, preparation, uses, and designs for plants. E. H. Siegler and A. M. Daniels. 1922.  
1286. The red-necked raspberry cane-borer. F. H. Chittenden. 1922.  
1287. Foreign material in spring wheat. R. H. Black and C. R. Haller. 1922.  
1288. Game laws for 1922. George A. Lawyer and Frank L. Earnshaw. 1922.  
1289. Distribution of types of farming in the United States. W. J. Spillman. 1923.  
1290. The bulk handling of grain. E. N. Bates and A. L. Rush. 1922.  
1291. Preparation of fresh tomatoes for market. F. Earl Parsons. 1922.  
1292. Organization and management of cooperative livestock shipping associations. 1923.  
1293. Laws relating to fur animals, 1922. George A. Lawyer and Frank L. Earnshaw. 1922.  
1294. The European corn borer and its control. D. J. Caffrey and L. H. Worthley. 1922.  
1295. What tractors and horses do on Corn Belt farms. L. A. Reynoldson and H. R. Tolley. 1923.  
1296. Changes effected by tractors on Corn Belt farms. L. A. Reynoldson and H. R. Tolley. 1922.  
1297. Cost of using tractors on Corn Belt farms. L. A. Reynoldson and H. R. Tolley. 1922.  
1298. Cost of using horses on Corn Belt farms. M. R. Cooper and J. O. Williams. 1922.  
1299. Shall I buy a tractor (for a Corn Belt farm). L. A. Reynoldson and H. R. Tolley. 1922.  
1300. Choosing a tractor (for a Corn Belt farm). L. A. Reynoldson and H. R. Tolley. 1922.  
1301. The common white wheats. J. Allen Clark, John H. Martin, and C. E. Leighty. 1922.  
1302. How to get rid of rats. James Silver. 1923.  
1303. The club wheats. J. Allen Clark and John H. Martin. 1923.  
1304. The durum wheats. J. Allen Clark and John H. Martin. 1923.  
1305. The soft, red winter wheats. Clyde E. Leighty and John H. Martin. 1922.  
1306. The insect enemies of chrysanthemums. Charles A. Weigel. 1923.  
1307. Quack grass. L. W. Kephart. 1923.  
1308. Marketing the cowpea seed crop. J. E. Barr. 1923.

1309. Control of the common mealybug on citrus in California. Arthur D. Borden. 1923.
1310. The corn earworm: Its ravages on field corn, and suggestions for control. W. J. Phillips and Kenneth M. King. 1923.
1311. Chrysanthemums for the home. B. Morrison. 1923.
1312. Tree planting in the Great Plains region. F. R. Johnson and F. E. Cobb. 1923.
1313. Good proportions in the diet. Caroline L. Hunt. 1923.
1314. Motor trucks on Corn Belt farms. H. R. Tolley and L. M. Church. 1923.
1315. Cleaning milking machines. L. H. Burgwald. 1923.
1316. Marketing the early potato crop. George B. Fiske and Paul Froelich. 1923.
1317. Marketing main-crop potatoes. Wells A. Sherman, George B. Fiske, and O. D. Milner. 1923.
1318. Greenhouse construction and heating. James H. Beattie. 1923.
1319. Cotton-dusting machinery. Elmer Johnson, S. T. Howard, and B. R. Coad. 1923.
1320. The production of cucumbers in greenhouses. J. H. Beattie. 1923.
1321. Fumigation of citrus trees for control of insect pests. R. S. Woglum. 1923.
1322. The striped cucumber beetle and how to control it. F. H. Chittenden. 1923.
1323. The wheat strawworm and its control. W. J. Phillips and F. W. Poos. 1923.
1324. Lamb and mutton and their use in the diet. 1923.
1325. Rural planning—the social aspects. W. C. Nason. 1923.
1326. Control of the codling moth in the Pacific Northwest. E. J. Newcomer, M. A. Yothers, and W. D. Whitcomb. 1924.
1327. Canaries: Their care and management. Alexander Wetmore. 1923.
1328. Production of seed flax. A. C. Dillman. 1924.
1329. The boll-weevil problem. W. D. Hunter and B. R. Coad. 1923.
1330. Parasites and parasitic diseases of sheep. Maurice C. Hall. 1923.
1331. Back-yard poultry keeping. Rob. R. Slocum. 1923.
1332. Seed potatoes and how to produce them. William Stuart. 1923.
1333. Pruning citrus trees in the Southwest. A. D. Shamel, C. S. Pomeroy, and R. E. Caryl. 1923.
1334. Home tanning of leather and small fur skins. R. W. Frey, I. D. Clarke, and F. P. Veitch. 1923.
1335. Controlling the gypsy moth and the brown-tail moth. A. F. Burgess. 1923.
1336. Feeding and management of dairy calves and young dairy stock. W. K. Brainerd and H. F. Davis. 1923.
1337. Diseases of poultry. Bernard A. Gallagher. 1923.
1338. Tomatoes as a truck crop. W. R. Beattie. 1923.
1339. Red-clover culture, with notes on insect enemies of red clover. A. J. Pieters and W. R. Walton. 1923.
1340. Polish and poulard wheats. John H. Martin. 1923.
1341. Mule production. J. O. Williams. 1923.
1342. Dairy-barn construction. K. E. Parks. 1923.
1343. Culture of citrus fruits in the Gulf States. E. D. Vosbury and T. R. Robinson. 1923.
1344. The strawberry rootworm as an enemy of the greenhouse rose. C. A. Weigel and C. F. Doucette. 1923.
1345. Roof-knot: Its cause and control. G. H. Godfrey. 1923.
1346. Carpet beetles and their control. E. A. Back. 1923.
1347. Standard varieties of chickens. I. The American class. Bob R. Slocum. 1923.
1348. The corrugation method of irrigation. James C. Marr. 1923.
1349. Increasing the potato crop by spraying. F. H. Chittenden and W. A. Orton. 1923.
1350. Beef-cattle barns. E. W. Sheets and M. A. R. Kelley. 1923.
1351. Cabbage diseases. L. L. Harter and L. R. Jones. 1923.
1352. The tobacco flea-beetle in the southern cigar-wrapper district. F. S. Chamberlin and J. N. Tenhet. 1923.
1353. Clothes moths and their control. E. A. Back. 1923.
1354. The yellow-fever mosquito. L. O. Howard. 1923.
1355. Blackleg: Its nature, cause, and prevention. John R. Mohler. 1923.
1356. Tobacco hornworm insecticide: Recommendations for use of powdered arsenate of lead in dark-tobacco district. A. C. Morgan. 1923.
1357. Castration of hogs. S. S. Buckley. 1923.
1358. Growing rye in the western half of the United States. John H. Martin and Ralph W. Smith. 1923.
1359. Milk and its uses in the home. 1923. Revised. 1924.
1360. Apple growing east of the Mississippi River. H. P. Gould. 1924.
1361. Brahman (Zebu) cattle. Virgil V. Parr. 1923.
1362. Insects injurious to ornamental greenhouse plants. C. A. Weigel and E. R. Sasscer. 1923.
1363. Natural and artificial incubation of hens' eggs. Alfred R. Lee. 1923.
1364. Important pecan insects and their control. John B. Gill. 1924.
1365. Clover failure. A. J. Pieters. 1924.
1366. Production of maple sirup and sugar. A. Hugh Bryan, William F. Hubbard, and S. F. Sherwood. 1923.
1367. Control of potato-tuber diseases. Michael Shapovalov and G. K. K. Link. 1924.
1368. Breaking and training colts. V. G. Stambaugh. 1923.
1369. Bridge grafting. Guy E. Yerkes. 1923.
1370. Dahlias for the home. B. Y. Morrison. 1923.
1371. Diseases and insects of garden vegetables. W. W. Gilbert and C. H. Popenoe. 1924.
1372. Plum and prune growing in the Pacific States. C. F. Kinman. 1924.
1373. Homing pigeons: Their care and training. Alfred R. Lee. 1924.
1374. Care of food in the home. 1923.
1375. Game laws for the season 1923-24. George A. Lawyer and Frank L. Earnshaw. 1923.
1376. Natural and artificial brooding of chickens. A. R. Lee. 1924.
1377. Marketing poultry. Rob R. Slocum. 1924.
1378. Marketing eggs. Rob R. Slocum. 1924.
1379. Beef production in the Cotton Belt. Arthur T. Semple. 1923.

1380. Apple scald and its control. Charles Brooks, J. S. Cooley, and D. F. Fisher. 1923.
1381. Herbaceous perennials. Furman Lloyd Mulford. 1924.
1382. Fattening steers in the Corn Belt. Wm. H. Black. 1924.
1383. Food values and body needs shown graphically. Emma A. Winslow. 1923.
1384. Community cotton production. O. F. Cook and R. D. Martin. 1924.
1385. Buying a farm in an undeveloped region. Bertha Henderson. 1924.
1386. Terracing farm lands. C. E. Ramser. 1924.
1387. Laws relating to fur animals for the season 1923-24. George A. Lawyer and Frank L. Earnshaw. 1923.
1388. Rural planning: The social aspects of recreation places. Wayne C. Nason. 1924.
1389. Sorgo-sirup manufacture. A. Hugh Bryan and Sidney F. Sherwood. 1924.
1390. Vegetable seeds for the home and market garden. W. W. Tracy and D. N. Shoemaker. 1924.
1391. The guinea fowl. Andrew S. Weiant. 1924.
1392. Black walnut for timber and nuts. W. R. Mattoon and C. A. Reed. 1924.
1393. Principles of dairy-barn ventilation. M. A. R. Kelley. 1924.
1394. Watermelons. W. R. Beattie. 1924.
1395. Beef-cattle production in the range area. Virgil V. Parr. 1925.
1396. The dasheen: A southern root crop for home use and market. Robert A. Young. 1924.
1397. Mouse control in field and orchard. James Silver. 1924.
1398. Currants and gooseberries: Their culture and relation to white-pine blister rust. George M. Darrow and S. B. Detwiler. 1924.
1399. Blackberry growing. George M. Darrow. 1924.
1400. Establishing cranberry fields. George M. Darrow, Henry J. Franklin, and O. G. Malde. 1924.
1401. Managing cranberry fields. George M. Darrow, Henry J. Franklin, and O. G. Malde. 1924.
1402. Cranberry harvesting and handling. Henry J. Franklin, George M. Darrow, and O. G. Malde. 1924.
1403. Dewberry growing. George M. Darrow. 1924.
1404. Pumping from wells for irrigation. Paul A. Ewing. 1924.
1405. The windbreak as a farm asset. Charles G. Bates. 1924.
1407. The Mexican bean beetle in the East. N. F. Howard. 1924.
1408. The housefly and how to suppress it. L. O. Howard and C. F. Bishopp. 1924.
1409. Turkey raising. Morley A. Jull and Alfred R. Lee. 1924.
1410. Control of brown-rot of prunes and cherries in the Pacific Northwest. D. F. Fisher and Charles Brooks. 1924.
1411. Crimson clover: Seed production. J. H. Westgate. 1924.
1412. Care and management of dairy bulls. J. R. Dawson. 1924.
1413. Poultry house construction. A. R. Lee. 1924.
1414. The rosette disease of wheat and its control. Aaron G. Johnson, Harold H. McCluney, Robert W. Webb, and Clyde E. Leighty. 1924.
1415. Beef on the farm—slaughtering, cutting, curing. W. H. Black and E. W. McComas. 1924.
1416. Fattening beef calves. Sam H. Ray. Revised by Arthur T. Semple. 1924. Super-series Farmers' Bulletin 811.
1417. Idle land and costly timber. W. B. Greeley. 1924.
1418. Lettuce growing in greenhouses. James H. Beattie. 1924.
1419. Care and management of farm work horses. J. O. Williams and Earl B. Krantz. 1924.
1420. Handling rough rice to produce high grades. W. D. Smith. 1924.
1421. Successful farming on 80-acre farms in central Indiana. H. W. Hawthorne and Lynn Robertson. 1924.
1422. Udder diseases of dairy cows. Hubert Bunyea. 1924.
1423. Preparation of cabbage for market. Charles W. Hauck. 1924.
1424. Making vinegar in the home and on the farm. Edwin LeFevre. 1924.
1425. The tobacco flea-beetle in the dark fire-cured tobacco districts of Kentucky and Tennessee. A. C. Morgan and J. U. Gilmore. 1924.
1426. Farm plumbing. George M. Warren. 1924.
1427. Poultry accounts. A. R. Lee and Sheppard Haynes. 1924.
1428. Saving livestock from starvation on southwestern ranges. C. L. Forsling. 1924.
1429. Emmer and spelt. John H. Martin and Clyde E. Leighty. 1924.
1430. Power for the farm from small streams. A. M. Daniels, C. E. Seitz, and J. C. Glenn. 1925.
1431. Greenhouse tomatoes. James H. Beattie. 1924.
1432. Culture of pima and upland cotton in Arizona. O. F. Cook and R. D. Martin. 1924.
1433. Cultivated grasses of secondary importance. Charles V. Piper. 1925.
1434. Standard baskets for fruits and vegetables. F. P. Downing and H. A. Spilman. 1924.
1435. Diseases of stone fruits on the market. Dean H. Rose. 1924.
1436. Why potatoes run out. E. S. Schultz. 1924.
1437. Swine production. E. Z. Russell. 1925.
1438. Making fermented pickles. Edwin LeFevre. 1924.
1440. More profit for the wheat farmers of central Kansas. Jesse W. Tapp and W. E. Grimes. 1924.
1441. Rural planning—the village. Wayne C. Nason. 1925.
1442. Storage of sweet potatoes. H. C. Thompson. 1925.
1443. Dairy cattle breeds. Ame B. Nystrom. 1925.
1444. Game laws for the season 1924-25. George A. Lawyer and Frank L. Earnshaw. 1924.
1445. Laws relating to fur animals for the season 1924-25. Frank G. Ashbrook and Frank L. Earnshaw. 1924.
1446. Cow-testing associations and stories the records tell. J. C. McDowell. 1925.
1447. Citrus fruit growing in the Southwest. A. D. Samuel and R. E. Caryl. 1925.
1448. Farmstead water supply. George M. Warren. 1925.
1450. Home baking. Charlotte Chatfield. 1925.

1451. Making and using cottage cheese in the home. Kenneth J. Matheson and Jessie M. Hoover. 1925.
1452. Painting on the farm. H. P. Holman. 1925.
1453. Growing and planting coniferous trees on the farm. C. R. Tillotson. 1925.
1454. Home utilization of muscadine grapes. Charles Dearing. 1925.
1455. Fitting, showing, and judging hogs. E. Z. Russell. 1925.
1456. Homes for birds. E. R. Kalmbach and W. L. McAtee. 1925.
1457. Packing apples in boxes. Raymond R. Pailthorp and Frank S. Kinsey. 1925.
1458. Strawberry diseases. Neil E. Stevens. 1925.
1459. Selling black walnut timber. Warren D. Brush. 1925.
1460. Simple plumbing repairs in the home. G. M. Warren. 1925.
1463. Successful farming on 160-acre farms in central Indiana. Lynn Robertson and H. W. Hawthorne. 1925.
1464. Barley: Culture, uses, and varieties. Harry V. Harlan. 1925.
1465. Cotton ginning. G. S. Meloy. 1925.
1466. Game laws for the season 1925-26. George A. Lawyer and Frank L. Earnshaw. 1925.
1469. Laws relating to fur animals for the season 1925-26. Frank G. Ashbrook and Frank L. Earnshaw. 1925.

NOTE.—Numbers omitted have not been published. (December 31, 1925.)

#### STATISTICAL BULLETINS (1923-1925)

1. Cold storage holdings, year ending January, 1923, with comparable data for earlier years. 1923.
2. Seed statistics, year ended May 31, 1923, with comparable data for earlier years. 1924.
3. Sheep, lamb, mutton, and wool statistics, year ended March 31, 1923, with comparable data for earlier years. 1924.
4. Cold-storage holdings to October, 1924. 1925. Revision of Statistical Bulletin 1.
5. Horses, mules, and motor vehicles, year ended March 31, 1924, with comparable data for earlier years. 1925.
6. Grain futures: Daily data. Volume of trading on the Chicago Board of Trade, January 1, 1921, to May 31, 1924. 1924.
7. Shipments and unloads of certain fruits and vegetables, 1918-1923. 1925.
8. Carload shipments of fruits and melons from stations in United States for 1920, 1921, 1922, and 1923. 1925.
9. Carload shipments of vegetables from stations in the United States for 1920, 1921, 1922, and 1923. 1925.
10. Statistics of potatoes and sweet potatoes, year ended July 31, 1924, with comparable data for earlier years. 1925.
11. Hay and feed statistics, year ended December 31, 1924, with comparable data for earlier years. 1925.

#### DEPARTMENT CIRCULARS

1. Suggestions for the marketing of cottage cheese. Delos L. James. 1919.
2. Sewing for girls' club work. Ola Powell. 1919.
3. Drying vegetables and fruits for home use. Frants P. Lund. 1919.
4. Vacation land: The national forests in Oregon. 1919.
5. Out-of-door playgrounds of the San Isabel National Forest. 1919.
6. A summer vacation in the Sopris National Forest. 1919.
7. Trend of the dairy-cattle industry in the United States and other countries. T. R. Pirtle. 1919.
8. Arbor Day. L. C. Everard. 1919.
9. Meadow fescue. H. N. Vinall. 1919.
13. Brood coops and appliances. Boys' and girls' poultry club work. 1919.
14. Care of baby chicks. Boys' and girls' poultry club work. 1919.
15. Preserving eggs. Boys' and girls' poultry club work. 1919.
16. Lice, mites, and cleanliness. Boys' and girls' poultry club work. 1919.
17. Management of growing chicks. Boys' and girls' poultry club work. 1919.
18. Culling for eggs and market. Boys' and girls' poultry club work. 1919.
19. Poultry houses. Boys' and girls' poultry club work. 1919.
20. Common poultry diseases. Boys' and girls' club work. 1919.
25. Points for egg buyers: What to sell, what to buy, how to candle. 1919.
26. Delicious products of the dairy. J. C. McDowell. 1919.
27. Gardening instructions for club members. 1919.
28. Cotton gin fires caused by static electricity. 1919.
29. Vacation trips in the Holy Cross National Forest. 1919.
30. Organization of a county for extension work: The farm-bureau plan. L. R. Simons. 1919.
31. Culling the poultry flock: Why, when, and how. 1919.
32. Potato wart: A dangerous new disease. 1919.
33. How teachers may use Farmers' Bulletin 1044, the city home garden. Alvin Dille. 1919.
34. Outdoor life in the Colorado National Forest. 1919.
35. Boys' and girls' club work: Diseases and insects of the home garden. W. W. Gilbert. 1919.
36. Use of poultry club products. 1919.
37. Status and results of county-agent work, Northern and Western States, 1918, showing war service of the county agent. W. A. Lloyd. 1919.
38. Boys' agricultural club work in the Southern States. I. W. Hill and G. W. Chambers. 1919.
39. A report on the retail prices of nitrate of soda and acid phosphate as of May 1, 1919. 1919.
40. Insect enemies and diseases of the tomato. 1919.

41. Mountain playgrounds of the Pike National Forest. 1919.
42. Perennial ryegrass (*Lolium perenne*). Lyman Carrier. 1919.
43. Redtop. (*Agrostis alba*). Lyman Carrier. 1919.
44. Italian ryegrass (*Lolium multiflorum*). Lyman Carrier. 1919.
45. Para grass. (*Panicum barbinode*). S. M. Tracy. 1919.
46. How to make a hog crate. 1919.
47. Stomach worms in sheep: Prevention and treatment. 1919.
48. Boys' and girls' club work: The club member's home vegetable garden. 1919.
49. Making and maintaining a lawn. 1919.
50. Sudan grass (*Andropogon sorghum* var.). 1919.
51. Our national elk herds: A program for conserving the elk on national forests about the Yellowstone National Park. Henry P. Graves and E. W. Nelson. 1919.
52. How to wrap heads: Points for poultry packers, No. 4. 1919.
53. Milk and cream contests. Ernest Kelly and George B. Taylor. 1919.
54. Tuberculosis eradication under the accredited-herd plan. Herd List No. 2. 1919.
55. How to load cars of eggs. Points for egg shippers, No. 1. 1919.
56. Suggested improvements in methods of selling cotton by farmers. O. J. McConnell. 1919.
57. A report on the retail prices of unmixed fertilizer material as of June 1, 1919, with comparative prices for May 1. 1919.
58. Fruit growing on the northern Great Plains. Max Pfander. 1919.
59. Suggestions for field studies of mammalian life-histories. 1919.
60. The work of the Belle Fourche (S. Dak.) reclamation project experiment farm in 1918. Beyer Aune. 1919.
61. Sources of American potash. R. O. E. Davis. 1919.
62. Horticultural exhibitions and garden competitions. F. L. Mulford. 1919.
63. Directory of officials and organizations concerned with the protection of birds and game, 1919. 1919.
64. How lumber is graded. H. S. Betts. 1920.
65. Distribution of tulip and narcissus bulbs in 1919. R. A. Oakley. 1919.
66. Organization and results of boys' and girls' club work (Northern and Western States), 1918. O. H. Benson and Gertrude Warren. 1920.
67. How teachers may use Farmers' Bulletin 602, clean milk: Production and handling. Alvin Dille. 1920.
68. How teachers may use publications on the control of diseases and insect enemies of the home garden. Alvin Dille. 1919.
69. How teachers may use Farmers' Bulletin 876, making butter on the farm. E. H. Shinn. 1919.
70. Trend of the butter industry in the United States and other countries. T. R. Pirtle. 1919.
71. Trend of the cheese industry in the United States and other countries. T. R. Pirtle. 1919.
72. Good drinks made of milk, kickless, but full of punch. 1919.
73. The work of the San Antonio (Texas) Experiment Farm in 1918. C. R. Letteer. 1920.
74. How to break eggs for freezing: Points for egg breakers. 1920.
75. The work of the Yuma reclamation project experiment farm in 1918. R. E. Blair. 1920.
76. Directions for collecting flowering plants and ferns. S. F. Blake. 1920.
77. Suggestions for a state law providing for the organization of farmers' mutual fire insurance companies. V. N. Valgren. 1920.
78. A machine for trimming camphor trees. G. A. Russell. 1920.
79. Tropical fowl mite in the United States. H. P. Wood. 1920.
80. The work in 1918 of the Newlands (formerly the Truckee-Carson) reclamation project experiment farm. F. B. Headley. 1920.
81. *Astragalus tetrapteris*, a new poisonous plant of Utah and Nevada. C. Dwight Marsh and A. B. Clawson. 1920.
82. A new sheep-poisoning plant of the Southern States. C. Dwight Marsh. 1920.
83. Testing farms in the South for efficiency in management. C. L. Goodrich. 1920.
84. Crop injury by borax in fertilizers. Oswald Schreiner, B. E. Brown, and J. J. Skinner. 1920.
85. Safe farming in the Southern States in 1920. Bradford Knapp. 1920.
86. The work of the Huntley (Mont.) reclamation project experiment farm in 1918. Dan Hansen. 1920.
87. Sweet-clover-seed screenings not injurious to sheep. C. Dwight Marsh and Glenwood C. Roe. 1920.
88. Annual report of the governor of Alaska on the Alaska game law, 1919. Thomas Riggs, jr. 1919.
89. Kudzu. C. V. Piper. 1920.
90. Control of watermelon anthracnose by spraying. F. C. Meier. 1920.
91. The land of beautiful water. Chelan National Forest. 1920.
92. The jack bean. C. V. Piper. 1920.
93. The development of the Peruvian alfalfa industry in the United States. H. L. Westover. 1920.
94. TNT as a blasting explosive. Charles E. Munroe and Spencer P. Howell. 1920.
95. United States grades for northern-grown onions. Hartley E. Traux. 1920.
96. United States grades for potatoes. Hartley E. Traux. 1920.
97. United States grades for Bermuda onions. Hartley E. Traux. 1920.
98. The installation of dust-collecting fans on thrashing machines for the prevention of explosions and fires, and for grain cleaning. H. E. Roethe, jr., and E. N. Bates. 1920.
99. United States grades for sweet potatoes. Hartley E. Traux. 1920.
100. Vacation on the White Mountain National Forest. 1921.
101. The whorled milkweed, a plant poisonous to livestock. C. Dwight Marsh. 1920.
102. The migratory bird treaty. 1920.
103. Mountain outings on the Rainier National Forest. 1920.

104. Fishing, hunting, and camping on the Cascade National Forest. 1920.
105. Forest trails and highways of the Mount Hood region. 1920.
106. Status and results, county agent work, Northern and Western States, 1919. W. A. Lloyd. 1920.
107. A system of field and office records for county extension workers. M. C. Wilson. 1920.
108. Chicory: Control and eradication. Albert A. Hansen. 1920.
109. Cocklebur. Albert A. Hansen. 1920.
110. The work of the Umatilla reclamation project experiment farm in 1918 and 1919. H. K. Dean. 1920.
111. Potato wart. G. R. Lyman, L. O. Kunkel, and C. R. Orton. 1920.
112. Timber depletion and the answer. 1920.
113. Alfalfa: Instructions adapted to Michigan, Wisconsin, and Minnesota. 1920.
114. Motion pictures of the United States Department of Agriculture. A list of films and their uses. Fred W. Perkins and George R. Goergens. 1920.
115. Alfalfa: Instructions adapted to southern New Jersey, Delaware, southern Maryland, Virginia, Arkansas, Tennessee, and the South Atlantic and Gulf States. 1920.
116. Alfalfa: Instructions adapted to Ohio, Indiana, Illinois, Iowa, Missouri, and Kentucky. 1920.
117. Peruvian alfalfa. 1920.
118. Field pea. 1920.
119. Cowpeas. 1920.
120. Soy bean. 1920.
121. Velvet beans. 1920.
122. Dry-land alfalfa. 1920.
123. Grimm alfalfa. 1920.
124. Spur feterita. 1920.
125. Forcing and blanching dasheen shoots. Robert A. Young. 1920.
126. Alfalfa: Instructions adapted to New England States and New York. 1920.
127. Alfalfa: Instructions adapted to Pennsylvania, West Virginia, northwestern Maryland, and northern New Jersey. 1920.
128. The manufacture and use of peanut butter. H. C. Thompson. 1920.
129. Milk for the family. 1920. Rev. 1921.
130. The hawkweeds or paintbrushes. Albert A. Hansen. 1920.
131. Directory of officials and organizations concerned with the protection of birds and game, 1920. 1920.
132. A mountain vacation land: The Washington National Forest. 1920.
133. United States grades for milled rice. 1920.
134. Livestock grazing as a factor in fire protection on the national forests. John H. Hatton. 1920.
135. Maintenance of the fur supply. Ned Dearborn. 1920.
136. The work of the Newlands reclamation project experiment farm in 1919. F. B. Headley. 1920.
137. The Bureau of Chemistry of the United States Department of Agriculture. 1920.
138. In the open: The national forests of Washington. 1920.
139. The Government exhibit at the 1920 national dairy show. 1920.
140. Statistics of cooperative extension work 1920-21. 1920.
141. Status and results of home demonstration work, Northern and Western States, 1919. Florence E. Ward. 1921.
142. Tuberculosis eradication under the accredited-herd plan. (Herd List No. 3.) 1920.
143. Tuberculosis eradication under the accredited herd plan. (Supplement 1 to Herd List No. 3.) 1920.
144. Tuberculosis eradication under the accredited herd plan. (Supplement 2 to Herd List No. 3.) 1920.
145. Australia and New Zealand as markets for American fruit. Samuel B. Moomaw and Caroline B. Sherman. 1921.
146. Markets for American fruits in China. Clarence B. Moomaw and Marjorie L. Franklin. 1920.
147. The work of the Huntley reclamation project experiment farm in 1919. Dan Hansen. 1921.
148. The farm woman's problems. Florence E. Ward. 1920.
149. Cooperative cane-sirup canning: Producing sirup of uniform quality. J. K. Dale. 1920.
150. Statistical data compiled and published by the Bureau of Crop Estimates 1863-1920. 1921.
151. Distribution of cottonseed in 1921. Introductory statement by O. F. Cook. 1920.
152. Organization and results of boys' and girls' club work, Northern and Western States, 1919. George E. Farrell and Ivan L. Hobson. 1921.
153. Developing an American utility horse. J. O. Williams. 1921.
154. Nicotine sulphate in a dust carrier against truck-crop insects. Roy E. Campbell. 1921.
155. How teachers may use Farmers' Bulletin 1087, beautifying the farmstead. C. H. Schopmeyer. 1921.
156. How teachers may use Farmers' Bulletin 1175, better seed corn. F. A. Merrill. 1921.
157. How teachers may use Farmers' Bulletin 1148, cowpeas: Culture and varieties. F. A. Merrill. 1921.
158. How teachers may use Farmers' Bulletin 1125, forage for the Cotton Belt. F. A. Merrill. 1921.
159. How teachers may use Farmers' Bulletin 1121, factors that make for success in farming in the South. F. A. Merrill. 1921.
160. Peppers. 1921.
161. Pisgah National Game Preserve: Regulations and information for the public. 1921.
162. Some rules for poisoning the cotton-boll weevil. B. R. Coad and T. P. Cassidy. 1922.
163. Dispersion of the boll weevil in 1920. B. R. Coad and R. W. Moreland. 1921.



164. Cotton culture in the San Joaquin Valley in California. Wofford B. Camp. 1921.
165. Lawn pennywort: A new weed. Albert A. Hansen. 1921.
166. Influence of winter rations on the growth of steers on pasture. E. W. Sheets. 1921.
167. The satin moth: An introduced enemy of poplars and willows. A. F. Burgess. 1921.
168. Annual report of the Governor of Alaska on the Alaska game law, 1920. Thomas Riggs, jr. 1921.
169. Annual white sweet clover and strains of the biennial form. A. J. Pieters and L. W. Kephart. 1921.
170. Instructions for bird banding. Frederick C. Lincoln. 1921.
171. Unprotected electric lights. A recently developed dust explosion and fire hazard. David J. Price and Hylton R. Brown. 1921.
172. The range crane-flies in California. C. M. Packard and B. G. Thompson. 1921.
173. The work of the Scottsbluff reclamation project experiment farm in 1918 and 1919. James A. Holden. 1921.
174. A dangerous tobacco disease appears in the United States. Erwin F. Smith and R. E. B. McKenney. 1921.
175. Linters. A. M. Agelasto. 1921.
176. Suggestions to growers for treatment of tobacco blue-mold disease in the Georgia-Florida district. Erwin F. Smith and R. E. B. McKenney. 1921.
177. Treatment of ornamental white pines infected with blister rust. J. F. Martin, G. F. Gravatt and G. B. Posey. 1921.
178. Status and results of home demonstration work, Northern and Western States, 1920. Florence E. Ward. 1921.
179. Status and results of county agent work, Northern and Western States, 1920. W. A. Lloyd. 1921.
180. The "alkali disease" of livestock in the Pecos Valley. C. Dwight Marsh and Glenwood C. Roe. 1921.
181. The present status of the tobacco blue-mold (*Peronospora*) disease in the Georgia-Florida district. Erwin F. Smith and R. E. B. McKenney. 1921.
182. The migratory bird treaty act. 1921.
183. Seedtime and harvest. Oliver E. Baker, Charles F. Brooks, James R. Covert and Reginald G. Hainesworth. 1922.
184. State laws and court decisions relating to cattle-tick eradication. Harry Goding. 1921.
185. Handbook for campers in the national forests in California. 1921.
186. The occurrence of wheat downy mildew in the United States. William H. Weston, jr. 1921.
187. List of serials currently received in the library of the United States Department of Agriculture. 1922.
188. Progress of barberry eradication. F. E. Kempton. 1921.
189. The well-planned kitchen. Ruth Van Deman. 1921. Rev. 1923.
190. Extension work among negroes, 1920. W. B. Mercler. 1921.
191. Use of explosives in blasting stumps. George R. Boyd. 1921.
192. Status and results of boys' and girls' club work, Northern and Western States, 1920. George E. Farrell. 1921.
193. Fulghum oats. T. R. Stanton. 1921.
194. Kaured wheat. J. Allen Clark and S. C. Salmon. 1921.
195. A list of fungi (*Ustilaginales* and *Uredinales*) prepared for exchange. Flora W. Patterson, William W. Diehl and Edith K. Cash. 1922.
196. Directory of officials and organizations concerned with the protection of birds and game, 1921. Geo. A. Lawyer and Frank L. Earnshaw. 1921.
197. The credit association as an agency for rural short-time credit. V. N. Valgren and Elmer E. Engelbert. 1921.
198. Government forest work in Utah. 1921.
199. Breeding Morgan horses at the United States Morgan Horse Farm. H. H. Reese. 1921.
200. Improvements in cotton production. O. F. Cook. 1921.
201. Eradication of the sweet-potato weevil in Florida. J. E. Graf and B. L. Boyden. 1921.
202. The migratory bird treaty act. United States vs. Joseph Lumpkin. 1922.
203. Statistics of cooperative extension work, 1921-22. Eugene Merritt. 1922.
204. The work of the Huntley reclamation project experiment farm in 1920. Dan Hansen. 1921.
205. Cottonseed mixing increased by modern gin equipment. W. W. Ballard and C. B. Doyle. 1922.
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208. Trebi barley, a superior variety for irrigated land. Harry V. Harlan, Merritt N. Pope and Louis C. Aicher. 1922.
209. The work of the San Antonio experiment farm in 1919 and 1920. George T. Ratliffe. 1922.
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211. Government forest work. 1922.
212. The manufacture and sale of farm equipment in 1920. H. R. Tolley and L. M. Church. 1922.
213. Eradication of lice on pigeons. H. P. Wood. 1922.
214. Fusarium tuber rot of potatoes. George K. K. Link and F. C. Meier. 1922.
215. Commercial control of citrus scab. John R. Winston. 1922.
216. Controlling the curculio, brown rot, and scab in the peach belt of Georgia. Oliver I. Snapp, William F. Turner, and John W. Roberts. 1922.
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224. Nicotine dust for control of the striped cucumber beetle. W. H. White. 1922.
225. Annual report of Governor of Alaska on the Alaska game laws, 1921. Scott C. Bone. 1922.
226. White pine blister rust in the western United States. 1922.
227. Eastern blue-stem of the black raspberry. R. B. Wilcox. 1922.
228. The livestock industry in South America. L. B. Burk and E. Z. Russell. 1922.
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238. United States grades for potatoes. Harold W. Samson. 1922.
239. State forestry laws of 1921. Jeannie S. Peyton. 1922.
240. The national forests of New Mexico. 1922.
241. Food animals and meat consumption in the United States. John Roberts. 1922.
242. Directory of officials and organizations concerned with the protection of birds and game. 1922. George A. Lawyer and Frank L. Earnshaw. 1922.
243. Forest fires in California, 1911-1920. S. B. Show and E. I. Kotok. 1923.
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245. United States grades for grain sorghums. H. J. Besley, E. G. Boerner, and B. E. Rothgeb. 1922.
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247. The uniformity of Pima cotton. Thomas H. Kearney. 1922.
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249. Tuberculin testing of livestock. L. B. Ernest and Elmer Lash. 1922.
250. Educational milk-for-health campaigns. Jessie M. Hoover. 1923.
251. Federal legislation, regulations, and rulings affecting lang-grant colleges and experiment stations. 1923.
252. Preparation of peat composts. Alfred P. Dachnowski. 1922.
253. Statistics of cooperative extension work, 1922-1923. Eugene Merritt. 1923.
254. Homemade apple and citrus pectin extracts and their use in jelly making. Minna C. Denton, Ruth Johnston, and Fanny Walker Yeatman. 1923.
255. Status and results of boys' and girls' club work, Northern and Western States, 1921. George E. Farrell and Gertrude L. Warren. 1923.
256. History and seed production of purple vetch. Roland McKee. 1923.
257. Composition of filter press (lime) cake. Sidney F. Sherwood. 1923.
258. Turpentine and rosin: Distribution of the world's production, trade, and consumption. V. E. Grotlich. 1923.
259. Commercial control of citrus melanose. John R. Winston and John J. Bowman. 1923.
260. Annual report of the Governor of Alaska on the Alaska game law, 1922. Scott C. Bone. 1923.
261. The purpose of bird censuses and how to take them. May Thacher Cooke. 1923.
262. Length of the dormancy period of the sugar-beet nematode in Utah. Gerald Thorne. 1923.
263. Preliminary report on control of San José scale with lubricating-oil emulsion. A. J. Ackerman. 1923.
264. Frost resistance in flax. Robert L. Davis. 1923.
265. Arbor Day. 1923.
266. Dispersion of the boll weevil in 1922. F. F. Bondy, R. C. Gaines, W. B. Williams, and M. T. Young. 1923.
267. The work of the Newlands reclamation project experiment farm in 1920 and 1921. F. B. Leadley and E. W. Knight. 1923.
268. Kill the common barberry with chemicals. Noel F. Thompson. 1923.
269. Barberry eradication prevents black rust in western Europe. E. C. Stakman. 1923.
270. Extension work in agricultural engineering, 1922. George R. Boyd. 1924.
271. Grounding cotton gins to prevent fires. Harry E. Roethe. 1923.
272. Woolly-pod milkweed, a dangerous stock-poisoning plant. C. D. Marsh and A. B. Clawson. 1923.
273. Flag smut of wheat. W. H. Tisdale, G. H. Dungan, and C. E. Leighty. 1923.
274. Dusting for the cotton boll weevil. B. R. Coad and T. P. Cassidy. 1923.
275. The work of the Huntley reclamation project experiment farm in 1921. Dan Hansen. 1923.
276. Inspection of milk supplies. Ernest Kelly and C. S. Leete. 1923.
277. Crop tests at the cooperative testing station, Sacaton, Ariz. C. J. King. 1923.
278. The commercial classification of American cotton, with reference to the standards for grade, color, and staple. Arthur W. Palmer. 1924.
279. Greasewood as a poisonous plant. C. Dwight Marsh, A. B. Clawson, and James F. Couch. 1923.
280. Kota wheat. J. Allen Clark and L. R. Waldron. 1923.
281. Potato brown-rot. F. C. Meier and G. K. K. Link. 1923.
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283. Livestock poisoning by cocklebur. C. Dwight Marsh, G. C. Roe, and A. B. Clawson. 1923.
285. Status and results of home demonstration work, Northern and Western States, 1921. Florence E. Ward. 1923.

286. The chayote: Its culture and uses. L. G. Hoover. 1923.
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295. Basic grading rules and working stresses for structural timbers. J. A. Newlin and R. P. A. Johnson. 1923.
296. Standard grading specifications for yard lumber. Edward P. Ivory, David G. White, and Arthur T. Upson. 1923.
297. The eelworm disease; a menace to alfalfa in America. G. H. Godfrey. 1923.
298. Directory of officials and organizations concerned with the protection of birds and game, 1923. George A. Lawyer and Frank L. Earnshaw. 1923.
299. Quarantine procedure to safeguard the introduction of citrus plants: A system of aseptic plant propagation. Walter T. Swingle, T. Ralph Robinson, and Eugene May, jr. 1924.
300. Commercial cuts of meat. W. C. Davis. 1924.
301. Introduction of parasites of the alfalfa weevil into the United States. Thomas R. Chamberlin. 1924.
302. Farm management extension. Early development and status in 1922. H. M. Dixon. 1924.
303. Hot-water treatment of sugar cane for insect pests—a precaution. P. A. Yoder and J. W. Ingram. 1923.
304. United States grades for shelled white Spanish peanuts. 1924.
305. Electrochemical treatment of seed wheat. C. E. Leighty and J. W. Taylor. 1924.
306. Statistics of cooperative extension work, 1923-24. Eugene Merritt. 1924.
307. A method of testing farm-management and cost-of-production data for validity of conclusions. H. R. Tolley and S. W. Mendum. 1924.
308. An extension program in range livestock, dairying, and human nutrition for the Western States. W. A. Lloyd. 1924.
309. Spraying strawberries for the control of fruit rots. E. M. Stoddard, D. H. Rose, and N. E. Stevens. 1924.
310. The solar propagating frame for rooting citrus and other subtropical plants. Walter T. Swingle, T. Ralph Robinson, and E. May, jr. 1924.
311. Cabbage-seed treatment. J. C. Walker. 1924.
312. Boys' and girls' club work, 1922. Ivan L. Hobson and Gertrude L. Warren. 1924.
313. Purchase of land for national forests under act of March 1, 1911, the Weeks' law. 1924.
314. Home demonstration work, 1922. Grace E. Frysinger. 1924.
315. Chilling of tomatoes. H. C. Diehl. 1924.
316. Methods and results of cooperative extension work, reported through county agricultural agents, 1922. H. W. Hochbaum. 1924.
317. Korean lespedeza, a new forage crop. A. J. Pieters and G. P. Van Eseltine. 1924.
318. The national forests of Arizona. 1924.
319. Composition of sugar-beet pulp and tops and of silage therefrom. Sidney F. Sherwood. 1924.
320. The Van Fleet raspberry, a new hybrid variety. George M. Darrow. 1924.
321. Control of cucumber mosaic in the greenhouse. S. P. Doolittle. 1924.
322. Mycotic stomatitis of cattle. John R. Mohler. 1924.
323. How to collect, label, and pack living plant material for long-distance shipment. B. T. Galloway. 1924.
324. Markton, an oat variety immune from covered smut. T. R. Stanton, D. E. Stephens, and E. F. Gaines. 1924.
325. Foot-and-mouth disease, with special reference to the outbreak of 1914. John R. Mohler. 1924.
326. United States grades for timothy hay, clover hay, clover mixed hay, and grass mixed hay, effective Feb. 1, 1924. Edward C. Parker. 1924.
327. The French turpentine system applied to longleaf pine. E. R. McKee. 1924.
328. Directory of officials and organizations concerned with the protection of birds and game: 1924. George A. Lawyer and Talbot Denmead. 1924.
329. Extension work in plant pathology, 1923. Fred C. Meier. 1924.
330. Work of the Huntley reclamation project experiment farm in 1922. Dan Hansen. 1924.
331. Standard specifications for corrugated metal pipe culverts. 1925.
332. Chemical eradication of the common barberry. Noel F. Thompson. 1924.
333. Handling the soft-corn crop. Frederick D. Richey. 1924.
334. The bee-louse, *Braula coeca*, in the United States. E. F. Phillips. 1925.
335. An extension program in crop production to reinforce force range livestock, dairying, and human nutrition for the Western States. W. A. Lloyd. 1924.
336. Spread of the European starling in North America. May Thacher Cooke. 1925.
337. Hot-water treatment of dormant and sprouted seed cane. P. A. Yoder. 1925.
338. Parasites and parasitic diseases of dogs. Maurice C. Hall. 1925.
339. Work of the Belle Fourche reclamation experiment farm from 1919 to 1922, inclusive. Beyer Aune. 1925.
340. Cost of producing field crops, 1923. M. R. Cooper and C. R. Hawley. 1925.
341. Seed flax as a farm crop in 1925. A. C. Dillman, A. C. Arny, Clyde McKee, T. E. Stoa, and A. N. Hume. 1925.
342. Work of the Umatilla reclamation project experiment farm in 1920, 1921, and 1922. H. K. Dean. 1925.

343. Extension work in agronomy, 1923. O. S. Fisher. 1925.  
 344. Extension work in agricultural engineering, 1923. Guy Ervin. 1925.  
 345. Farm-forestry extension, early development, and status in 1923. G. H. Collingwood. 1925.  
 346. Extension work with fruits, vegetables, and ornamentals, 1923. C. P. Close, W. R. Beattie, and F. L. Mulford. 1925.  
 347. Methods and results of cooperative extension work, 1923. H. W. Gilbertson and C. L. Chambers. 1925.  
 348. Boys' and girls' 4-H club work, 1923. I. W. Hill and Gertrude L. Warren. 1925.  
 349. Extension work in foods and nutrition, 1923. Miriam Birdseye. 1925.  
 350. An improved type of pressure tester for the determination of fruit maturity. J. R. Magness and George F. Taylor. 1925.  
 351. Centralized management of a large corporate estate operated by tenants in the wheat belt. Walter H. Baumgartel. 1925.  
 352. Work of the Newlands reclamation project experiment farm in 1922 and 1923. F. B. Headley, E. W. Knight, and L. E. Cline. 1925.  
 353. Improved oat varieties for New York and adjacent States. H. H. Love, T. R. Stanton, and W. T. Craig. 1925.  
 354. Weather conditions and forest fires in California. S. B. Show and E. I. Kotok. 1925.  
 355. Extension work among negroes, 1923. J. A. Evans. 1925.  
 356. The common barberry and how to kill it. F. E. Kempton and Noel F. Thompson. 1925.  
 357. Production of acala cotton in the San Joaquin Valley of California. Wofford B. Camp. 1925.  
 358. Fire and the forest. (California pine region.) S. B. Show and E. I. Kotok. 1925.  
 360. Directory of officials and organizations concerned with the protection of birds and game: 1925. Talbot Denmead and Frank L. Earnshaw. 1925.  
 364. The color grading of honey. E. L. Secrist. 1925.  
 375. An extension program in home management and farm management for the Western States, with reports of standing regional committees on range livestock, dairying, farm crops, and human nutrition. W. A. Lloyd. 1925.

NOTE.—Numbers omitted have not been published. (December 31, 1925.)

#### MISCELLANEOUS CIRCULARS

3. Relation of agricultural education to farm organizations. C. W. Pugsley. 1923.  
 4. List of workers in subjects pertaining to agriculture, 1922-1923: Part II. State agricultural colleges and experiment stations. 1923.  
 5. In the land of the ancient cliff dweller. Banderier National Monument. 1923.  
 6. Crop and livestock estimates, 1910-1922. 1923.  
 7. A forest fire prevention handbook for the school children of California. State Forester and Superintendent of Public Instruction, California. 1923.  
 8. Demonstration courses in kiln drying, boxing and crating, gluing of wood, wood properties and uses. 1923.  
 9. Importation and inspection of tea. 1923.  
 10. Grain futures act, 1922: General rules and regulations of the Secretary of Agriculture with respect to contract markets. 1923.  
 11. Agricultural cooperation: A selected and annotated list with special reference to purchasing, marketing, and credit. Chastina Gardner. 1923.  
 12. A handbook for better feeding of livestock. E. W. Sheets and William Jackson. 1923. Revised, 1925.  
 13. Local names of migratory game birds. W. L. McAtee. 1923.  
 14. State sanitary requirements governing admission of livestock. 1924.  
 15. Importance of forestry and the national forests. 1924.  
 16. Tree distribution under the Kinkaid Act of 1911. 1925.  
 17. List of workers in subjects pertaining to agriculture, 1923-1924: Part II. State agricultural colleges and experiment stations. 1924.  
 18. Instructions for banding birds. Frederick C. Lincoln. 1924.  
 19. Forest fires in intermountain region. 1924.  
 20. Crop report regulations: Effective on and after January 1, 1924. 1923.  
 21. Posters prepared by school children in milk-for-health programs. Jessie M. Hoover. 1924.  
 22. The naval stores act and regulations for its enforcement: Effective March 1, 1924. 1924.  
 23. The agricultural outlook for 1924. 1924.  
 24. Time-tables for home canning of fruits and vegetables. 1924.  
 25. Directions for examining all canned food before use. 1924.  
 26. The cow tester's handbook. J. C. McDowell. 1924.  
 27. Motion pictures of the Department of Agriculture: A list of films, and how to obtain them. 1924. Supplement, 1925. Title: New motion pictures released by the United States Department of Agriculture.  
 28. Tables for converting crude protein and ash content to a uniform moisture base. J. H. Shollenberger and D. A. Coleman. 1924.  
 29. Demonstration courses in wood utilization. 1924.  
 30. Directory of field activities of the Bureau of Plant Industry. 1924.  
 31. Let's know some trees. Charles H. Shinn. 1925.  
 32. Practical farm economics. Henry C. Taylor, H. R. Tolley, and J. W. Tapp. 1924.  
 33. Some tested methods for livestock improvement. D. S. Burch. 1925.  
 34. List of workers in subjects pertaining to agriculture in State agricultural colleges and experiment stations, 1924-25. Mary A. Agnew. 1925.  
 35. Bibliography on the marketing of agricultural products. Emily L. Day, Katherine Jacobs, Margaret T. Olcott, and Mary G. Lacy. 1925.  
 36. The Wichita National Forest and Game Preserve. S. M. Shanklin and James E. Scott. 1925.  
 37. Crop report regulations: Effective January 1, 1925. 1925.  
 38. The Agricultural Outlook for 1925. 1925.

39. Report of the National Conference on Utilization of Forest Products, Washington, D. C., November 19 and 20, 1924. 1925.
40. White pine is profitable if protected from blister rust. J. F. Martin. 1925.
41. Estimating the quantity of grain in bins, with chart reducing the necessary computations. E. N. Bates. 1925.
42. How to pick chickens. 1925.
43. Lessons on cotton for elementary schools. F. A. Merrill. 1925.
44. Forest fire control. John McLaren. 1925.
45. List of technical workers in the Department of Agriculture, 1924-1925.
46. A bibliography of the European corn borer (*Pyrausta nubilalis* Hbn.). J. S. Wade. 1925.
47. What the national forests mean to the intermountain region. Frederick S. Baker. 1925.
52. Certification of coal-tar food colors. 1925.
53. When fire is banished from the land of the white oak. 1925.
54. Efficient methods of retailing meat. Roy C. Lindquist. 1925.
60. Federal legislation providing for Federal aid in highway construction, the construction of national forest roads and trails, and the distribution of surplus war materials: Rules and regulations of the Secretary of Agriculture for carrying out the Federal Highway Act and amendments thereto. Rules and regulations for administering forest roads and trails. 1925.

NOTE.—Numbers omitted have not been published. (December 31, 1925.)

#### YEARBOOKS AND YEARBOOK SEPARATES (REPRINTS)

##### 1900 Yearbook.

- Report of the Secretary. James Wilson.
192. Rabies: Its cause, frequency, and treatment. D. E. Salmon. 1901.
  193. Agricultural education in France. C. B. Smith. 1901.
  194. The food of nestling birds. Sylvester D. Judd. 1901.
  195. Successful wheat growing in semiarid districts. Mark Alfred Carleton. 1901.
  196. Smyrna fig culture in the United States. L. O. Howard. 1901.
  197. How birds affect the orchard. F. E. L. Beal. 1901.
  198. Directory for farmers. 1901.
  199. Dairy products at Paris Exposition of 1900. Henry E. Alvord. 1901.
  200. Statistics of the principal crops and farm animals. 1901.
  201. Practical irrigation. C. T. Johnston and J. D. Stannard. 1901.
  202. Amplification of weather forecasts. Alfred J. Henry. 1901.
  203. Commercial plant introduction. Jared G. Smith. 1901.
  204. The selection of material for macadam roads. Logan Waller Page. 1901.
  205. Hot waves: Conditions which produce them, and their effect on agriculture. Alvin T. Burrows. 1901.
  206. Some poisonous plants of the northern stock ranges. V. K. Chestnut. 1901.
  207. The scale insect and mite enemies of citrus trees. C. L. Marlatt. 1901.
  208. Fungous diseases of forest trees. Hermann von Schrenk. 1901.
  209. Influence of rye on the price of wheat. Edward T. Peters. 1901.
  210. Mountain roads. James W. Abbott. 1901.
  211. The world's exhibit of leaf tobacco at the Paris Exposition of 1900. Marcus L. Floyd. 1901.
  212. Forest extension in the Middle West. William L. Hall. 1901.
  213. The value of potatoes as food. C. F. Langworthy. 1901.
  214. Practical forestry in the southern Appalachians. Overton W. Price. 1901.
  215. Commercial pear culture. M. B. Waite. 1901.
  216. Objects and methods of investigating certain physical properties of soils. Lyman J. Briggs. 1901.
  217. Development of the trucking interests. F. S. Earle. 1901.
  218. The date palm and its culture. Walter T. Swingle. 1901.
  219. Free delivery of rural mails. Charles H. Greathouse. 1901.
  220. Testing commercial varieties of vegetables. W. W. Tracy, jr. 1901.
  221. The use and abuse of food preservatives. W. D. Bigelow. 1901.
  222. The influence of refrigeration on the fruit industry. William A. Taylor. 1901.
  223. Our native pasture plants. F. Lamson-Scribner. 1901.
  224. William Saunders. Geo. Wm. Hill. 1901.

##### 1901 Yearbook.

- Report of the Secretary. James Wilson.
225. The relation of nutrition to the health of plants. Albert F. Woods. 1902.
  226. Mohair and mohair manufactures. George Fayette Thompson. 1902.
  227. The prairie dog of the Great Plains. C. Hart Merriam. 1902.
  228. Some typical reservoirs in the Rocky Mountain States. Elwood Mead. 1902.
  229. Little-known fruit varieties considered worthy of wider dissemination. William A. Taylor. 1902.
  230. Commercial apple orcharding. G. B. Brackett. 1902.
  231. The tuberculin test for tuberculosis. D. E. Salmon. 1902.
  232. The purpose of a soil survey. Milton Whitney. 1902.
  233. Some problems of the rural common school. A. C. True. 1902.
  234. The future demand for American cotton. J. L. Watkins. 1902.
  235. Insects as carriers and spreaders of disease. L. O. Howard. 1902.
  236. The timber resources of Nebraska. William L. Hall. 1902.
  237. Progress in plant and animal breeding. Willet M. Hays. 1902.
  238. Agricultural seeds: Where grown and how handled. A. J. Pieters. 1902.
  239. The cottonseed industry. Charles M. Daugherty. 1902.
  240. Road building with convict labor in the Southern States. J. A. Holmes. 1902.
  241. Grazing in the forest reserves. Filibert Roth. 1902.
  242. Agriculture in the tropical islands of the United States. O. F. Cook. 1902.
  243. The present status of the Mexican cotton-boll weevil in the United States. W. D. Hunter. 1902.
  244. Dieteries in public institutions. W. O. Atwater. 1902.

## 1901 Yearbook—Continued.

245. Government cooperation in object-lesson road work. Martin Dodge. 1902.  
 246. The home fruit garden. L. C. Corbett. 1902.  
 247. Two vanishing game birds—the woodcock and the wood duck. A. K. Fisher. 1902.  
 248. Experimental work with fungous diseases of grasshoppers. L. O. Howard. 1902.  
 249. A working plan for southern hardwoods, and its results. John Foley. 1902.  
 250. Floods and flood warnings. H. C. Frankenfeld. 1902.  
 251. Progress of the beet-sugar industry in the United States. Charles F. Saylor. 1902.  
 252. Agricultural investigations in the island possessions of the United States. Walter H. Evans. 1902.  
 253. Mountain roads as a source of revenue. James W. Abbott. 1902.  
 254. The hemp industry in the United States. Lyster H. Dewey. 1902.  
 255. The Chinook winds. Alvin T. Burrows. 1902.  
 256. Wheat ports of the Pacific coast. Edwin S. Holmes, jr. 1902.  
 257. Influence of environment on the chemical composition of plants. H. W. Wiley. 1902.  
 258. Statistical matter relating to principal crops and farm animals, freight exports, etc., in United States. 1902.  
 259. Directory for farmers. 1902.

## 1902 Yearbook.

- Report of the Secretary. James Wilson.  
 260. Dairying at home and abroad. Henry E. Alvord. 1903.  
 261. San José scale: Its native home and natural enemy. C. L. Marlatt. 1903.  
 262. The contamination of public water supplies by algae. George T. Moore. 1903.  
 263. Audubon societies in relation to the farmer. Henry Oldys. 1903.  
 264. Industrial progress in plant work. B. T. Galloway. 1903.  
 265. Some engineering features of drainage. C. G. Elliott. 1903.  
 266. Top working orchard trees. G. Harold Powell. 1903.  
 267. The educational value of livestock exhibitions. George M. Rommel. 1903.  
 268. Some of the principal insect enemies of coniferous forests in the United States. A. D. Hopkins. 1903.  
 269. Climate of the forest-denuded portion of the upper Lake region. Willis L. Moore. 1903.  
 270. Practicability of forest planting in the United States. William L. Hall. 1903.  
 271. Wet and dry seasons in California. Alexander G. McAdie. 1903.  
 272. Analysis of waters and interpretation of the results. J. K. Haywood. 1903.  
 273. Distribution and magnitude of the poultry and egg industry. George Fayette Thompson. 1903.  
 274. The influence of forestry upon the lumber industry. Overton W. Price. 1903.  
 275. The agaves, a remarkable group of useful plants. E. W. Nelson. 1903.  
 276. Chemical studies of some forest products of economic importance. William H. Krug. 1903.  
 277. Bacteria and the nitrogen problem. George T. Moore. 1903.  
 278. Systems of farm management in the United States. W. J. Spillman. 1903.  
 279. Improvement of cotton by seed selection. Herbert J. Webber. 1903.  
 280. The cost of food as related to its nutritive value. R. D. Milner. 1903.  
 281. Grape raisin, and wine production in the United States. George C. Husmann. 1903.  
 282. Flaxseed production, commerce, and manufacture in the United States. Charles M. Daugherty. 1903.  
 283. Promising new fruits. William A. Taylor. 1903.  
 284. Plants as a factor in home adornment. L. C. Corbett. 1903.  
 285. Progress in secondary education in agriculture. A. C. True. 1903.  
 286. Selecting and judging horses for market and breeding purposes. W. J. Kennedy. 1903.  
 287. Improvement of corn by seed selection. C. P. Hartley. 1903.  
 288. Tests on the physical properties of timber. F. E. Olmsted. 1903.  
 289. Practices in crop rotation. George K. Holmes. 1903.  
 290. Fertilizers for special crops. A. F. Woods and R. E. B. McKenney. 1903.  
 291. Crops used in the reclamation of alkali lands in Egypt. Thomas H. Kearney and Thomas H. Means. 1903.  
 292. Some practical results of experiment station work. W. H. Beal. 1903.  
 293. Cultivation and fertilization of peach orchards. M. B. Waite. 1903.  
 294. Rainfall and irrigation. Edward A. Beals. 1903.  
 295. Foot-and-mouth disease. D. E. Salmon. 1903.  
 296. Use of mineral oil in road improvement. James W. Abbott. 1903.  
 297. Directory for farmers. 1903.  
 298. Statistical matter relating to principal crops and animals, etc., 1902. 1903.  
 299. The principal injurious insects in 1902. F. H. Chittenden. 1903.  
 300. Agricultural periodicals in the department library, 1902. 1903.

## 1903 Yearbook.

- Report of the Secretary. James Wilson.  
 301. Weather Bureau stations and their duties. James Kenealy. 1904.  
 302. Relation of precipitation to yield of corn. J. Warren Smith. 1904.  
 303. Relations of Federal Government to control of contagious diseases of animals. D. E. Salmon. 1904.  
 304. The Nation's farm surplus. George K. Holmes. 1904.  
 305. Progress of road building in the Middle West. R. W. Richardson. 1904.  
 306. Some soil problems for practical farmers. E. C. Chilcott. 1904.  
 307. Use of Weather Bureau records in court. Henry J. Cox. 1904.  
 308. Consumption of cotton in the cotton States. J. L. Watkins. 1904.  
 309. The economic value of the bobwhite. Sylvester D. Judd. 1904.  
 310. The cultivation of corn. C. P. Hartley. 1904.  
 311. Some results of investigations in soil management. F. H. King. 1904.  
 312. The farmers' institutes. John Hamilton. 1904.

## 1903 Yearbook—Continued.

313. The United States Department of Agriculture and silk culture. L. O. Howard. 1904.
314. The growing of long-staple upland cottons. Herbert J. Webber. 1904.
315. Recent progress in timber preservation. Hermann von Schrenk. 1904.
316. The status of the Mexican cotton-boll weevil in the United States in 1903. W. D. Hunter. 1904.
317. Relation of cold storage to commercial apple culture. G. Harold Powell. 1904.
318. Preparing land for irrigation. R. P. Teale. 1904.
319. The industry in oil seeds. Charles M. Daugherty. 1904.
320. Relation of sugar beets to general farming. C. O. Townsend. 1904.
321. Principal commercial plant fibers. Lyster H. Dewey. 1904.
322. Some new facts about the migration of birds. Wells W. Cooke. 1904.
323. A model farm. W. J. Spillman. 1904.
324. Wheat flour and bread. Harry Snyder and Charles D. Woods. 1904.
325. Cultivation of drug plants in the United States. Rodney H. True. 1904.
326. Macaroni wheat. James H. Shepard. 1904.
327. Insect injuries to hardwood forest trees. A. D. Hopkins. 1904.
328. Determination of effect of preservatives in foods on health and digestion. H. W. Wiley. 1904.
329. The relation of forests to stream flow. James W. Toumey. 1904.
330. Promising new fruits. William A. Taylor. 1904.
331. The adulteration of drugs. Lyman F. Kebler. 1904.
332. Building sand-clay roads in Southern States. W. L. Spoon. 1904.
333. Directory for farmers. 1904.
334. Statistical matter relating to principal crops, farm animals, freight rates, exports, etc., in United States in 1903. 1904.
335. Principal injurious insects of 1903. F. H. Chittenden. 1904.

## 1904 Yearbook.

- Report of the Secretary. James Wilson.
336. The relation of plant physiology to the development of agriculture. Albert F. Woods. 1905.
337. Attitude of lumbermen toward forest fires. E. A. Sterling. 1905.
338. Relation of weather conditions to growth and development of cotton. J. B. Marbury. 1905.
339. Inspection of foreign food products. H. W. Wiley. 1905.
340. Opportunities in agriculture:  
 Growing crops under glass. B. T. Galloway. 1905.  
 Fruit growing. M. B. Waite. 1905.  
 General farming. W. J. Spillman. 1905.
341. Present status of the cotton boll weevil in the United States. W. D. Hunter. 1905.
342. The respiration calorimeter. W. D. Atwater and F. G. Benedict. 1905.
343. New citrus creations of the Department of Agriculture. Herbert J. Webber and Walter T. Swingle. 1905.
344. The relation of birds to fruit growing in California. F. E. L. Beal. 1905.
345. Forest planting and farm management. George L. Clothier. 1905.
346. Agricultural development in Argentina. Frank W. Bicknell. 1905.
347. The castor-oil industry. Charles M. Daugherty. 1905.
348. The nut weevils. F. H. Chittenden. 1905.
349. Potato culture near Greeley, Colo. J. Max Clark. 1905.
350. Practical road building in Madison Co., Tennessee. Sam C. Lancaster. 1905.
351. Sugar-beet seed breeding. J. E. W. Tracy. 1905.
352. The Weather Bureau and the homesecker. Edward L. Welis. 1905.
353. Detection of cottonseed oil in lard. L. M. Tolman. 1905.
354. Some uses of the grapevine and its fruit. George C. Husmann. 1905.
355. Insect injuries to forest products. A. D. Hopkins. 1905.
356. Promising new fruits. William A. Taylor. 1905.
357. Consumers' fancies. George K. Holmes. 1905.
358. The improvement of tobacco by breeding and selection. Archibald D. Shamel. 1905.
359. The determination of timber values. Edward A. Braniff. 1905.
360. The annual loss occasioned by destructive insects in the United States. C. L. Marlatt. 1905.
361. Cotton culture in Guatemala. O. F. Cook. 1905.
362. Boys' agricultural clubs. Dick J. Crosby. 1905.
363. Work of the Bureau of Plant Industry in meeting the ravages of the boll weevil, and some diseases of cotton. B. T. Galloway. 1905.
364. Some benefits the farmer may derive from game protection. T. S. Palmer. 1905.
365. State publications on agriculture. Charles H. Greathouse. 1905.
366. Animal breeding and feeding investigations by the Bureau of Animal Industry. D. E. Salmon. 1905.
367. Plant diseases in 1904. W. A. Orton. 1905.
368. The principal injurious insects in 1904. F. H. Chittenden. 1905.
369. Directory for farmers. 1905.
370. Statistical matter. 1905.
371. Game protection in 1904. T. S. Palmer. 1905.
372. Progress of forestry in 1904. Quincy R. Craft. 1905.

## 1905 Yearbook.

- Report of the Secretary. James Wilson.
373. The gypsy and brown-tail moths and their European parasites. L. O. Howard. 1906.
374. How parasites are transmitted. B. H. Ransom. 1906.
375. Some ways in which the Department of Agriculture and the experiment stations supplement each other. E. W. Allen. 1906.
376. How to grow young trees for forest planting. E. A. Sterling. 1906.

## 1905 Yearbook—Continued.

377. Diversified farming in the Cotton Belt: I. South Atlantic Coast. W. J. Spillman. II. Alabama and Mississippi. M. A. Crosby. III. Louisiana, Arkansas, and northeastern Texas. D. A. Brodie. IV. Texas. C. W. Warburton. 1906.
378. Dark fire-cured tobacco of Virginia and the possibilities for its improvement. George T. McNess and E. H. Mathewson. 1906.
379. Extension of the river and flood service of the Weather Bureau. H. C. Frankensfield. 1906.
380. Table sirups. H. W. Wiley. 1906.
381. Insect enemies of forest reproduction. A. D. Hopkins. 1906.
382. The use of illustrative material in teaching agriculture in rural schools. Dick J. Crosby. 1906.
383. New fruit productions of the Department of Agriculture. Herbert J. Webber. 1906.
384. The business of seed and plant introduction and distribution. A. J. Pieters. 1906.
385. Fruit and its uses as food. C. F. Langworthy. 1906.
386. The principal insect enemies of the peach. A. L. Quaintance. 1906.
387. The handling of fruit for transportation. G. Harold Powell. 1906.
388. Meadow mice in relation to agriculture and horticulture. D. E. Lantz. 1906.
389. The effect of inbreeding in plants. A. D. Shamel. 1906.
390. Renovated butter: Its origin and history. Levi Wells. 1906.
391. Ostrich farming in Arizona. Watson Pickrell. 1906.
392. Illustrations of the influence of experiment station work on culture of field crops. J. I. Schulte. 1906.
393. The relation of irrigation to dry farming. Elwood Mead. 1906.
394. New opportunities in subtropical fruit growing. P. H. Rolfs. 1906.
395. Prolonging the life of telephone poles. Henry Grimmell. 1906.
396. Farm practice in the control of field-crop insects. F. M. Webster. 1906.
397. Formaldehyde: Its composition and uses. Bernard H. Smith. 1906.
398. Waste in logging southern yellow pine. J. Girvin Peters. 1906.
399. Promising new fruits. William A. Taylor. 1906.
400. Causes affecting farm values. George K. Holmes. 1906.
401. Progress in drug-plant cultivation. Rodney H. True. 1906.
402. Federal game protection: A five years' retrospect. T. S. Palmer. 1906.
403. Game protection in 1905. T. S. Palmer. 1906.
404. Statistical matter relating to principal crops and farm animals, freight rates, exports, etc., of the United States, 1905. 1906.
405. A directory for farmers (corrected to April 1, 1906), with weather conditions, crop injuries, etc., for 1905. 1906.
406. Progress of forestry in 1905. Quincy R. Craft. 1906.
407. Progress of road legislation and road improvement in the different States. 1906.
408. The principal injurious insects of 1905. 1906.
409. Plant diseases in 1905. W. A. Orton. 1906.

## 1906 Yearbook.

- Report of the Secretary. James Wilson.
410. New problems of the weather. Willis L. Moore, W. J. Humphreys, and O. L. Fassig. 1907.
411. The present status of the nitrogen problem. A. F. Woods. 1907.
412. Object-lesson roads. Logan Waller Page. 1907.
413. Introduction of elementary agriculture into schools. A. C. True. 1907.
414. Cage-bird traffic of the United States. Henry Oldys. 1907.
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I. General. Wm. Hart Dexter. 1907. II. New England. George M. Whitaker. 1907. III. The North Central States. B. D. White. 1907. IV. The South. B. H. Rawl. 1907. V. The Pacific Coast. E. A. McDonald. 1907.
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 459. Truck farming in the Atlantic Coast States. L. C. Corbett. 1908.  
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 505. The problems of an irrigation farmer. Carl S. Scofield. 1910.  
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 509. Farming as an occupation for city-bred men. W. J. Spillman. 1910.  
 510. Introduction of the Hungarian partridge into the United States. Henry Oldys. 1910.

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 513. Information in regard to fabricated wire fences and hints to purchasers. Allerton S. Cushman. 1910.  
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 518. Comforts and conveniences in the farmers' homes. W. R. Beattie. 1910.  
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 529. Inspection of imported food and drug products. R. E. Doolittle. 1911.  
 530. Nitrogen-gathering plants. Karl E. Kellerman. 1911.  
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 534. Progress in saving forest waste. William L. Hall. 1911.  
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 543. Cheese and other substitutes for meat in the diet. C. F. Langworthy. 1911.  
 544. The value of the shellfish industry and the protection of oysters from sewage contamination. George W. Stiles, jr. 1911.  
 545. The migratory movements of birds in relation to the weather. Wells W. Cooke. 1911.  
 546. Cooperation in the handling and marketing of fruit. G. Harold Pcell. 1911.  
 547. Mountain snowfall observations and evaporation investigations in the United States. Frank H. Bigelow. 1911.  
 548. Fire prevention and control on the national forests. F. A. Silcox. 1911.  
 549. Promising new fruits. William A. Taylor. 1911.  
 550. The precooling of fruit. A. V. Stubenrauch and S. J. Dennis. 1911.  
 551. Camphor cultivation in the United States. S. C. Hood and R. H. True. 1911.  
 552. The effect of the present method of handling eggs on the industry and the product. M. E. Pennington and H. C. Pierce. 1911.  
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 568. Some results of the farmers' cooperative demonstration work. Bradford Knapp. 1912.  
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 571. Crawfish as crop destroyers. A. K. Fisher. 1912.  
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 574. The water economy of dry-land crops. Thomas H. Kearney and H. L. Shantz. 1912.  
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 576. The present outlook for irrigation farming. Carl S. Scofield. 1912.  
 577. Commercial methods of canning meats. C. N. McBryde. 1912.  
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 579. Cotton improvement on a community basis. O. F. Cook. 1912.  
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 581. Promising new fruits. W. A. Taylor and H. P. Gould. 1912.  
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 591. The handling of dressed poultry a thousand miles from the market. M. E. Pennington. 1913.  
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 594. Insects injurious to the onion crop. F. H. Chittenden. 1913.  
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 596. How the produce dealer may improve the quality of poultry and eggs. H. C. Pierce. 1913.  
 597. A successful method of marketing vegetable products. L. C. Corbett. 1913.  
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 606. Dairying and its relation to agriculture in semiarid regions. A. K. Risser. 1913.  
 607. Agriculture in public high schools. Dick J. Crosby. 1913.  
 608. The settlement of irrigated lands. Carl S. Scofield. 1913.  
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 621. What the Department of Agriculture is doing for the housekeeper. C. F. Langworthy. 1914.  
 622. Practical tree surgery. J. Franklin Collins. 1914.  
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 634. Clean water and how to get it on the farm. Robert W. Trullinger. 1915.  
 635. Story of the thermometer and its uses in agriculture. Alfred H. Thiessen. 1915.  
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 637. Cooperative marketing and financing of marketing associations. C. E. Bassett, Clarence W. Moomaw, and W. H. Kerr. 1915.  
 638. State management of public roads: Its development and trend. J. E. Pennybacker. 1915.

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639. Apple sirup and concentrated cider: New products for utilizing surplus and cull apples. H. C. Gore. 1915.
640. The economy of farm drainage. R. D. Marsden. 1915.
641. Movement from city and town to farms. George K. Holmes. 1915.
642. Our shorebirds and their future. Wells W. Cooke. 1915.
643. The preparation of fertilizer from municipal waste. J. W. Turrentine. 1915.
644. The American farm woman as she sees herself. Edward B. Mitchell. 1915.
634. Suggestions from Australasia to American sheep raisers. F. R. Marshall. 1915.
646. Selection of household equipment. Helen W. Atwater. 1915.
647. The egg and poultry demonstration car work in reducing our \$50,000,000 waste in eggs. M. E. Pennington, H. C. Pierce, and H. L. Shrader. 1915.
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650. Meat production in Australia and New Zealand. E. C. Joss. 1915.
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652. Nematodes and their relationships. N. A. Cobb. 1915.
653. Edible snails. E. W. Rust. 1915.
654. Statistics of grain crops, 1914. 1915.
655. Statistics of crops other than grain crops, 1914. 1915.
656. Livestock, 1914, and census data. 1915.
657. Imports and exports of agricultural products. 1915.

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661. Some outstanding factors in profitable farming. J. S. Cates. 1916.
662. Pointers on marketing wood-lot products. Stanley L. Wolfe. 1916.
663. How Hawaii helps her farmers to market their produce. E. V. Wilcox. 1916.
664. Unprofitable acres. J. C. McDowell. 1916.
665. Shipping fish three thousand miles to market. E. D. Clark. 1916.
666. Animal disease and our food supply. Edward B. Mitchell. 1916.
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668. The successful rural cooperative laundry. C. H. Hanson. 1916.
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677. The production and handling of grain in Argentina. Laurel Duval. 1916.
678. Improvement and management of native pastures in the West. James T. Jardine. 1916.
679. How seed testing helps the farmer. E. Brown. 1916.
680. Stories of the atmosphere. Roscoe Nunn. 1916.
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683. Statistics of crops other than grain crops, 1915. 1916.
684. Livestock, 1915, and miscellaneous data. 1916.
685. Imports and exports of agricultural products. 1916.

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696. Opening up the national forests by road building. O. C. Merrill. 1917.
697. Farmers' mutual fire insurance. V. N. Valgren. 1917.
698. Meeting the farmer halfway. Carl Vrooman. 1917.
699. A federated cooperative cheese manufacturing and marketing association. Hector Macpherson and W. H. Kerr. 1917.
700. The thanksgiving turkey. Andrew S. Weiant. 1917.
701. Possibilities of a market-train service. G. C. White and T. F. Powell. 1917.
702. Development and localization of truck crops in the United States. Fred J. Blair. 1917.
703. Pumping for irrigation on the farm. P. E. Fuller. 1917.
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706. Suppression of the gipsy and brown-tail moths and its value to States not infested. A. F. Burgess. 1917.
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709. Progress in handling the wool clip: Development in the West. F. R. Marshall. 1917.
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726. Rest rooms for women in marketing centers. Anne M. Evans. 1918.
727. The design of public roads. Charles H. Moorefield. 1918.
728. Fertilizers from industrial wastes. Wm. H. Ross. 1918.
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731. Danger of introducing fruit flies in the United States. E. A. Back. 1918.
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737. Cheesemaking brings prosperity to farmers of southern mountains. C. F. Doane and A. J. Reed. 1918.
738. Cooperative marketing, where? when? how? C. E. Bassett and O. P. Jesness. 1918.
739. Federal aid to highways. J. E. Pennybacker and L. E. Boykin. 1918.
740. The soy-bean industry in the United States. W. J. Morse.
741. Hides and skins: Production, foreign trade, supply, and consumption. George K. Holmes. 1918.
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743. Butter fat and income. J. C. McDowell. 1918.
744. How the dairy cow brought prosperity in the wake of the boll weevil. L. A. Higgins. 1918.
745. The service of cold storage in the conservation of foodstuffs. I. C. Franklin. 1918.
747. The peanut, a great American food. H. S. Bailey and J. A. LeClerc. 1918.
747. A wasted sugar supply. E. F. Phillips. 1918.
748. Present status of the peanut industry. H. C. Thompson. 1918.
749. Growth of the beef-cattle industry in the South. F. W. Farley. 1918.
750. Sheep and intensive farming. F. R. Marshall. 1918.
751. Wool: Production, foreign trade, supply, and consumption. George K. Holmes. 1918.
752. The world's supply of wheat. O. C. Stine. 1918.
753. Pig clubs and the swine industry. J. D. McVean. 1918.
754. Breeding horses for the United States Army. H. H. Reese. 1918.
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756. Sugar supply of the United States. Frank Andrews. 1918.
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761. Live stock, 1917, and miscellaneous data. 1918.
762. Imports and exports of agricultural products. 1918.

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10. Standards of purity for food products. 1903.
11. Methods and benefits of growing sugar beets. Charles F. Saylor. 1904.
12. Adulteration of alfalfa seed. James Wilson. 1904.
13. Standards of purity for food products. 1904.
14. Adulteration of alfalfa and red clover seed. James Wilson. 1905.
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133. Address of D. F. Houston, Secretary of Agriculture, before the Governors' Conference, Annapolis, Md., December 16, 1918. 1919.

134. A national lumber and forest policy. Address of Henry S. Graves before the American Lumber Congress, Chicago, Ill. April 16, 1919. 1919.
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  137. Regulations of the Secretary of Agriculture under section 5 of the United States cotton futures act as amended March 4, 1919. 1919.
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  139. Report of committee appointed by the Secretary of Agriculture to consider the subject of farm life studies as one of the divisions of research work of the proposed Bureau of Farm Management and Farm Economics. 1919.
  140. Lumber exports and our forests. Henry S. Graves. 1919.
  141. Regulations of the Secretary of Agriculture under the United States warehouse act of August 11, 1916, as amended July 24, 1919. Regulation for grain warehouses. 1919.
  142. Suggestions regarding fall-sown crops, with notes on the livestock situation, September, 1919. 1919.
  143. Regulations of the Secretary of Agriculture under the United States warehouse act of August 11, 1916, as amended July 24, 1919. Regulations for cotton warehouses. 1919.
  144. Rules and regulations of the Secretary of Agriculture under the food products inspection law of July 24, 1919. 1919.
  145. General regulations governing the importation, manufacture, storage and distribution of fertilizers and fertilizer ingredients. 1919.
  146. Address of D. F. Houston, Secretary of Agriculture, before the National Association of Commissioners of Agriculture at Auditorium Hotel, Chicago, Ill., November 11, 1919. 1919.
  147. Address of D. F. Houston, Secretary of Agriculture, before the Association of American Agricultural Colleges and Experiment Stations. Chicago, Ill. November 12, 1919. 1919.
  148. A policy of forestry for the Nation. Henry S. Graves. 1919.
  149. Proposed farm power studies as outlined by the farm power conference and the department committee on farm power projects. 1920.
  150. Regulations of the Secretary of Agriculture under the United States warehouse act of August 11, 1916, as amended July 24, 1919. Regulations for wool warehouses. 1920.
  151. Rules and regulations of the Secretary of Agriculture under the food products inspection law of May 31, 1920. 1920.
  152. Value of Government crop reports. Edwin T. Meredith (Secretary of Agriculture). 1920.
  153. Cooperative relations in agricultural development. Address of E. T. Meredith, Secretary of Agriculture, before the Land-Grant College Association, at Springfield, Mass., October 20, 1920. 1920.
  154. Rules and regulations of the Secretary of Agriculture under the United States warehouse act of August 11, 1916, as amended July 24, 1919. Regulations for tobacco warehouses. 1921.
  155. Rules and regulations of the Secretary of Agriculture under the food products inspection law of March 3, 1921. 1921.
  156. General rules and regulations of the Secretary of Agriculture under the packers and stockyards act of 1921. 1922.
  157. Handbook for use in the inspection of whole-milk American cheese under the food products inspection law. C. W. Fryhofer and Roy C. Potts. 1923.
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  159. Regulations of the Secretary of Agriculture under the United States Cotton Futures act. Effective August 1, 1922. 1922.
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  183. Forest experiment stations. Earle H. Clapp. 1921.
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67. Foreign markets for American agricultural products. Testimony of Frank H. Hitchcock, chief of the section of Foreign Markets, before the Industrial Commission. 1901.
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69. Progress of the beet-sugar industry in the United States in 1900. Charles F. Saylor. 1901.
70. Exhaustion and abandonment of soils. Testimony of Milton Whitney, chief of Division of Soils, before the Industrial Commission. 1901.
71. Some mutual relations between alkali soils and vegetation. Thomas H. Kearney and Frank K. Cameron. 1902.
72. Progress of the beet-sugar industry in the United States in 1901. Charles F. Saylor, C. O. Townsend, and A. J. Pieters. 1902.
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75. Indian corn in Argentina: Production and export. Frank W. Bicknell. 1903.
76. Report of the Secretary of Agriculture, 1903. James Wilson. 1903.
77. Alfalfa and beef production in Argentina. Frank W. Bicknell. 1904.

78. An enemy of the cotton boll weevil. O. F. Cook. 1904.  
 79. Report of the Secretary of Agriculture, 1904. James Wilson. 1904.  
 80. Progress of the beet-sugar industry in the United States in 1904. Charles F. Saylor, C. O. Townsend, and J. E. W. Tracy. 1905.  
 81. Report of the Secretary of Agriculture, 1905. James Wilson. 1905.  
 82. Progress of the beet-sugar industry in the United States in 1905. Charles F. Saylor. 1906.  
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 84. Progress of the beet-sugar industry in the United States in 1906. Charles F. Saylor. 1907.  
 85. Report of the Secretary of Agriculture, 1907. James Wilson. 1907.  
 86. Progress of the beet-sugar industry in the United States in 1907. Charles F. Saylor. 1908.  
 87. Report of the Secretary of Agriculture, 1908. (Abridged edition.) James Wilson. 1908.  
 88. The influence of sodium benzoate on the nutrition and health of man. Russell H. Chittenden, John H. Long, and Dr. Christian A. Herter. 1909.  
 89. Durability and economy in papers for permanent records. H. W. Wiley and C. Hart Merriam. 1909.  
 90. Progress of the beet-sugar industry in the United States in 1908. Charles F. Saylor. 1909.  
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 99. Classification of the cryphalinae, with descriptions of new genera and species. A. D. Hopkins. 1915.  
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 101. The woolly apple aphid. A. C. Baker. 1915.  
 102. Descriptions of some weevils reared from cotton in Peru. W. Dwight Pierce. 1915.  
 103. Social and labor needs of farm women. Extracts from letters received from farm women. 1915.  
 104. Domestic needs of farm women. Extracts from letters received from farm women. 1915.  
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 107. Larvae of the prioninae. Contributions toward a classification and biology of the North American cerambycidae. F. C. Craighead. 1915.  
 108. The acarina or mites. Nathan Banks. 1915.  
 109. Meat situation in the United States: Part I. Statistics of livestock, meat production, and consumption prices, and international trade for many countries. George K. Holmes. 1916.  
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 114. Studies of the lumber industry. Part I. Some public and economic aspects of the lumber industry. William B. Greeley. 1917.  
 115. Studies of the lumber industry. Part VIII. The distribution of softwood lumber in the Middle West. Wholesale distribution. Ovid M. Butler. 1918.  
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 117. Studies of the lumber industry: Part XI. The substitution of other materials for wood. Rolf Thelen. 1917.

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 Notice to exporters of desiccated fruits. 1904.

- Extension work in agriculture. 1906.
- Hearing before the commission appointed by the Secretaries of the Treasury, Commerce and Labor, and Agriculture, to make uniform rules and regulations for carrying into effect the provisions of the food and drugs act, Public No. 384, approved June 30, 1906.
- Actinidia chinensis*, yangtaw. 1908.
- Bambusa arundinacea*, bamboo. 1908.
- Food and drugs act, June 30, 1906. 1908.
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- Project statements. Description and use. 1908.
- Report of the Secretary of Agriculture on the southern Appalachian and White Mountain watersheds. James Wilson. 1908.
- Sapium sebiferum*, tallow tree. 1908.
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- The 28-hour law, June 29, 1903, 1908.
- Transfers. [Circular letter.] 1908.
- Address delivered by W. M. Hays, Assistant Secretary of Agriculture, before the National Farm Land Congress, Chicago, Ill., November 17, 1909. 1909.
- Before the honorable, the Attorney General of the United States re labeling of Canadian Club whiskey under the food and drugs act of June 30, 1906. Question submitted by the Secretary of Agriculture. Brief of the solicitor. 1911.
- Before the honorable, the Attorney General of the United States in re lard substitute, composed of 80 per cent of vegetable oils and 20 per cent of imported oleo stearin, under the meat inspection law. Question submitted by the Secretary of Agriculture. Brief of the solicitor. 1911.
- Before the honorable, the Attorney General of the United States in re the inspection, under the act of June 30, 1906, of meat food products derived from the carcasses of animals which did not receive a post-mortem inspection under that act. Question submitted by the Secretary of Agriculture. Brief of the solicitor. 1911.
- Instructions regarding the collection of samples under the insecticide act of 1910. 1911.
- Regulations governing leaves of absence in the Department of Agriculture. James Wilson. 1911.
- Report of the committee of bureau chiefs. (A. D. Melvin, chairman.) 1911.
- Cooperative laboratory at Reno, Nev., for the examination of potash-bearing materials. 1912.
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- Program of work of the Department of Agriculture, 1916. E. H. Bradley. 1915.
- Program of work of the Department of Agriculture, 1917. E. H. Bradley. 1916.
- Program of work of the Department of Agriculture, 1919. E. H. Bradley. 1919.
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- Grain farming in the Corn Belt, with all bulletins to which reference is made. Carl Vrooman. 1916.
- Quarantine on stone and quarry products on account of gypsy moth, with regulations. D. F. Houston. 1916.
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- A manual of dangerous insects likely to be introduced in the United States through importation. W. Dwight Pierce. 1917. Rev. 1918.
- Announcing a food production syndicate service for afternoon newspapers. 1917.
- Announcing an agricultural, dairying, poultry raising, and household syndicate service for weekly newspapers. 1917.
- Certificate of deduction and apportionment by the Secretary of Agriculture for the fiscal year 1915 under an act to provide that the United States shall aid States in construction of rural post roads, approved July 11, 1916. 1917. Revised, 1919; 1921; 1922; 1923.
- Food crops must be increased. Food production statements by the Secretary of Agriculture. D. F. Houston. 1917.
- Food production report submitted to the Senate. D. F. Houston. 1917.
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- The farm labor problem. D. F. Houston. 1917.
- The Liberty loan and the farmer. D. F. Houston. 1917.
- War emergency food survey: Detailed survey of retail concerns, New York City. 1917.
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- Wastes. The leaks in a nation's strength. 1917.
- Crop report regulations:
- Effective January 1, 1918. 1918.
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  - Effective January 1, 1921. 1921.
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  - Effective January 1, 1925. 1925. (Miscellaneous Circular 87.)
- Notice to shippers of shelled corn regarding loading of cars. 1918. (In cooperation with the Railroad Administration.) Rev. 1919.

- Remarks of D. F. Houston, Secretary of Agriculture, at the conference of editors of agricultural journals, Washington, D. C., Nov. 20, 1918. 1918.
- Steps to victory. David F. Houston. Address delivered before the Economic Club, New York City, December 6, 1917. 1918.
- Supplying the farm labor need. G. I. Christie and Clarence Du Bose. 1918.
- The business of agriculture during the war and after. Discussion of the Nation's most vital industry, by D. F. Houston, Secretary of Agriculture; R. A. Pearson, Assistant Secretary; and Clarence Ousley, Assistant Secretary. 1918.
- The city's part in solving the farm labor problem. David F. Houston. 1918.
- The food production outlook. 1918. D. F. Houston. 1918.
- Why we went to war. David F. Houston. 1918.
- Women on the farm. Clarence Ousley. 1918.
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- Arbor Day. 1919. D. F. Houston. 1919.
- Just a word about grain dust explosions. (In cooperation with the United States Grain Corporation.) 1919.
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- To-day and to-morrow in American agriculture. Remarks of D. F. Houston, Secretary of Agriculture, before the Association of American Agricultural Colleges and Experiment Stations, at Baltimore, Md., January 8, 1919. 1919.
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- Intermediate credit for the farmer. A pamphlet containing questions and answers on intermediate credit as provided for in the agricultural credits act of 1923 and essential facts showing the need of it. 1923.
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- Advantages of dairying in the South. 1914.
- Conveniences for handling the farm cow and her products. 1914.
- Do you keep a cow? 1914.
- Feeding the farm cow in the South. 1914.
- Hairy vetch in the Cotton Belt. C. V. Piper. 1914.
- Horse and mule raising in the South. 1914.
- How southern farmers may get a start in pig raising. 1914.
- Making farm butter in the South. 1914.
- Marketing butter and cream in the South. 1914.
- Permanent pastures for the Cotton Belt. Lyman Carrier. 1914.
- Producing sheep on southern farms. 1914.
- Rape as a forage crop in the Cotton Belt. C. V. Piper. 1914.
- Rye in the Cotton Belt. Clyde E. Leighty. 1914.
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- Sorghum for forage in the Cotton Belt. H. N. Vinal. 1914.
- Suggestions on poultry raising for the southern farmer. 1914.
- The adulteration and misbranding of the seeds of Kentucky bluegrass and redbtop. William A. Taylor. 1914.
- The feeding and care of dairy calves. 1914.
- The production and care of milk and cream. 1914.
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- Winter wheat in the Cotton Belt. Clyde E. Leighty. 1914.
- Cowpeas in the Cotton Belt. W. J. Morse. 1915.
- Notice regarding foot-and-mouth disease. 1915.
- Rules and regulations for the government of the watch force of the United States Department of Agriculture. 1915.
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- Geography of the world's agriculture. V. C. Finch and O. E. Baker. 1917.
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## DIVISION OF ACCOUNTS AND DISBURSEMENTS

## ANNUAL REPORTS

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|--------------------|----------------------|
| 1901. F. L. Evans. | 1914. A. Zappone.    |
| 1902. F. L. Evans. | 1915. A. Zappone.    |
| 1903. F. L. Evans. | 1916. A. Zappone.    |
| 1904. F. L. Evans. | 1917. A. Zappone.    |
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| 1908. A. Zappone.  | 1921. A. Zappone.    |
| 1909. A. Zappone.  | 1922. A. Zappone.    |
| 1910. A. Zappone.  | 1923. A. Zappone.    |
| 1911. A. Zappone.  | 1924. A. Zappone.    |
| 1912. A. Zappone.  | 1925. Not published. |
| 1913. A. Zappone.  |                      |

## UNNUMBERED PUBLICATIONS

- Fiscal regulations of the United States Department of Agriculture. (1898.) Revised, 1901; 1904; 1907; 1913. For later issues see advisory committee on finance and business methods.
- [Pay regulations.] F. L. Evans. 1903.
- Contract prices for supplies for Forest Service supply depot, Ogden, Utah, fiscal year 1910. 1909.
- Compendium of official, southern, and western freight classifications with directions as to the manner of making shipments of freight for the Department of Agriculture. A. Zappone. 1910.
- List of hotels throughout the United States offering special rates to employees of the Department of Agriculture. A. Zappone. 1910.

ADMINISTRATION OF GRAIN FUTURES ACT<sup>1</sup>

## ANNUAL REPORT

1923. Chester Morrill, assistant to the secretary.

## ADVISORY COMMITTEE ON FINANCE AND BUSINESS METHODS

## UNNUMBERED PUBLICATIONS

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- Amendments No. 1-11. 1919-1920.
- Effective January 1, 1922. 1922.
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- Amendments 2-4. 1920.
- Administrative regulations. Revised to August 1, 1918.
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- Travel regulations of the United States Department of Agriculture, effective July 1, 1921.
- Regulations of the United States Department of Agriculture: Fiscal, property, administrative, 1924.
- Appendix, provisions of law affecting the fiscal, property, and administrative regulations of the Department of Agriculture, 1924.

## APPOINTMENT CLERK

## ANNUAL REPORTS

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|----------------------|----------------------|
| 1902. J. B. Bennett. | 1908. J. B. Bennett. |
| 1903. J. B. Bennett. | 1909. J. B. Bennett. |
| 1904. J. B. Bennett. | 1910. J. B. Bennett. |
| 1905. Not published. | 1911. R. W. Roberts. |
| 1906. J. B. Bennett. | 1912. R. W. Roberts. |
| 1907. J. B. Bennett. | 1913. R. W. Roberts. |

## UNNUMBERED PUBLICATION

- Regulations governing appointments and other changes affecting personnel in the field service of the Department of Agriculture. 1912.

## CHIEF CLERK

## UNNUMBERED PUBLICATIONS

- Rules and regulations governing leaves of absence in the Department of Agriculture.
- Andrew Geddes. 1902.
- (Circular letter.) Penalty envelopes. 1903.
- Telephone service. 1906.
- (Circular letter.) In relation to leaves of absence. 1907.

OFFICE OF EDITORIAL AND DISTRIBUTION WORK<sup>2</sup>

## ANNUAL REPORTS

1924. L. J. Haynes. 1925. Not published.
- See also* Office of Information.

OFFICE OF EXHIBITS<sup>3</sup>

## ANNUAL REPORTS

1922. Joseph W. Hiscox. 1923. Joseph W. Hiscox.

<sup>1</sup> Name changed to "Grain Futures Administration July 1, 1923."

<sup>2</sup> Previous to July 1, 1923, the name of this office was "Division of Publications."

<sup>3</sup> Became part of Extension Service July 1, 1923.

OFFICE OF EXPERIMENT STATIONS<sup>4</sup>

ANNUAL REPORTS

1924. E. W. Allen. 1925. E. W. Allen.

HAWAII AGRICULTURAL EXPERIMENT STATION

*Annual report*

1924. J. M. Westgate, W. T. Pope, H. L. Chung, J. C. Ripperton, H. F. Willey, R. A. Goff, Mabel Greene. 1925.

*Bulletins*

- 49. The acid lime fruit in Hawaii. W. T. Pope. 1923.
- 50. The sweet potato in Hawaii. H. L. Chung. 1923.
- 51. The Guatemalan avocado in Hawaii. W. T. Pope. 1924.
- 52. Manganese chlorosis of pineapples: Its cause and control. Maxwell O. Johnson. 1924.
- 53. The Hawaiian tree fern as a commercial source of starch. J. C. Ripperton. 1924.
- 54. Edible canna in Hawaii. H. L. Chung and J. C. Ripperton. 1924.

PORTO RICO AGRICULTURAL EXPERIMENT STATION

*Bulletin*

30. Coffee varieties in Porto Rico. T. B. McClelland. 1924.

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*Annual report*

1924. J. B. Thompson, W. M. Perry, and Maybin S. Baker. 1925.

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5. Production of sweet-potato seedlings at the Virgin Islands Experiment Station  
John B. Thompson. 1925.

EXTENSION SERVICE

ANNUAL REPORTS

1924. C. W. Warburton. 1925. C. W. Warburton.

COOPERATIVE EXTENSION WORK

1923. Issued in 1924. 1924. Issued in 1925.

FOOD AND DRUG INSPECTION BOARD

UNNUMBERED PUBLICATIONS

Regulations and decisions concerning guaranties and serial numbers and their use. 1908.  
*See also* Bureau of Chemistry.

GRAIN FUTURES ADMINISTRATION<sup>5</sup>

ANNUAL REPORT

1924. Chester Morrill. 1925. J. W. T. Duvel.

OFFICE OF INFORMATION

UNNUMBERED PUBLICATIONS

The Federal farm loan act. 1916.  
How the South has helped beat the Kaiser. Push the cattle tick off the map. 1918.  
*See also* Office of Editorial and Distribution Work; Division of Publication.

OFFICE OF MOTION PICTURES<sup>6</sup>

ANNUAL REPORT

1923. Fred W. Perkins.

NEW DEPARTMENT BUILDINGS COMMITTEE

ANNUAL REPORTS

1904. B. T. Galloway. 1907. B. T. Galloway.  
1905. B. T. Galloway. 1908. B. T. Galloway.  
1906. B. T. Galloway.

<sup>3</sup> Became part of Extension Service July 1, 1923.

<sup>4</sup> Independent office previous to July 1, 1915; from then to July 1, 1923, under States Relations Service.

<sup>5</sup> For earlier reports see States Relations Service, Report on the receipts, expenditures and results in extension work in agriculture and home economics in the United States.

<sup>6</sup> Previous to July 1, 1923, the name of this office was "Administration of Grain Futures Act."



DIVISION OF PUBLICATIONS<sup>7</sup>

## ANNUAL REPORTS

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|----------------------------|--------------------------|
| 1901. George William Hill. | 1912. Joseph A. Arnold.  |
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| 1908. George William Hill. | 1919. Edwy B. Reid.      |
| 1909. Joseph A. Arnold.    | 1920. Edwy B. Reid.      |
| 1910. Joseph A. Arnold.    | 1922. John L. Cobbs, jr. |
| 1911. Joseph A. Arnold.    | 1923. Edwin C. Powell.   |

## BULLETINS

6. List by titles of publications of the United States Department of Agriculture from 1840 to June, 1901, inclusive. R. E. Handy and Minna A. Cannon. 1902.
7. Index to the yearbooks of the United States Department of Agriculture, 1894-1900. Charles H. Greathouse. 1902.
8. Index to farmers' bulletins. Nos. 1-250. Charles H. Greathouse. 1907.
9. Index to the yearbooks of the United States Department of Agriculture, 1901-1905. Charles H. Greathouse. 1908.
10. Index to the yearbooks of the United States Department of Agriculture, 1906-1910. Charles H. Greathouse. 1913.

## CIRCULARS

1. Organization of Department of Agriculture, 1901-2. 1901. Revised to September 1, 1903; September 1, 1904; October 1, 1905; January 1, 1907; January 1, 1908; June 10, 1908; February 15, 1909; July 1, 1910; July 1, 1911; July 1, 1912.
2. Publications for free distribution. Revised to October 3, 1906; January 15, 1907; July 1, 1907; December 15, 1907; June 10, 1908; September 1, 1908; March 1, 1909; October 15, 1909; April 1, 1910; June 15, 1910.
3. Publications for sale. Revised to October 1, 1906; June 1, 1907; October 1, 1907; January 1, 1908; June 15, 1908; December 1, 1908; October 1, 1909; June 15, 1910; October 15, 1910.
4. Farmers' bulletin subject index. 1906. Revised to include Bulletin 273. 1907. Revised to include Bulletin 309. 1907. Revised to include Bulletin 320. 1908. Revised to include Bulletin 331. 1908. Revised to include Bulletin 351. 1909. Revised to include Bulletin 382. 1909.
5. Food and drugs index. 1908. Revised October, 1908.
6. Publications of the United States Department of Agriculture and how they are distributed. 1909.
7. Publications of the Bureau of Chemistry. January 21, 1911; March 15, 1911; September 30, 1911; January 5, 1912; February 23, 1912; October 21, 1912; January 23, 1913; March 10, 1913; July 3, 1913.
8. Publications of the Bureau of Biological Survey. January 28, 1911. Revised March 10, 1911; December 7, 1911; January 23, 1912; October 31, 1912; March 10, 1913; July 3, 1913.
9. Publications, Office of the Secretary, Office of the Solicitor, and the Division of Publications. February 11, 1911. Revised March 28, 1911; November 2, 1911; March 5, 1912; October 30, 1912; March 10, 1913; July 7, 1913.
10. Publications of the Office of Public Roads, February 18, 1911. Revised April 4, 1911; February 23, 1912; May 7, 1912; December 28, 1912; February 19, 1913; July 7, 1913.
11. Publications of the Forest Service. March 2, 1911. April 4, 1911. Revised June 28, 1911; December 7, 1911; February 10, 1912; May 6, 1912; September 19, 1912; January 25, 1913; April 3, 1913; July 3, 1913.
12. Publications of the Bureau of Statistics. March 2, 1911. Revised August 14, 1911; February 8, 1912; August 8, 1912; January 15, 1913; July 3, 1913.
13. Publications of the Bureau of Plant Industry. March 3, 1911. Revised August 14, 1911; December 12, 1911; February 8, 1912; May 8, 1912; November 11, 1912; March 8, 1913; July 9, 1913.
14. Publications of the Bureau of Soils. March 7, 1911. Revised September 18, 1911; December 7, 1911; February 13, 1912; September 19, 1912; February 1, 1913; June 25, 1913.
15. Publications of the Bureau of Animal Industry. March 8, 1911. Revised October 3, 1911; December 7, 1911; January 27, 1912; April 18, 1912; November 9, 1912; February 17, 1913; June 25, 1913.
16. Publications of the Bureau of Entomology. March 15, 1911. Revised December 7, 1911; February 29, 1912; October 24, 1912; January 24, 1913; June 26, 1913.
17. Publications of the Office of Experiment Stations. March 20, 1911. Revised May 4, 1911; August 14, 1911; November 7, 1911; January 27, 1912; April 27, 1912; January 29, 1913; June 26, 1913.
18. Publications of the Library. March 4, 1911. Revised November 7, 1911; January 13, 1912; March 5, 1912; November 29, 1912; February 20, 1913; June 26, 1913.
19. Publications of the Department of Agriculture classified for the use of teachers. 1912.

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List of bulletins and circulars available for free distribution. 1902-1913. Corrected to January, 1902; January, 1903; September, 1903; January, 1904; June, 1904; November, 1904; July, 1905; April, 1906. (Ed. 7-14.)

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- Speech by Hon. James Wilson, Secretary of Agriculture, delivered July 7, 1902, at the School of Agriculture, Columbus, Ohio. 1902.
- Methods of studying effect of preservatives and other substances added to foods upon health and digestion. Address. [Harvey W. Wiley.] 1903.
- Crop export movement. 1905.
- Orris root culture, Rodney H. True. 1905.
- Game conditions in January, 1906. 1906.
- Cowpea seed. 1907.
- Investigations of Neosho Valley floods by drainage engineers of United States Office of Experiment Stations. 1908.
- The present status of the cotton-boll weevil. 1908.
- Report of committee on charges of J. F. Harms against the meat inspection service. 1909.
- Bulletins of interest to persons residing in cities and towns: November, 1911; December, 1912; April, June, July, October, November, 1913; January, March, May, July, September, October, 1914; April, July, 1915; 1916; 1917; 1918; 1921; April, August, 1924.
- Index of titles of farmers' bulletins available for distribution, Nos. 22-560. 1913.
- Organization of the Department of Agriculture, 1913. 1913.
- List of publications of the United States Department of Agriculture suggested for an agricultural reading course. 1914.
- Alphabetical subject index of farmers' bulletins. August, 1915; December, 1916; November, 1917; December, 1918; June, 1919; April, 1920; July, 1921; May, 1922; January, 15, 1924; February 15, 1924.
- Irrigation map of the United States. Outline map of the United States, by counties. 1915.
- Complete list of Farmers' Bulletins issued to October 15, 1916. 1916.
- Radio telephone stations distributing weather, market, and agricultural information of the United States Department of Agriculture, March 1, 1923. Map. 1923.
- Lists of Farmers' Bulletins.
- No. 1. Numerical list, April 25, 1924; February 25, 1925; September 1, 1925.
- No. 2. Classified list, April 25, 1924; May 1, 1925; September 1, 1925.
- No. 3. Bulletins of interest to persons who live in cities and towns. April 15, 1924; June 1, 1925.

## OFFICE OF THE SOLICITOR

## ANNUAL REPORTS

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|--------------------------|----------------------------|
| 1907. George P. McCabe.  | 1916. Francis G. Caffey.   |
| 1908. George P. McCabe.  | 1917. William M. Williams. |
| 1909. George P. McCabe.  | 1918. William M. Williams. |
| 1910. George P. McCabe.  | 1919. William M. Williams. |
| 1911. George P. McCabe.  | 1920. R. W. Williams.      |
| 1912. George P. McCabe.  | 1922. R. W. Williams.      |
| 1913. Francis G. Caffey. | 1923. R. W. Williams.      |
| 1914. Francis G. Caffey. | 1924. R. W. Williams.      |
| 1915. Francis G. Caffey. |                            |

## CIRCULARS

1. Negligence of employee imputable to carrier: Decision of the United States District Court for the District of Montana in cases involving violations of the act of Congress of June 29, 1906 (34 Stat. 607), commonly known as "The 28-hour law." 1907.
2. Unit of violation under "The 28-hour law." 1908. Opinion of the Circuit Court of Appeals for the Sixth Circuit in cases involving violations of the act of Congress of June 29, 1906, commonly known as "The 28-hour law." 1908.
3. "The 28-hour law" has the incidents of a civil action: Opinion of the Circuit Court of Appeals for the Sixth Circuit on petition for rehearing, in cases involving violations of the act of Congress of June 29, 1906 (34 Stat. 607), commonly known as "The 28-hour law." For original decision of Circuit Court of Appeals, referred to here, see Circular No. 2, Office of the Solicitor. 1908.
4. The 28-hour law: Opinion of Judge Landis of the Northern District of Illinois in certain cases involving violations of the act of June 29, 1906 (34 Stat. 607). 1908.
5. The 28-hour law: Opinion of Munger, J., of the District of Nebraska, overruling demurrer of defendant in cases involving violations of the act of June 29, 1906 (34 Stat. 607). 1908.
6. The 28-hour law: Syllabus of the opinion. 1908.
7. The 28-hour law: Charge to the jury by Lewis, J., in the United States District Court for the District of Colorado, in case involving violation of the act of June 29, 1906 (34 Stat. 607). 1908.
8. The 28-hour law: Opinions of Wolverton, J., District of Oregon, in cases involving violations of act of June 29, 1906 (34 Stat. 607). 1908.
9. The 28-hour law: Opinion of De Haven, J., of the Northern District of California, in cases involving violations of the act of June 29, 1906 (34 Stat. 607). 1908.
10. The food and drugs act: Opinion of Morris, J., of the District of Maryland, in a case involving an alleged violation of the act of June 30, 1906 (34 Stat. 768). 1908.
11. The 28-hour law: Charge to the jury by Meek, J., of the Northern District of Texas, in cases involving violations of the act of June 29, 1906 (34 Stat. 607). 1908.
12. The 28-hour law: Opinion of Ross, J., for Circuit Court of Appeals, Ninth Circuit, affirming decision of district court in favor of the Government, in case involving violation of the act of June 29, 1906 (34 Stat. 607). 1909.
13. The cattle quarantine law: Opinion of Evans, J., of the Western District of Kentucky, delivered in sustaining a demurrer to an indictment based upon the act of March 3, 1905, commonly known as the "Cattle quarantine law." 1909.
14. Twenty-eight hour law: Opinion of the Circuit Court of Appeals for the Eighth Circuit on Appeal by the United States from a judgment of the United States District Court for the District of Wyoming overruling the demurrer to the answer of defendant in a case involving a violation of the act of June 29, 1906 (34 Stat. 607), commonly known as "The 28-hour law." 1909.

15. The 28-hour law: Opinion of the Circuit Court of Appeals for the First Circuit, in cases involving violations of the act of Congress of June 29, 1906 (34 Stat. 607), commonly known as "The 28-hour law." 1909.
16. The 28-hour law: Opinion of the Circuit Court of Appeals for the Second Circuit, reversing judgment of the Circuit Court for the western district of New York, in a case founded on the act of June 29, 1906, commonly known as the "28-hour law." 1909.
17. The 28-hour law: Opinion of the Circuit Court of Appeals for the Eighth Circuit, in a case involving violation of the act of Congress of June 29, 1906 (34 Stat. 607), commonly known as the "28-hour law." 1909.
18. The 28-hour law: Opinion of the Circuit Court of Appeals for the Eighth Circuit, in cases involving violations of the act of Congress of June 29, 1906 (34 Stat. 607), commonly known as the "28-hour law." 1909.
19. The 28-hour law: Opinion of Holt, J., for the Western District of New York, in case involving violation of the act of Congress of June 29, 1906 (34 Stat. 607), commonly known as the "28-hour law." 1909.
20. The 28-hour law: Charge of Bean, J., to the jury in a case involving a violation of the act of June 29, 1906 (34 Stat. 607). 1909.
21. The 28-hour law: Decision of the Circuit Court of Appeals for the Fourth Circuit, reversing decision of the District Court for the Eastern District of Virginia, in a case involving violation of the 28-hour law (act of June 29, 1906; 34 Stat. 607.) 1909.
22. Judicial notice of the regulations of the United States Department of Agriculture. 1909.
23. The 28-hour law: Decision of the Circuit Court of Appeals for the Ninth Circuit, affirming the decision of the District Court for the Northern District of California, in a case involving violation of the 28-hour law (act of June 29, 1906, 34 Stat. 607). 1909.
24. The 28-hour law: Decision of the Circuit Court of Appeals for the Ninth Circuit, affirming the decision of the District Court of the United States for the Northern District of California, in a case involving a violation of the 28-hour law (act of June 29, 1906, 34 Stat. 607). 1909.
25. The 28-hour law: Decision of Judge Smith McPherson, in the Western District of Missouri, in cases involving violations of the 28-hour law (act of June 29, 1906; 34 Stat. 607). 1909.
26. The 28-hour law: Decision of the United States Circuit Court for the District of Minnesota, Third Division, in a case involving an alleged violation of the act of June 29, 1906 (34 Stat. 607). 1909.
27. The 28-hour law: Decisions of the Federal courts and an opinion of the Attorney General of the United States on the "Twenty-eight-hour law." 1909.
28. The 28-hour law: Opinion of the Circuit Court for the District of Oregon in cases involving violation of the act of Congress of June 29, 1906 (34 Stat. 607), commonly known as the "Twenty-eight-hour law." 1909.
29. The food and drugs act: Opinion of Holland, J., of the District Court of the United States for the Eastern District of Pennsylvania in overruling demurrer of defendant to information filed by the United States attorney charging a violation of the food and drugs act of June 30, 1906. 1910.
30. The 28-hour law: Decision of Judge Charles E. Wolverton, in the District of Oregon, in case involving violation of the 28-hour law (act of June 29, 1906; 34 Stat. 607). 1910.
31. The 28-hour law: Notice of decision of the Supreme Court of the United States affirming the judgment of the United States Circuit Court of Appeals for the Sixth Circuit in the cases of United States *v. The Baltimore & Ohio Southwestern Railroad Co.* involving violations of the act of June 29, 1906, commonly known as "The Twenty-eight-hour law." 1910.
32. Railroad right of way act: (March 3, 1875; 18 Stat. 472.) The United States of America *v. Chicago, Milwaukee & St. Paul Railway Co.* of Idaho. 1910.
33. The 28-hour law: Decision of the Circuit Court of Appeals for the Eighth Circuit, affirming the decision of the Circuit Court of the United States for the District of Minnesota, in a case arising under the 28-hour law. (Act of June 29, 1910; 34 Stat. 607). 1910.
34. The cattle quarantine law: Opinion of Grubb, J., of the Northern District of Alabama, delivered in overruling a demurrer to an indictment based on the act of March 3, 1905 (33 Stat. 1364). (Reported in 176 Fed. 942.) 1910.
35. The 28-hour law: Decision of the Circuit Court of Appeals for the Eighth Circuit, reversing the decision of the Circuit Court for the Western District of Missouri, in a case involving a violation of the 28-hour law (act of June 29, 1906; 34 Stat. 607). 1910.
36. The 28-hour law: Decision of the Circuit Court of Appeals for the Eighth Circuit affirming the decision of the District Court for the District of Kansas in cases involving violations of the 28-hour law (act of June 29, 1906; 34 Stat. 607). 1910.
37. The 28-hour law: Decision of the Circuit Court of Appeals for the Eighth Circuit, reversing the decision of the District Court for the District of Kansas in cases involving violations of the 28-hour law. (Act of June 29, 1906; 34 Stat. 607.) 1910.
38. Meat-inspection law: Meat food product—Lard substitute. Regulations of the Secretary of Agriculture. Opinion by J. A. Fowler, Acting Attorney General, United States Department of Justice, upon the question whether lard substitute and the establishments where the same is manufactured are subject to inspection under the meat-inspection law (34 Stat. 674). 1910.
39. The Lacey Act: Opinion of the Circuit Court of Appeals for the Eighth Circuit in a case involving a violation of the act of May 25, 1900 (31 Stat. 187), commonly known as the Lacey Act. (Filed March 5, 1910.) 1910.
40. Opinion of the District Court of the United States for the District of Idaho involving saloon trespass on national forest. 1910.
41. The food and drugs act: Opinion of Holland, J., of the Eastern District of Pennsylvania, in a case involving an alleged violation of the act of June 30, 1906 (34 Stat. 788). 1911.

42. The 28-hour law: Decision of the District Court of the United States for the District of Nebraska, Omaha Division, in a case involving an alleged violation of the act of June 29, 1906 (34 Stat. 607). 1911.
43. The 28-hour law: Decision of the Circuit Court of Appeals for the Eighth Circuit, reversing the decision of the District Court for the Eastern District of Missouri in a case involving a violation of the 28-hour law. (Act of June 29, 1906; 34 Stat. 607.) 1911.
44. The 28-hour law: Decision of the United States Circuit Court for the Western District of New York in cases involving apparent violations of the 28-hour law (act of June 29, 1906; 34 Stat. 607). 1911.
45. The food and drugs act: Decision of the Supreme Court of the United States affirming decree rendered by District Court of the United States for the Southern District of Illinois, in a proceeding by way of libel for condemnation and forfeiture under section 10 of the food and drugs act, June 30, 1906 (34 Stat. 768). 1911.
46. The 28-hour law: Decision of the Supreme Court of the United States, reversing decision of the Circuit Court of Appeals for the Sixth Circuit, in cases involving apparent violations of the 28-hour law (act of June 29, 1906; 34 Stat. 607). 1911.
47. The food and drugs act: Decision of the Circuit Court of Appeals for the Sixth Circuit, overruling claimants' demurrer to libel for condemnation and forfeiture under section 10 of the food and drugs act, June 30, 1906 (34 Stat. 768). 1911.
48. The 28-hour law: Decision of the United States Circuit Court for the Western District of New York, involving violation of the 28-hour law (act of June 29, 1906; 34 Stat. 607). 1911.
49. The food and drugs act: Decision of the Circuit Court of the United States for the Southern District of New York overruling defendant's demurrer in a prosecution arising under section 2 of the food and drugs act of June 30, 1906 (34 Stat. 768). 1911.
50. The cattle quarantine act: Decision of the District Court of the United States for the District of South Carolina, overruling a demurrer to an indictment in a case involving an alleged violation of the act of March 3, 1905 (33 Stat. 1264). 1911.
51. The food and drugs act: Decision of the District Court for the District of Minnesota overruling claimant's exceptions to libel for condemnation and forfeiture under section 10 of the food and drugs act, June 30, 1906 (34 Stat. 768). 1911.
52. National forests organic and administrative acts (acts of March 3, 1891, and June 4, 1897): Decision of the Supreme Court of the United States sustaining power of Congress to provide for creation of national forests and for their administration under rules and regulations made and promulgated by the Secretary of Agriculture. 1911.
53. The 28-hour law: Decision of the Circuit Court of the United States for the District of Oregon in a case involving violation of the act of June 29, 1906 (34 Stat. 607). 1911.
54. National forest administrative act (act June 4, 1897; 30 Stat., 11); The United States v. Pierre Grimaud and J. P. Carajous and The United States v. Antonio Inda. 1911.
55. The food and drugs act: Decision of the Court of Appeals for the Second Circuit overruling claimant's exceptions to libel for condemnation and forfeiture under section 10 of the food and drugs act, June 30, 1906 (34 Stat. 768). 1911.
56. Meat inspection law: Lard substitute composed of vegetable oils and imported oleostearin. 1911.
57. The food and drugs act: Decision of the United States Circuit Court of Appeals for the Second Circuit, affirming judgment of conviction in a prosecution arising under section 2 of the food and drugs act of June 30, 1906 (34 Stat. 768). 1911.
58. Food and drugs act: Decision of the Supreme Court of the United States reversing judgment of the Circuit Court of the United States for the Southern District of New York, in a prosecution under section 2 of the food and drugs act, June 30, 1906 (34 Stat. 768). 1911.
59. The 28-hour law: Decision of the United States Circuit Court of Appeals for the Second Circuit, affirming the decision of the Circuit Court of the United States for the Western District of New York in a case involving a violation of the 28-hour law (act of June 29, 1906; 34 Stat. 607). 1912.
60. The 28-hour law: Decision of the United States Circuit Court for the Western District of New York in cases involving apparent violations of the 28-hour law (act of June 29, 1906; 34 Stat. 607). 1912.
61. The 28-hour law: Decision of the United States Circuit Court for the Western District of New York in a case involving an apparent violation of the 28-hour law (act of June 29, 1906; 34 Stat. 607). 1912.
62. The 28-hour law: Decision of the Circuit Court of the United States for the Western District of New York in cases involving violations of the 28-hour law (act of June 29, 1906; 34 Stat. 607). 1912.
63. The 28-hour law: Opinion of the Circuit Court of Appeals for the Eighth Circuit, reversing judgment of the District Court for the District of Nebraska in a case involving alleged violation of the act of June 29, 1906 (34 Stat. 607), commonly known as the "Twenty-eight-hour law." 1912.
64. The 28-hour law: Opinion of the Circuit Court of Appeals for the Eighth Circuit, affirming judgment of the District Court for the District of Nebraska in a case involving a violation of the act of June 29, 1906 (34 Stat. 607), commonly known as the "Twenty-eight-hour law." 1912.
65. The 28-hour law: Decision of the District Court for the District of New Jersey in a case involving an alleged violation of the 28-hour law (act of June 29, 1906; 34 Stat. 607). 1912.
66. The plant quarantine act: Decision of the District Court for the Southern District of New York in a case involving a violation of the plant quarantine act of August 20, 1912 (37 Stat. 315). 1912.
67. The 28-hour law: Decision of the Circuit Court of Appeals for the Second Circuit, affirming the decision of the District Court of the United States for the Western District of New York in a case involving a violation of the 28-hour law (act of June 29, 1906; 34 Stat. 607). 1912.

68. The food and drugs act: Decision of the Supreme Court of the United States reversing decree of the Court of Appeals for the Third Circuit in a proceeding by way of libel for condemnation and forfeiture under section 10 of the food and drugs act, June 30, 1906 (34 Stat. 768). 1913.
69. National forests can not be occupied by ditches and canals for irrigation without permission from proper officers of the Government: Decision of the District Court of the United States for the District of Colorado sustaining the authority of the Government to prevent the unauthorized use and occupation of national forests. 1913.
70. The food and drugs act: Decision of the Court of Appeals of the District of Columbia affirming the decree of the Supreme Court of the District of Columbia in a proceeding by way of libel for the condemnation and forfeiture of adulterated flour under section 10 of the food and drugs act, June 30, 1906 (34 Stat. 768). 1913.
71. The food and drugs act: Decision of the United States Circuit Court of Appeals for the Eighth Circuit reversing judgment of the District Court of the United States for the Western District of Missouri in a proceeding by way of libel for condemnation and forfeiture under section 10 of the food and drugs act, June 30, 1906 (34 Stat. 768). 1913.
72. The food and drugs act: Decision of the Circuit Court of Appeals for the Sixth Circuit, affirming the decision of the District Court for the Southern District of Ohio. Proceedings under section 2 of the food and drugs act, June 30, 1906 (34 Stat. 768). 1913.
73. The 28-hour law: Decision of the Circuit Court of Appeals for the Second Circuit, affirming the decision of the Circuit Court of the United States for the Western District of New York, in cases arising under the 28-hour law (act of June 29, 1906; 34 Stat. 607). 1913.
74. The meat inspection law: Opinion of the District Court of the United States for the Eastern District of Missouri in a case arising under the meat inspection law (act of June 30, 1906; 34 Stat. 674). 1913.
75. The 28-hour law: Decision of the Circuit Court of Appeals for the Third Circuit, affirming the decision of the District Court of the United States for the District of New Jersey in a case arising under the 28-hour law (act of June 29, 1906; 34 Stat. 607). 1913.
76. The food and drugs act: Decision of the Supreme Court of the United States, reversing the decree of the Supreme Court of the District of Columbia, in a proceeding by way of libel for condemnation and forfeiture under section 10 of the food and drugs act, June 30, 1906 (34 Stat. 786). 1914.
77. The 28-hour law: Opinion of United States District Court for the District of North Dakota in a case involving an alleged violation of the act of June 29, 1906 (34 Stat. 607). 1914.
78. The food and drugs act: United States of America, libelants, v. Seven Cases, More or Less, of "Buffalo Lithia Water." 1914.
79. The food and drugs act: Decision of the Supreme Court of the United States affirming the judgment of the Circuit Court of Appeals for the Eighth Circuit, which reversed a decree of the District Court for the Western District of Missouri condemning and forfeiting 625 sacks of flour seized under section 10 of the food and drugs act of June 30, 1906 (34 Stat. 768). 1914.
80. The food and drugs act: Decision of the United States Circuit Court of Appeals for the Sixth Circuit affirming the judgment of the District Court of the United States for the Eastern District of Tennessee dismissing the libel for the condemnation and forfeiture of 40 barrels, etc., of Coca Cola seized under section 10 of the food and drugs act of June 30, 1906 (34 Stat. 768). 1914.
81. The food and drugs act: Decision of the United States Circuit Court of Appeals for the Second Circuit affirming a judgment of the United States District Court for the Southern District of New York in a prosecution for violation of the food and drugs act, June 30, 1906 (34 Stat. 768). 1914.
82. The food and drugs act: Decision of the United States Circuit Court of Appeals for the First Circuit, reversing the judgment of the District Court of the United States for the District of Massachusetts in a proceeding involving the seizure, under section 10 of the food and drugs act of June 30, 1906 (24 Stat. 768), of 131 boxes of confectionery. 1915.
83. The meat-inspection law: Decision of the Circuit Court of Appeals for the Third Circuit, affirming the decision of the District Court for the Western District of Pennsylvania in a case involving a violation of the meat-inspection law (act of June 30, 1906; 34 Stat. 674). 1915.
84. The food and drugs act: Decision of the Circuit Court of Appeals for the Seventh Circuit affirming the decision of the District Court of the United States for the Northern District of Illinois in a proceeding arising under sections 2 and 9 of the food and drugs act, June 30, 1906 (34 Stat. 768). 1915.
85. The food and drugs act: Decision of the Supreme Court of the United States affirming judgments of the District Court of the United States for the District of Nebraska in proceedings instituted under section 10 of the food and drugs act of June 30, 1906 (34 Stat. 768), as amended by the act of August 23, 1912 (37 Stat. 416). 1916.
86. The food and drugs act: Decision of the Supreme Court of the United States reversing the judgment of the Circuit Court of Appeals for the Sixth Circuit, which sustained a judgment of the District Court for the Eastern District of Tennessee dismissing the libel for condemnation and forfeiture of 40 barrels and 20 kegs of Coca Cola, seized under section 10 of the food and drugs act of June 30, 1906 (34 Stat. 768). Case remanded for further proceedings in conformity with opinion of the Supreme Court. 1916.
87. The food and drugs act: Decision of the United States Circuit Court of Appeals for the Third Circuit, affirming a decree of the United States Court for the Eastern District of Pennsylvania, condemning and forfeiting as misbranded certain packages of medicine proceeded against under the food and drugs act of June 30, 1906 (34 Stat. 768), as amended by the act of August 23, 1912 (37 Stat. 416). 1916.

88. The food and drugs act: Decision of the Circuit Court of Appeals for the Sixth Circuit, affirming a judgment of the District Court of the United States for the Northern District of Ohio in a case involving a violation of the food and drugs act of June 30, 1906 (34 Stat. 768), as amended by the act of August 23, 1912 (37 Stat. 416). 1917.
89. The food and drugs act: Decision of the Supreme Court of the United States affirming the judgment of the Circuit Court of Appeals for the Second Circuit, which sustained a conviction under the second count of a criminal information charging a violation of section 8, subdivision 1, in the case of food, of the food and drugs act of June 30, 1906 (34 Stat. 768). 1918.
90. The food and drugs act: Decision of the Circuit Court of Appeals for the Seventh Circuit, affirming a judgment of the District Court of the United States for the Southern District of Ohio in a case involving a violation of the food and drugs act of June 30, 1906 (34 Stat. 768). 1918.
91. The food and drugs act: Decision of the Supreme Court of the United States reversing the judgment of the District Court for the Southern District of New York, which sustained a demurrer to a criminal information charging a violation of the food and drugs act of June 30, 1906 (34 Stat. 768). Cause remanded for further proceedings. 1918.

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- , First supplement. Embracing statutes and parts of statutes, applicable to the United States Department of Agriculture, enacted from August 28, 1912, to March 4, 1913, inclusive. Otis H. Gates. 1913.
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- The national forest manual. General laws, parts of laws, decisions, and opinions applicable to the creation, administration, and protection of national forests. Prepared for the use of officers and employees of the Department of Agriculture. 1913. (*See also* Forest Service, unnumbered publications.) Revised, 1916. Title: Laws, decisions and opinions applicable to the national forests. R. F. Feagans.
- Food and drugs act June 30, 1906, and amendments of August 23, 1912, and March 3, 1913, with the rules and regulations for the enforcement of the act, food inspection decisions, selected court decisions, digest of decisions, opinions of the Attorney General and appendix. C. A. Gwinn. 1914.
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1923. Henry C. Taylor.  
1924. Henry C. Taylor.  
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- Handbook of official grain standards for rye. (Tabulated and abridged.) 1923.
- United States warehouse act, as amended July 25, 1919, and February 23, 1923. 1923.
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- Handbook of United States grades for grain sorghums. (Tabulated and abridged.) 1924.
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DIVISION OF AGROSTOLOGY<sup>9</sup>

## BULLETINS

24. Studies on American grasses: I. Some recent collections of Mexican grasses. F. Lamson-Scribner and Elmer D. Merrill. II. Notes on *Panicum nitidum* Lam., *Panicum scoparium* Lam., and *Panicum pubescens* Lam. F. Lamson-Scribner and Elmer D. Merrill. III. Miscellaneous notes and descriptions of new species. F. Lamson-Scribner and Carleton R. Ball. 1901.
25. Field work of the division of agrostology. Cornelius L. Shear. 1901.

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27. Agrostological notes. F. Lamson-Scribner and Elmer D. Merrill. 1901.
28. Grasses and fodder plants on the Potomac ams. C. R. Ball. 1901.
29. The grasses in Elliott's "Sketch of the Botany of South Carolina and Georgia." F. Lamson-Scribner. 1901.
30. New or little-known grasses. F. Lamson-Scribner. 1901.
31. Bermuda grass. A. S. Hitchcock. 1901.
32. Some Arizona grasses. Elmer D. Merrill. 1901.
33. Range grass and forage plant experiments at Highmore, S. Dak. F. Lamson-Scribner. 1901.
34. *Aristida purpurea* Nutt., and its allies. Elmer D. Merrill. 1901.
35. Agrostological notes. F. Lamson-Scribner and Elmer D. Merrill. 1901.
36. List of the publications of the division of agrostology. F. Lamson-Scribner. 1901.

BUREAU OF ANIMAL INDUSTRY<sup>10</sup>

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|----------------------------|-----------------------------|
| Seventeenth, 1900. 1901.   | Twenty-third, 1906. 1908.   |
| Eighteenth, 1901. 1902.    | Twenty-fourth, 1907. 1909.  |
| Nineteenth, 1902. 1903.    | Twenty-fifth, 1908. 1910.   |
| Twentieth, 1903. 1904.     | Twenty-sixth, 1909. 1911.   |
| Twenty-first, 1904. 1905.  | Twenty-seventh, 1910. 1912. |
| Twenty-second, 1905. 1907. | Twenty-eighth, 1911. 1913.  |

## ANNUAL REPORTS OF CHIEF

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|---------------------|-----------------------|
| 1901. D. E. Salmon. | 1914. A. D. Melvin.   |
| 1902. D. E. Salmon. | 1915. A. D. Melvin.   |
| 1903. D. E. Salmon. | 1916. A. D. Melvin.   |
| 1904. D. E. Salmon. | 1917. A. D. Melvin.   |
| 1905. D. E. Salmon. | 1918. John R. Mohler. |
| 1906. A. D. Melvin. | 1919. John R. Mohler. |
| 1907. A. D. Melvin. | 1920. John R. Mohler. |
| 1908. A. D. Melvin. | 1921. John R. Mohler. |
| 1909. A. D. Melvin. | 1922. John R. Mohler. |
| 1910. A. D. Melvin. | 1923. John R. Mohler. |
| 1911. A. D. Melvin. | 1924. John R. Mohler. |
| 1912. A. D. Melvin. | 1925. John R. Mohler. |
| 1913. A. D. Melvin. |                       |

## ANIMAL HUSBANDRY DIVISION—A H SERIES

- G-25. The candling and preservation of eggs. 1918.
- G-27. Homemade poultry appliances for poultry club members. 1918.
- G-28. Hatch early. 1918.
- G-30. First care of baby chicks. 1919.
- G-31. Culling the flock. 1918.

## BULLETINS

27. Information concerning the Angora goat. George Fayette Thompson. 1901.
28. Legislation with reference to bovine tuberculosis, being a digest of the laws in force and a transcript of the laws, rules and regulations, and proclamations for the several States and Territories. D. E. Salmon. 1901.
29. American breeds of fowls: I. The Plymouth Rock. T. F. McGrew. 1901.
30. Trichinosis in Germany. C. W. Stiles and Albert Hassall. 1901.
31. American breeds of fowls: II. The Wyandotte. T. F. McGrew. 1901.
32. The tuberculin test of imported cattle. D. E. Salmon. 1901.
33. Relation of bovine tuberculosis to the public health. D. E. Salmon. 1901.
34. American breeds of beef cattle with remarks on pedigrees. George M. Rommel. 1902.
35. Eleven miscellaneous papers on animal parasites. Charles Wardell Stiles, Albert Hassall, W. Ashby Frankland, and Louise Tayler. 1902.
36. Apoptictiform septicemia in chickens. Victor A. Nørgaard and John R. Mohler. 1902.
37. Market classes of horses. George M. Rommel. 1902.
38. Tuberculosis of the food-producing animals. D. E. Salmon. 1906.
39. Index-catalogue of medical and veterinary zoology: Authors. Ch. Wardell Stiles and Albert Hassall. 1902-1912.
40. Description and treatment of scabies in cattle. Richard W. Hickman. 1902.
41. Mexico as a market for purebred cattle from the United States. D. E. Salmon. 1902.

<sup>9</sup> Became part of Bureau of Plant Industry July 1, 1901.

<sup>10</sup> See also Bureau of Dairying.

42. Emergency report on surra. D. E. Salmon and Ch. Wardell Stiles. With a bibliography of surra and allied trypanosomatic diseases. Albert Hassall. 1902.
43. State and Territorial laws relating to contagious and infectious diseases of animals. 1901. 1902.
44. Infectiveness of milk of cows which have reacted to the tuberculin test. John R. Mohler. 1903.
45. Takosis, a contagious disease of goats. John R. Mohler and Henry J. Washburn. 1903.
46. The milk supply of 200 cities and towns. Henry E. Alvord and R. A. Pearson. 1903.
47. The hog industry. George M. Rommel. 1904.
48. The animal industry of Argentina. Frank W. Bicknell. 1903.
49. The cold curing of cheese. S. M. Babcock, H. L. Russell, U. S. Baer, L. L. Van Slyke, G. A. Smith, and E. B. Hart. 1903.
50. German meat regulations, with original texts. 1903.
51. The available energy of timothy hay. Henry Prentiss Armsby and J. August Fries. 1903.
52. Experiments concerning tuberculosis under the supervision of the Biochemic Division. Part I. Marion Dorset. 1904. Part II. E. A. de Schweinitz, Marion Dorset, and E. C. Schroeder. 1905. Part III. E. C. Schroeder and W. E. Cotton. 1905.
53. Reports on bovine tuberculosis and public health. D. E. Salmon. 1904.
54. Laws (Federal, State, and Territorial) relating to contagious and infectious diseases of animals. 1902 and 1903. 1904.
55. Statistics of the dairy. Henry E. Alvord. 1903.
56. Digestion experiments with poultry. E. W. Brown. 1904.
57. Studies upon the keeping quality of butter: I. Canned butter. Lore A. Rogers. 1904.
58. The fat testing of cream by the Babcock method. Ed. H. Webster. 1904.
59. The farm separator: Its relation to the creamery and to the creamery patron. Ed. H. Webster. 1904.
60. Manson's eye worm of chickens. B. H. Ransom. 1904.
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62. The relation of bacteria to the flavors of Cheddar cheese. Lore A. Rogers. 1904.
63. Foot-rot of sheep: Its nature, cause, and treatment. John R. Mohler and Henry J. Washburn. 1904.
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67. Necrotic stomatitis, with special reference to its occurrence in calves (calf diphtheria) and pigs (sore mouth). John R. Mohler and George Byron Morse. 1905.
68. Information concerning the milk of goats. George Fayette Thompson. 1905.
69. The external parasites of hogs, being articles on the hog louse and mange, or scabies, of hogs. Earl C. Stevenson. 1905.
70. The milk supply of 29 southern cities. C. F. Doane. 1905.
71. The Camembert type of soft cheese in the United States. H. W. Conn, Charles Thom, A. W. Bosworth, W. A. Stocking, Jr., and T. W. Issajeff. 1905.
72. The etiology of hog cholera. M. Dorset, B. M. Bolton, and C. N. McBryde. 1905.
73. The bacteria of Pasteurized and un-Pasteurized milk under laboratory conditions. Lore A. Rogers. 1905.
74. Energy values of red clover hay and maize meal. Henry Prentiss Armsby and J. August Fries. 1905.
75. Records of dairy cows in the United States. Clarence B. Lane. 1905.
76. The score card in stock breeding. George M. Rommel. 1905.
77. Cattle, sheep, and hog feeding in Europe. Willard John Kennedy. 1905.
78. Texas fever (otherwise known as tick fever, splenic fever, or southern fever), with methods for its prevention. John R. Mohler. 1905.
79. The determination of generic types and a list of roundworm genera, with their original and type species. Ch. Wardell Stiles and Albert Hassall. 1905.
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81. The milk supply of Boston, New York, and Philadelphia. George M. Whitaker. 1905.
82. Fungi in cheese ripening: Camembert and Roquefort. Charles Thom. 1906.
83. The cold storage of cheese. (Experiments of 1903-4.) Clarence B. Lane. 1906.
84. Investigations in the manufacture and storage of butter: I. The keeping qualities of butter made under different conditions and stored at different temperatures. C. E. Gray and G. L. McKay. 1906.
85. Investigations in the manufacture and curing of cheese: VI. The cold curing of American cheese, with a digest of previous work on the subject. C. F. Doane. 1906.
86. Experiments with milk artificially infected with tubercle bacilli. E. C. Schroeder and W. E. Cotton. 1906.
87. Market milk investigations: II. The milk and cream exhibit at the national dairy show, 1906. Clarence B. Lane. 1906.
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90. Poultry investigations at the Maine Agricultural Experiment Station. Charles D. Woods and Gilbert M. Gowell. 1906.
91. Feeding prickly pear to stock in Texas. David Griffiths. 1906.
92. The milking machine as a factor in dairying: I. Practical studies of a milking machine. C. L. Lane. II. Bacteriological studies of a milking machine. W. A. Stocking. 1907.
93. The relation of tuberculous lesions to the mode of infection. E. C. Schroeder and W. E. Cotton. 1906.
94. Investigations in the use of the bomb calorimeter in cooperation with the Pennsylvania State College agricultural experiment station. J. August Fries. 1907.
95. The bacteriolytic power of the blood serum of hogs. B. M. Bolton. 1907.



96. A comparative study of tubercle bacilli from varied sources. John R. Mohler and Henry J. Washburn. 1907.
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99. The danger from tubercle bacilli in the environment of tuberculous cattle. E. C. Schroeder and W. E. Cotton. 1907.
100. The germicidal value of liquor cresolis compositus (U. S. P.). C. N. McBryde. 1907.
101. The available energy of red clover hay. Investigations with the respiration calorimeter. Henry Prentiss Armsby and J. August Fries. 1908.
102. Further experiments concerning the production of immunity from hog cholera. M. Dorset, C. N. McBryde, and W. B. Niles. 1908.
103. Experiments in beef production in Alabama. J. F. Duggar and W. F. Ward. 1908.
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105. Varieties of cheese: Descriptions and analyses. C. F. Doane and H. W. Lawson. 1908.
106. Experiments on the digestibility of prickly pear by cattle. R. F. Hare. 1908.
107. The analysis of coal-tar cresote and cresylic acid sheep dips. Robert M. Chapin. 1908.
108. Feeding for meat production. Henry Prentiss Armsby. 1908.
109. Proteolytic changes in the ripening of Camembert cheese. Arthur W. Dox. 1908.
110. A biometrical study of egg production in the domestic fowl. Raymond Pearl and Frank M. Surface. Pts. I-III. 1909-1914.
111. A chemical and physical study of the large and small fat globules in cows' milk. R. H. Shaw and C. H. Eckles. 1909.
112. The loco-weed disease of the plains. C. Dwight Marsh. 1909.
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114. The influence of acidity of cream on the flavor of butter. L. A. Rogers and C. E. Gray. 1909.
115. Camembert cheese problems in the United States. Charles Thom. 1909.
116. Tests concerning tubercle bacilli in the circulating blood. E. C. Schroeder and W. E. Cotton. 1909.
117. Leucocytes in milk: Methods of determination and the effect of heat upon their number. H. C. Campbell. 1909.
118. Cultural studies of species of *Penicillium*. Charles Thom. 1910.
119. Studies on blood and blood parasites. Howard Crawley. 1909.
120. The intracellular enzymes of *Penicillium* and *Aspergillus*, with special reference to those of *Penicillium camemberti*. Arthur Wayland Dox. 1910.
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122. Factors controlling the moisture content of cheese curds. J. L. Sammis, S. K. Suzuki, and F. W. Laab. 1910.
123. The influence of lactic acid on the quality of cheese of the Cheddar type. C. F. Doane. 1910.
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125. The gid parasite and allied species of the cestode genus *Multiceps*. Maurice C. Hall. 1910.
126. The bacteriology of commercially Pasteurized and raw market milk. S. Henry Ayres and William T. Johnson, Jr. 1910.
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128. The influence of type and of age upon the utilization of feed by cattle. Henry Prentiss Armsby and J. August Fries. 1911.
129. Cattle breeders' associations in Denmark. Frederik Rasmussen. 1911.
130. Studies on the biology of the Texas-fever tick. H. W. Graybill. 1911.
131. Beef production in Alabama: I. Cost of raising the cattle. II. Wintering steers preparatory to summer fattening on pasture. III. Fattening cattle on pasture. Dan T. Gray and W. F. Ward. 1911.
132. A bacteriological study of ham souring. C. N. McBryde. 1911.
133. The determination of nicotine in nicotine solutions and tobacco extracts. Robert M. Chapin. 1911.
134. The estimation of total solids in milk by the use of formulas. R. H. Shaw and C. H. Eckles. 1911.
135. A comparative study of methods of examining feces for evidences of parasitism. Maurice C. Hall. 1911.
136. The diagnosis of glanders by complement fixation. John R. Mohler and Adolph Eichhorn. 1911.
137. Anthrax, with special reference to the production of immunity. Charles F. Dawson. 1911.
138. The milk supply of Chicago and Washington. George M. Whitaker. 1911.
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140. Fattening poultry. Alfred R. Lee. 1911.
141. The improvement of the farm egg. Harry M. Lamon and Charles L. Opperman. 1911.
142. Dourine of horses: Its cause and suppression. John R. Mohler. 1911.
143. The maintenance rations of farm animals. Henry Prentiss Armsby. 1912.
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146. Varieties of cheese: Descriptions and analyses. C. F. Doane and H. W. Lawson. 1911. Revision of Bureau of Animal Industry Bulletin 105.
147. Fattening calves in Alabama. Dan T. Gray and W. F. Ward. 1912.
148. The manufacture of butter for storage. L. A. Rogers, S. C. Thompson, and J. R. Keithley. 1912.

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150. The bacteriology of Cheddar cheese. E. G. Hastings, Alice C. Evans, and E. B. Hart. 1912.
151. A study of the gases of emmental cheese. William Mansfield Clark. 1912.
152. Studies on the biology of the Texas-fever tick. (Supplementary report.) H. W. Graybill and W. M. Lewellen. 1912.
153. The action of anthelmintics on parasites located outside of the alimentary canal. Brayton Howard Ransom and Maurice C. Hall. 1912.
154. Methods of classifying the lactic-acid bacteria. Lore A. Rogers and Brooke J. Davis. 1912.
155. The influence of the stage of lactation on the composition and properties of milk. C. H. Eckles and Roscoe H. Shaw. 1913.
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159. Feeding beef cattle in Alabama. Dan T. Gray and W. F. Ward. 1912.
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166. Chemical changes produced in cows' milk by Pasteurization. Philip Rupp. 1913.
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34. Notes on parasites—55-57. Ch. Wardell Stiles and Albert Hassall. 1901.
35. Treatment for roundworms in sheep, goats, and cattle. Ch. Wardell Stiles. 1901.
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37. Preliminary report on Argentina as a market for purebred cattle from the United States. D. E. Salmon. 1902.
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136. How to build a stave silo. B. H. Rawl and J. A. Conover. 1909.
137. The preservation of our native types of horses. George M. Rommel. 1908.
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- 1-64. August 30, 1913, to September, 1925. (No. 1 had no heading. Title: Regulations for the protection of game in Alaska. 1913.)

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- Directions for field work of the assistants of the Biological Survey. Vernon Bailey. 1912. [Map showing] States which had laws protecting deer throughout the year, in 1912. 1913. [Map showing] States which had game commissions or wardens, January 1, 1913. 1913. Report of the Governor of Alaska on the Alaska game law, 1913. J. F. A. Strong, governor. 1913.
- Directory of officials and organizations concerned with the protection of birds and game, 1914. T. S. Palmer. 1914.
- (1900, Biological Circular 28; 1901, Biological Circular 33; 1902, Biological Circular 35; 1903, Biological Circular 40; 1904, Biological Circular 44; 1905, Biological Circular 50; 1906, Biological Circular 53; 1907, Biological Circular 62; 1908, Biological Circular 65; 1909, Biological Circular 70; 1910, Biological Circular 74; 1911, Biological Circular 83; 1912, Biological Circular 88; 1913, Biological Circular 94.) 1915, Biological Document 101; 1916, Biological Document 104; 1917, Biological Document 108; 1918, Biological Document 109; 1919, Department Circular 63; 1920, Department Circular 131; 1921, Department Circular 196; 1922, Department Circular 242; 1923, Department Circular 298; 1924, Department Circular 328; 1925, Department Circular 360.
- Explanation of the proposed changes in the regulations for the protection of migratory birds. 1914.
- Report of the Governor of Alaska on the Alaska game law, 1914. J. F. A. Strong, governor. 1914.
- List of publications of the Biological Survey available for general distribution. 1915.
- Report of the Governor of Alaska on the Alaska game law, 1915. J. F. A. Strong, governor. 1915.
- Birds observed. (Blank form.) 1916.
- Instructions for taking the bird census, 1916. 1916.

DIVISION OF BOTANY<sup>9</sup>

## BULLETINS

25. Shade in coffee culture. O. F. Cook. 1901.
26. The stock-poisoning plants of Montana: A preliminary report. V. K. Chestnut and E. V. Wilcox. 1901.
27. Seeds of commercial salt bushes. G. N. Collins. 1901.
28. The chayote; A tropical vegetable. O. F. Cook. 1901.
29. The seed coats of certain species of the genus *Brassica*. A. J. Pieters and Vera K. Charles. 1901.

## CIRCULAR

80. List of publications of the Division of Botany. Frederick V. Coville. 1901.

## SECTION OF SEED AND PLANT INTRODUCTION

## CIRCULARS

1. The best horse-radish varieties of Europe, and methods of cultivation. David G. Fairchild. 1901.
2. The cultivation of Znaim cucumbers. David G. Fairchild. 1901.

BUREAU OF CHEMISTRY<sup>12</sup>

See also Food and Drug Inspection Board.

## ANNUAL REPORTS

- |                        |                        |
|------------------------|------------------------|
| 1901. H. W. Wiley.     | 1914. Carl L. Alsberg. |
| 1902. H. W. Wiley.     | 1915. Carl L. Alsberg. |
| 1903. H. W. Wiley.     | 1916. Carl L. Alsberg. |
| 1904. H. W. Wiley.     | 1917. Carl L. Alsberg. |
| 1905. H. W. Wiley.     | 1918. Carl L. Alsberg. |
| 1906. H. W. Wiley.     | 1919. Carl L. Alsberg. |
| 1907. H. W. Wiley.     | 1920. Carl L. Alsberg. |
| 1908. H. W. Wiley.     | 1921. Carl L. Alsberg. |
| 1909. H. W. Wiley.     | 1922. W. G. Campbell.  |
| 1910. H. W. Wiley.     | 1923. W. G. Campbell.  |
| 1911. H. W. Wiley.     | 1924. C. A. Browne.    |
| 1912. R. E. Doolittle. | 1925. C. A. Browne.    |
| 1913. Carl L. Alsberg. |                        |

<sup>9</sup> Became part of Bureau of Plant Industry July 1, 1901.

<sup>12</sup> Organized as a division prior to 1902.

## BULLETINS

60. The sunflower plant: Its cultivation, composition, and uses. Harvey W. Wiley. 1901.
61. Pure-food laws of European countries affecting American exports. W. D. Bigelow. 1901.
62. Proceedings of the seventeenth annual convention of the Association of Official Agricultural Chemists, Washington, D. C., November 16-19, 1900. 1901.
63. Exhibit of the Bureau of Chemistry at the Pan American Exposition, Buffalo, N. Y., 1901. E. E. Ewell, W. D. Bigelow, and Logan Waller Page. 1901.
64. The influence of environment upon the composition of the sugar beet. Harvey W. Wiley. 1901.
65. Provisional methods for the analysis of foods adopted by the Association of Official Agricultural Chemists, November 14-16, 1901. H. W. Wiley and W. D. Bigelow. 1902.
66. Fruits and fruit products: Chemical and microscopical examination. L. S. Munson, L. M. Tolman, and Burton J. Howard. 1902. Rev. 1905.
67. Proceedings of the eighteenth annual convention of the Association of Official Agricultural Chemists, Washington, D. C., November 14-16, 1901. 1902.
68. The chemical composition of insecticides and fungicides. J. K. Haywood. 1902.
69. Foods and food control. W. D. Bigelow. Parts I-V. 1902. Part VI. 1904.
70. Manufacture of table sirups from sugar cane. H. W. Wiley. 1902.
71. A study of cider making in France, Germany, and England, with comments and comparisons on American work. William B. Alwood. 1903.
72. American wines at the Paris Exposition of 1900: Their composition and character. H. W. Wiley. A monograph on the manufacture of wines in California. Henry Lachman. 1903.
73. Proceedings of the nineteenth annual convention of the Association of Official Agricultural Chemists, Washington, D. C., October 2-4, 1902. 1903.
74. The influence of soil and climate upon the composition of the sugar beet, 1901. Harvey W. Wiley. 1903.
75. Sugar-cane culture in the southeast for the manufacture of table sirup. H. W. Wiley. I. Fertilizer experiments on sugar cane. W. B. Roddenbery. II. Reports of special agents on sugar-cane culture. G. L. Spencer. 1903.
76. Insecticide studies: I. Pyrethrum powders containing poisonous metals. II. A compilation of analyses of insecticides and fungicides. III. State laws governing the composition and sale of insecticides. J. K. Haywood. 1903.
77. Olive oil and its substitutes. L. M. Tolman and L. S. Munson. 1903.
78. The influence of environment upon the composition of the sugar beet, 1902. Harvey W. Wiley. 1903.
79. The testing of road materials. Logan Waller Page and Allerton S. Cushman. 1903.
80. Adulterated drugs and chemicals: I. Inferior drugs and insidious methods of deception. II. Rose geranium oil and its substitutes. III. Phenacetic: Methods of analysis and commercial status. Lyman F. Kebler. 1904.
81. Proceedings of the twentieth annual convention of the Association of Official Agricultural Chemists, Washington, D. C., November 19-21, 1903. 1904.
82. Paris green spraying experiments. J. K. Haywood. 1904.
83. Foods and food control: I-II Legislation during the year ended July 1, 1903-04. W. D. Bigelow. 1904.
84. Influence of food preservatives and artificial colors on digestion and health. I. Boric acid and borax. H. W. Wiley, W. D. Bigelow, and others. 1904. II. Salicylic acid and salicylates. H. W. Wiley, W. D. Bigelow, F. C. Weber, and others. 1906. III. Sulphurous acid and sulphites. H. W. Wiley, F. C. Weber, and others. 1907. IV. Benzoic acid and benzoates. H. W. Wiley, W. D. Bigelow, F. C. Weber, and others. 1908. V. Formaldehyde. H. W. Wiley, W. D. Bigelow, F. C. Weber, and others. 1908.
85. The cementing power of road materials. Logan Waller Page and Allerton S. Cushman. 1904.
86. Arsenic in papers and fabrics. J. K. Haywood and H. J. Warner. 1904.
87. Chemical composition of some tropical fruits and their products: I. A study of Cuban fruits. II. The composition of fresh and canned pineapples. Ed. Mackay Chace, L. M. Tolman, and L. S. Munson. 1904.
88. The chemical composition of apples and cider: I. The composition of apples in relation to cider and vinegar production. II. The composition of cider as determined by dominant fermentation with pure yeasts. Wm. B. Alwood, R. J. Davidson, W. A. P. Moncreur. 1904.
89. Injury to vegetation by smelter fumes. J. K. Haywood. 1905.
90. Proceedings of the twenty-first annual convention of the Association of Official Agricultural Chemists, St. Louis, Mo., September 26-28, 1904. 1905.
91. Mineral waters of the United States: I. Classification and methods of analysis. II. Commercial waters. III. Saratoga waters sampled at source. J. K. Haywood and B. H. Smith. 1905.
92. The effect of water on rock powders. Allerton S. Cushman. 1905.
93. Experiments in the culture of sugar cane and its manufacture into table sirup. H. W. Wiley, G. L. Spencer, W. B. Roddenbery, G. R. Youmans, and Arthur Given. 1905.
94. Studies on apples: I. Storage, respiration, and growth. II. Insoluble carbohydrates or marc. III. Microscopic and macroscopic examinations of apple starch. W. D. Bigelow, H. C. Gore, and B. J. Howard. 1905.
95. The influence of environment upon the composition of the sugar beet, 1903. Harvey W. Wiley. 1905.
96. Influence of environment on the composition of the sugar beet, 1904. Harvey W. Wiley. 1905.
97. Studies on peaches: I. Compiled analyses of peaches. II. Changes in chemical composition of the peach during growth and ripening. III. Effect of storage on the composition of peaches. W. D. Bigelow and H. C. Gore. 1905.
98. Drug legislation in the United States. Lyman F. Kebler and Earl T. Ragan. 1906.

99. Proceedings of the twenty-second annual convention of the Association of Official Agricultural Chemists, Washington, D. C., November 16-18, 1905. 1906.
100. Some forms of food adulteration and simple methods for their detection. W. D. Bigelow and Burton J. Howard. 1906.
101. The lime-sulphur-salt wash and its substitutes. J. K. Haywood. 1907.
102. Foreign trade practices in the manufacture and exportation of alcoholic beverages and canned goods. Summary of an investigation made in Great Britain and Ireland, Germany, and France. H. W. Wiley. 1906.
103. Experimental work in the production of table sirup at Waycross, Ga., 1905, together with a summary of the four-year experiment on fertilization of sugar cane. H. W. Wiley, W. B. Roddenberg, G. R. Youmans, and Arthur Given. 1906.
104. Food legislation during the year ended June 30, 1906. W. D. Bigelow. 1906.
105. Proceedings of the twenty-third annual convention of the Association of Official Agricultural Chemists, Washington, D. C., November 14-16, 1906. 1907.
106. Cassava: Its content of hydrocyanic acid and starch and other properties. Charles C. Moore. 1907.
107. Official and provisional methods of analysis, Association of Official Agricultural Chemists. J. K. Haywood, J. P. Street, F. W. Woll, J. H. Pettit, L. M. Tolman, F. P. Veitch, and A. L. Winton. 1907.
108. Commercial feeding stuffs of the United States: Their chemical and microscopical examination. J. K. Haywood, H. J. Warner, and B. J. Howard. 1908.
109. Some technical methods of testing miscellaneous supplies, including paints and paint materials, inks, lubricating oils, soaps, etc. Percy H. Walker. 1908.
110. Chemical analysis and composition of American honeys. C. A. Browne. A microscopical study of honey pollen. W. J. Young. 1908.
111. The fermenting power of pure yeasts and some associated fungi. Wm. B. Alwood. 1908.
112. Food legislation during the year ended June 30, 1907. W. D. Bigelow. 1908.
113. Injury to vegetation and animal life by smelter wastes. J. K. Haywood. 1908. Rev. 1910.
114. Meat extracts and similar preparations, including studies of the methods of analysis employed. W. D. Bigelow and F. C. Cook. 1908.
115. A preliminary study of the effects of cold storage on eggs, quail, and chickens. H. W. Wiley, M. E. Pennington, C. W. Stiles, jr., B. J. Howard, and F. C. Cook. 1908.
116. Proceedings of the twenty-fourth annual convention of the Association of Official Agricultural Chemists, Jamestown Exposition, Norfolk, Va., October 9-11, 1907. 1908.
117. Commercial Sicilian sumac. F. P. Veitch. Notes on the microscopical examination of Sicilian sumac and its adulterants. B. J. Howard. 1908.
118. Unfermented apple juice. H. C. Gore. 1908.
119. Experiments on the spoilage of tomato ketchup. A. W. Bitting. 1909.
120. The feeding value of cereals, as calculated from chemical analyses. Joseph S. Chamberlain. 1909.
121. Food legislation during the year ended June 30, 1908. W. D. Bigelow and N. A. Parkinson. 1909.
122. Proceedings of the twenty-fifth annual convention of the Association of Official Agricultural Chemists, Washington, D. C., November 12-16, 1908. 1909.
123. Metabolism of organic and inorganic phosphorus: A feeding experiment using phytin and sodium phosphates. F. C. Cook. 1909.
124. Chemical studies of American barleys and malts. J. A. LeClerc and Robert Wahl. 1909.
125. The canning of peas, based on factory inspection and experimental data. A. W. Bitting. 1909.
126. The harmful effects of acetanilid, antipyrin, and phenacetin. L. F. Kebler, F. P. Morgan, and Philip Rupp. 1909.
127. The influence of environment on the composition of sweet corn, 1905-1908. M. N. Straughn and C. G. Church. 1909.
128. Tri-local experiments on the influence of environment on the composition of wheat. J. A. LeClerc and Sherman Leavitt. 1910.
129. Enological studies: I. Experiments in cider making applicable to farm conditions. II. Notes on the use of pure yeasts in wine making. William B. Alwood. 1909.
130. Manufacture of denatured alcohol. H. W. Wiley, H. E. Sawyer, L. M. Tolman, A. H. Bryan, A. Given, and H. W. Berger. 1910.
131. Lead arsenate. I. Composition of lead arsenates found on the market. II. "Home-made" lead arsenate and the chemicals entering into its manufacture. III. Action of lead arsenate on foliage. J. K. Haywood and C. C. McDonnell. 1910.
132. Proceedings of the twenty-sixth annual convention of the Association of Official Agricultural Chemists, Denver, Colo., August 26-28, 1909. 1910.
133. Preparation of the cod and other salt fish for the market. A. W. Bitting. 1911.
134. Maple-sap sirup: Its manufacture, composition, and effect of environment thereon. A. Hugh Bryan. 1910.
135. Commercial turpentine: Their quality and methods for their examination. F. P. Veitch and M. G. Donk. 1911.
136. Shellfish contamination from sewage-polluted waters and from other sources. George Whitfield Stiles, jr. 1911.
137. Proceedings of the twenty-seventh annual convention of the Association of Official Agricultural Chemists, Washington, D. C., November 10-12, 1910. 1911.
138. Translocation of plant food and elaboration of organic plant material in wheat seedlings. J. A. LeClerc and J. F. Breazeale. 1911.
139. American mineral waters: The New England States. W. W. Skinner. Bacteriological methods. G. W. Stiles, jr. 1911.
140. Enological studies. The occurrence of sucrose in grapes. The sugar and acid content of different varieties of grapes, sampled at frequent intervals during ripening and at full maturity. William B. Alwood. 1911.
141. Experiments on the processing of persimmons to render them nonstringent. H. C. Gore. Introduction by David Fairchild. 1911.

142. Studies on fruit respiration: I. The effect of temperature on the respiration of fruits. II. The effect of picking on the rate of evolution of carbon dioxide by peaches. III. The rate of accumulation of heat in the respiration of fruit under adiabatic conditions. H. C. Gore. 1911.
143. The food laws of the United Kingdom and their administration. F. L. Dunlap. 1911.
144. Wood turpentine: Its production, refining properties, and uses. F. P. Veitch and M. G. Donk. 1911.
145. Ecological studies. The chemical composition of American grapes grown in Ohio, New York, and Virginia. William B. Alwood. 1911.
146. Analyses of sugar beets, 1905 to 1910, together with methods of sugar determination. A. Hugh Bryan. 1911.
147. Coal-tar colors used in food products. Bernhard C. Hesse. 1912.
148. The toxicity of caffeine: An experimental study on different species of animals. William Salant and J. B. Rieger. 1912.
149. The growth of wheat seedlings as affected by acid or alkaline conditions. J. F. Breazeale and J. A. Le Clerc. 1912.
150. Technical drug studies: I. Examination of hydrogen dioxide solutions. L. F. Kebler, L. E. Warren, and E. A. Ruddiman. II. The purity of glycerin. L. F. Kebler and H. C. Fuller. III. Notes on two important alkaloidal reactions. H. C. Fuller. IV. The separation and identification of small quantities of cocaine. H. C. Fuller. V. The determination of molybdenic trioxid. B. Herstein. VI. A method for testing ammonium salts. B. Herstein. VII. Character of samples of beeswax submitted with bids. L. F. Kebler and F. M. Boyles. 1912.
151. The canning of foods: A description of the methods followed in commercial canning. A. W. Biting. 1912.
152. Proceedings of the twenty-eighth annual convention of the Association of Official Agricultural Chemists, Washington, D. C., November 20-22, 1911. 1912.
153. Determination of lithium. W. W. Skinner and W. D. Collins. 1912.
154. Chemical analysis and composition of imported honey from Cuba, Mexico, and Haiti. A. H. Bryan, Arthur Given, and Sidney Sherwood. 1912.
155. Large scale experiments on the processing of Japanese persimmons; with notes on the preparation of dried persimmons. H. C. Gore. 1912.
156. Sewage-polluted oysters as a cause of typhoid and other gastro-intestinal disturbances. George W. Stiles, jr. 1912.
157. The elimination of caffeine: An experimental study on herbivora and carnivora. William Salant and J. B. Rieger. 1912.
158. A bacteriological study of shell, frozen, and desiccated eggs; made under laboratory conditions at Washington, D. C., by George Whitfield Stiles, jr., and Carleton Bates. 1912.
159. Pulp and paper and other products from waste resinous woods. F. P. Veitch and J. L. Merrill. 1913.
160. A study of nuts with special reference to microscopic identification. W. J. Young. 1912.
161. Not published.
162. Proceedings of the twenty-ninth annual convention of the Association of Official Agricultural Chemists, Washington, D. C., September 16-18, 1912. 1913.
163. The composition of different varieties of red peppers. L. M. Tolman and L. C. Mitchell. 1913.
164. Graham flour: A study of the physical and chemical differences between graham flour and imitation graham flours. J. A. Le Clerc and B. R. Jacobs. 1913.
165. Leather investigations: The composition of some sole leathers. F. P. Veitch and J. S. Rogers. 1913.
166. The elimination and toxicity of caffeine in nephrectomized rabbits. William Salant and J. B. Rieger. 1913.

## CIRCULARS

7. Outline of work on foods and feeding stuffs for 1901. 1901.
8. Official method for analysis of tanning materials. 1901.
9. A plan for cooperating in the study of available plant food. C. C. Moore. 1902.
10. Methods for the analysis of insecticides and fungicides. J. K. Haywood. 1902.
11. Preliminary crop and soil data for the cooperative study of available plant food. C. C. Moore. 1903.
12. Methods for the investigation of canceling inks and other stamping inks. E. E. Ewell. 1903.
13. Extracts from the proceedings of the Association of Official Agricultural Chemists, 1903. 1904.
14. Organization of the Bureau of Chemistry. 1904.
15. Results of borax experiment. H. W. Wiley. 1904.
16. Officials charged with the enforcement of food laws in the United States and Canada. 1904.
17. The useful properties of clays. Allerton S. Cushman. 1904.
18. Suggestions to importers of food products. 1904.
19. Methods for the detection of renovated butter. 1904.
20. Extracts from the proceedings of the Association of Official Agricultural Chemists, 1901. 1905.
21. Proposed regulations governing the labeling of imported food products. 1901.
22. Cooperative work on the titer test, Association of Official Agricultural Chemists, 1904. 1905.
23. Methods for the examination of maple products. Julius Hortvet. 1905.
24. Analysis of the Mexican plant *Tecoma mollis* H. B. K. L. F. Kebler and A. Seidell. 1905.
25. Coloring matters for foodstuffs and methods for their detection. W. G. Berry. 1905.
26. Extracts from the proceedings of the Association of Official Agricultural Chemists, 1905. 1906.
27. Cooperative work on fats and oils, Association of Official Agricultural Chemists, 1906. L. M. Tolman. 1906.

28. Provisional methods for the determination of food preservatives as authorized by the Association of Official Agricultural Chemists, 1905. 1906.
29. Changes in provisional methods for the analysis of foods and additions thereto, from 1902 to 1905. 1906.
30. Changes in official methods of analysis and additions thereto, 1899 to 1905. 1906.
31. General results of the investigations showing the effect of salicylic acid and salicylates upon digestion and health. H. W. Wiley. 1906.
32. Extracts from the proceedings of the Association of Official Agricultural Chemists, 1906. 1907.
33. Report on methods of beer analysis. H. E. Barnard. 1907.
34. Examination of papers. 1907.
35. Report on colors: The solubility and extraction of colors and the color reactions of dyed fiber and aqueous and sulphuric-acid solutions. H. M. Loomis. 1907.
36. Chemical methods for utilizing wood, including destructive distillation, recovery of turpentine, rosin, and pulp, and the preparation of alcohols and oxalic acid. F. P. Velch. 1907.
37. General results of the investigations showing the effect of sulphurous acid and sulphites upon digestion and health. 1907.
38. Extracts from the proceedings of the Association of Official Agricultural Chemists, 1907. 1908.
39. General results of the investigation showing the effect of benzoic acid and benzoates upon digestion and health. 1908.
40. Methods for the analysis of maple products and the detection of adulterants, together with the interpretation of the results obtained. A. Hugh Bryan. 1908.
41. Paper-making materials and their conservation. F. P. Velch. 1908.
42. General results of the investigations showing the effect of formaldehyde upon digestion and health. 1908.
43. Extracts from the proceedings of the Association of Official Agricultural Chemists, 1908. 1909.
44. Apparatus for use in the determination of volatile acids in wines and vinegars. H. C. Gore. 1909.
45. A new method for measuring the electrolytic dissociation of water. C. S. Hudson. 1909.
46. The occurrence of pinene in lemon oil. E. M. Chace. 1909.
47. The hydrolysis of salicin by the enzym emulsion. C. S. Hudson and H. S. Paine. 1909.
48. The cold storage of apple cider. H. C. Gore. 1910.
49. A relation between the chemical constitution and the optical rotary power of the sugar lactones. C. S. Hudson. 1910.
50. The quantitative determination of cane sugar by the use of invertase. C. S. Hudson. 1910.
51. The value of peaches as vinegar stock. H. C. Gore. 1910.
52. Extracts from the proceedings of the Association of Official Agricultural Chemists, 1909. 1910.
53. Suggested modification of the Winton lead number, especially as applied to mixtures of maple and cane sugar sirups. S. H. Ross. 1910.
54. Analyses of canned peas and beans, showing composition of different grades. W. L. Dubois. 1910.
55. The influence of acids and alkalis on the activity of invertase. C. S. Hudson and H. S. Paine. 1910.
56. The determination of total sulphur in organic matter. Herman Schreiber. 1910.
57. Experiments on the preparation of sugared, dried pineapples. H. C. Gore. 1910.
58. The effect of alcohol on invertase. C. S. Hudson and H. S. Paine. 1910.
59. The destruction of the enzym invertase by acids, alkalis, and hot water. C. S. Hudson and H. S. Paine. 1910.
60. A theory of the influence of acids and alkalis on the activity of invertase. C. S. Hudson. 1910.
61. How to kill and bleed market poultry. M. E. Pennington and H. M. P. Betts. 1910. Rev. 1915.
62. A comparison of beef and yeast extracts of known origin. F. C. Cook. 1910.
63. Identification of food colors. H. M. Loomis. 1911.
64. Studies of poultry from the farm to the consumer. M. E. Pennington. 1910.
65. The estimation of iodine in organic compounds and its separation from other halogens. A. F. Seeker and W. E. Mathewson. 1910.
66. Extracts from the proceedings of the Association of Official Agricultural Chemists, 1910. 1911.
67. A method for the determination of tin in canned foods. Herman Schreiber and W. C. Taber. 1911.
68. Tomato ketchup under the microscope; with practical suggestions to insure a cleanly product. B. J. Howard. 1911.
69. Improvements in the Knorr fat extraction apparatus. H. L. Walter and C. E. Goodrich. 1911.
70. The comparative rate of decomposition in drawn and undrawn market poultry. M. E. Pennington, Evelyn Witmer, and H. C. Pierce. 1911.
71. Extraction of grains and cattle foods for the determination of sugars: A comparison of the alcohol and the sodium carbonate digestions. A. Hugh Bryan, A. Given, and M. N. Straughn. 1911.
72. An electrically controlled constant temperature water bath for the immersion refractometer. H. C. Gore. 1911.
73. A chemical investigation of the oil of chenopodium. E. K. Nelson. 1911.
74. Detection and determination of small quantities of ethyl and methyl alcohol and of formic acid. Raymond F. Bacon. 1911.
75. Studies on chicken fat: I. The occurrence and permanence of lipase in the fat of the common fowl (*Gallus domesticus*). M. E. Pennington and J. S. Hepburn. II. The oxidation of chicken fat by means of hydrogen peroxid. Joseph S. Hepburn. 1911.
76. Determination of malic acid. P. B. Dunbar and R. F. Bacon. 1911.
77. The determination of camphor. H. C. Fuller. 1911.

78. Changes taking place during the spoilage of tomatoes, with methods for detecting spoilage in tomato products. Raymond F. Bacon and P. B. Dunbar. 1911.
79. Tin salts in canned foods of low acid content, with special reference to canned shrimp. W. D. Bigelow and R. F. Bacon. 1911.
80. Two new pieces of chemical apparatus: I. Apparatus for the continuous extraction of liquids with immiscible solvents lighter than water. II. Apparatus for quantitative reactions which depend on the measurement of an evolved gas. R. F. Bacon and P. B. Dunbar. 1911.
81. The action of drugs under pathological conditions. William Salant. 1911.
82. The unification of reducing sugar methods. (A correction.) Percy H. Walker. 1911.
83. Deterioration of eggs as shown by changes in the moisture content. A. D. Greenlee. 1911.
84. The fluorescent test for mineral and rosin oils. Percy H. Walker and E. W. Boughton. 1911.
85. A modification of the Herzfeld-Bohme method for the detection of mineral oil in other oils. F. P. Veitch and Marion G. Donk. 1912.
86. The refractive index of beeswax. L. Feldstein. 1911.
87. A modification in the determination of malic acid. David S. Pratt. 1911.
88. Determination of citric acid. David S. Pratt. 1912.
89. The quantitative separation of mixtures of certain acid coal tar dyes. W. E. Mathewson. 1912.
90. Extracts from the proceeding of the Association of Official Agricultural Chemists, 1911. 1912.
91. The arsenic content of shellac and the contamination of foods from this source. Bernard H. Smith. 1912.
92. A chemical investigation of American spearmint oil. E. K. Nelson. 1912.
93. Marking porcelain and silica crucibles, etc. P. A. Yoder. 1912.
94. The volatile acidity of gum tragacanth compared with that of Indian gum. W. O. Emery. 1912.
95. A method for the detection of small quantities of coumarin, particularly in factitious vanilla extracts. H. J. Wichmann. 1912.
96. A measurement of the translucency of papers. C. Frank Sammet. 1912.
97. The calcium carbide method for determining moisture. H. C. McNeil. 1912.
98. Practical suggestions for the preparation of frozen and dried eggs. M. E. Pennington. 1912.
99. The estimation of minute amounts of arsenic in foods. Edmund Clark and A. G. Woodman. 1912.
100. Grading rosin at the still. F. P. Veitch and C. F. Sammet. 1912.
101. The ignition of precipitates without the use of the blast lamp. Percy H. Walker and J. B. Wilson. 1912.
102. The determination of arsenic. Claude R. Smith. 1912.
103. Studies on chicken fat: III. Influence of temperature on the lipolysis of esters. IV. The hydrolysis of chicken fat by means of lipase. M. E. Pennington and J. S. Hepburn. V. The occurrence of catalase, oxidases, and reductases in the fat of the common fowl (*Gallus domesticus*). Joseph S. Hepburn. 1912.
104. A study of the enzymes of the egg of the common fowl. M. E. Pennington and H. C. Robertson, jr. 1912.
105. The determination of malic and tartaric acids in the same solution. P. B. Dunbar. 1912.
106. The determination of tartaric acid. P. B. Dunbar. 1912.
107. The detection of faulty sizing in high-grade papers. C. Frank Sammet. 1913.
108. Extracts from the proceedings of the Association of Official Agricultural Chemists, 1912. 1912.
109. A chemical investigation of the composition of the oil of chenopodium. E. K. Nelson. 1913.
110. Identification of tanned skins. C. Frank Sammet. 1913.
111. The effect of certain pigments on linseed oil, with a note on the manganese content of raw linseed oil. E. W. Boughton. 1913.
112. Not published.
113. The quantitative separation and determination of subsidiary dyes in the permitted food colors. Walter E. Mathewson. 1913.
114. The identification of small amounts of dyestuffs by oxidation with bromin. Walter E. Mathewson. 1912.
115. An all-metal poultry-cooling rack. M. E. Pennington and H. C. Pierce. 1913.

## FOOD INSPECTION DECISIONS

1. Laws under which the food inspection is conducted. (No date.)
2. Opinions of the Attorney General relating to the scope and meaning of the act of July 1, 1902 (32 Stat. 632), regulating the branding of dairy and food products for interstate commerce. 1903.
3. Notice to exporters of wines. 1904.
4. Suggestions to importers of food products. 1904.
5. Proposed regulations governing the labeling of imported food products. 1904.
6. Style of label required for imported foods. (No date.)
7. Notice to exporters of desiccated fruits. 1904.
8. Notice to importers of liquid egg products. 1904.
9. Notice to importers of dried egg products. 1905.
10. Treasury decision on refunding duties paid on condemned importations of food products. 1905.
11. Suspending regulations governing the labeling of imported sardines and other food substances packed in oil. 1905.
12. Abolishing the rule to admit importations of food products in the case of first notification. 1905.
13. Provisional standards for the limit of sulphurous acid in imported wines. 1905.

14. Analyses of exports must be made before shipment on samples taken from actual cargo. 1905.
15. Placing preservatives in vinegar. 1905.
16. False labeling of vinegar. 1905.
17. Labels attached to wrappers instead of packages; statements relating to wholesomeness of added substance; pasteur labels. 1905.
18. Statement of quantity of added substance in food products. 1905.
19. False branding of mushrooms. 1905.
20. Statements on labels regarding health laws of other countries. 1905.
21. Relabeling imported food products after arrival in this country. 1905.
22. Illegible or concealed legends on labels. 1905.
23. Labeling of preserves sweetened with cane or beet sugar and glucose. 1905.
24. Adulteration of domestic food products by the addition of preservatives, coloring matters, and other ingredients not natural to foods, not regulated by department. 1905.
25. Food products offered for entry and afterwards declared to be for technical purposes. 1905.
26. Labeling imported food products. 1905.
27. Admission of sardines boiled in peanut oil and packed in olive oil. 1905.
28. Maximum quantity of sulphurous acid in wines. 1905.
29. Coloring matters in synthetic foods. 1905.
30. The use of packages made of tin plate, on which labels have been printed for pre-served vegetables, etc., ordered and delivered to manufacturers prior to September 1, 1905. 1905.
31. Labels on detachable wrappers. 1905.
32. Foods entered for the purpose of sale to outgoing ships. 1905.
33. The importation of a beverage under a misleading name. 1906.
34. Preservatives in sausages. 1906.
35. Modifying in certain cases provisions in food inspection decision 12 and food inspection decision 26. 1906.
36. Substances, ordinarily food products, intended for technical purposes. 1906.
37. Labeling of chocolates. 1906.
38. Labeling of cocoas. 1906.
39. Preservatives and artificial colors in macaronis. 1906.
40. Filing guaranty. 1906.
41. Approval of labels. 1906.
42. Mixing flours. 1906.
43. Relabeling of goods on hand. 1906.
44. Scope and purpose of food inspection decisions. 1906.
45. Blended whiskies. 1906.
46. Fictitious firm names. 1906.
47. Flavoring extracts. 1906.
48. Substances used in the preparation of foods. 1906.
49. Time required to reach decisions on different problems connected with the food and drugs act, June 30, 1906. 1907.
50. Imitation coffee. 1907.
51. Coloring of butter and cheese. 1907.
52. Form of label. 1907.
53. Formula on the label of drugs. 1907.
54. Declaration of the quantity or proportion of alcohol present in drug products. 1907.
55. Method of stating quantity or proportion of preparations (containing opium, morphine, etc.) used in manufacturing other preparations. 1907.
56. Names to be employed in declaring the amount of the ingredients as required by the law. 1907.
57. Physicians' prescriptions. 1907.
58. The labeling of products used as foods and drugs as well as for technical and other purposes. 1907.
59. National formulary appendix. 1907.
60. Minor border importations. 1907.
61. Cocoa butter substitutes. 1907.
62. Guaranty on imported products. 1907.
63. Use of the word "compound" in names of drug products. 1907.
64. Labeling of sardines. 1907.
65. The labeling of whisky, blends, compounds, and imitations thereof. 1907.
66. The use of sugar in canned foods. 1907.
67. Polishing and coating rice. 1907.
68. Labeling of food and drug products "manufactured for," "prepared for," "distributed by," etc. 1907.
69. Inspection of food and drugs and identification of inspectors. 1907.
70. Abuse of guaranty for advertising purposes. 1907.
71. Labeling of succotash. 1907.
72. Use of guaranties and serial numbers thereof. 1907.
73. Interstate transportation of imported meats and meat-food products. 1907.
74. Certificates for imported meats and meat-food products of cattle, sheep, swine and goats. 1907.
75. The labeling of mixtures of cane and maple sirups. 1907.
76. Dyes, chemicals, and preservatives in foods. 1907.
77. Certificate and control of dyes permissible for use in coloring foods and foodstuffs. 1907.
78. The use of labels after October 1, 1907. 1907.
79. Collection of samples. 1907.
80. Glazed coffee. 1907.
81. Labeling of caramels. 1907.
82. Labeling of coffee produced in the Dutch East Indies. 1907.
83. The issue of a guaranty based upon a former guaranty. 1907.
84. Amendments to regulations 17 and 19. 1908.
85. Labeling of bitters. 1908.



86. Original packages: Interpretation of regulation 2 of rules and regulations for the enforcement of the food and drugs act. 1908.
87. Labeling of corn sirup. 1908.
88. Private importations. 1908.
89. Amendment to food inspection decision 76, relating to the use in foods of benzoate of soda and sulphur dioxide. 1908.
90. The labeling of foods and medicinal mixtures for stock and poultry. 1908.
91. The labeling of Mocha coffee. 1908.
92. The use of copper salts in the greening of foods. 1908.
93. Amendment to regulation 34. 1908.
94. The labeling of medicinal and table waters. 1908.
95. The use of neutral spirits distilled from beet sugar molasses in the preparation of whisky compounds and imitation whiskies. 1908.
96. Serial number guaranty. 1908.
97. "Soaked curd" cheese. 1908.
98. The labeling of whisky compounds. 1908.
99. Change in form of guaranty legend. 1908.
100. Bleached flour. 1908.
101. Benzoate of soda. 1908.
102. Entry of vegetables greened with copper salts. 1908.
103. The labeling of turpentine. 1909.
104. Amendment to food inspection decisions No. 76 and No. 89, relating to the use in foods of benzoate of soda. 1909.
105. The labeling of canned salmon and whitefish. 1909.
106. Amendment to food inspection decision 77. 1909.
107. Decision of the Attorney General in regard to the legality of the referee board. 1909.
108. Importation of coffee. 1909.
109. The labeling of wines. 1909.
110. Shellfish. 1909.
111. The labeling of yeast. 1910.
112. Amendment to regulation 28 (labeling of derivatives). 1910.
113. The labeling of whisky, mixtures, and imitations thereof, under the food and drugs act of June 30, 1906. 1910.
114. The labeling of "Caracas cocoa." 1910.
115. On the use of geographical names. 1910.
116. Amendment to food inspection decision 74. 1910.
117. The use of certified colors. 1910.
118. Labeling of whisky compounds under food inspection decision 113. 1910.
119. Use of shellac and other gums for coating chocolates and other confections. 1910.
120. Labeling of Ohio and Missouri wines. 1910.
121. The floating of shellfish. 1910.
122. The labeling of port and sherry wines produced in the United States. 1910.
123. Labeling of rices. 1910.
124. Labeling of stock feed. 1910.
125. The labeling of cordials. 1910.
126. Salts of tin in food. 1910.
127. Decision of the Attorney General in regard to the labeling of whiskies sold under distinctive names. 1910.
128. Sago and tapioca. 1910.
129. The certification of straight dyes and mixtures under secondary certificates. (Amendment to food inspection decision 77.) 1910.
130. Amendment to regulation 4. 1911.
131. The composition of evaporated milk. 1911.
132. The use of homogenized butter and skimmed milk in the manufacture of ice cream. 1911.
133. The coloring of green citrus fruits. 1911.
134. The labeling of New Orleans molasses. 1911.
135. Saccharin in food. 1911.
136. Labeling of chocolate and cocoa. 1911.
137. The use of charlock as a substitute for mustard. 1911.
138. Saccharin in food. 1911.
139. Use of the term "sweet oil." 1912.
140. Labeling of vinegars. 1912.
141. The labeling of maraschino and maraschino cherries. 1912.
142. Saccharin in food. 1912.
143. The labeling of candied citron. 1912.
144. Canned foods: Use of water, brine, sirup, sauce, and similar substances in the preparation thereof. 1912.
145. Bleached oats and barley. 1912.
146. On the use of saccharin in foods. 1912.
147. Absinth. 1912.
148. Use of copper salts in the greening of foods. 1912.
149. Use of copper salts in the greening of foods. 1912.
150. Frozen citrus fruit. 1913.
151. Application of regulations. 1913.
152. Brandy. 1913.
153. Amendment to regulation 9, relating to guaranties by wholesalers, jobbers, manufacturers, and other parties residing in the United States to protect dealers from prosecution. 1914.
154. Regulation of marking the quantity of food in package form. 1914.
155. Changing effective date of food inspection decision No. 153, which amends regulation 9, relating to guaranties by wholesalers, jobbers, manufacturers, and other parties residing in the United States, to protect dealers from prosecution. 1914.
156. Wine. 1914.
157. Amending regulation 29, which relates to marking the quantity of food in package form. 1914.
158. Condensed milk, evaporated milk, concentrated milk. 1915.

159. Certification of mixtures containing coal-tar colors. (Amending food inspection decisions 77, 106, and 129.) 1916.
160. Gluten products and "diabetic" food. 1916.
161. Maple products. 1916.
162. Egg noodles and plain noodles. 1916.
163. Amending regulation 29, which related to marking the quantity of food in package form. 1916.
164. Colors in food. 1916.
165. Cacao products. 1916.
166. Rocky Ford melons. (Amending food inspection decision 115.) 1916.
167. Use of guaranty legends and serial numbers on labels and containers printed or marked prior to May 5, 1914. (Amending food inspection decisions 153 and 155.)
168. Amending paragraph (E) of regulation 29, which relates to marking the quantity of food in package form. 1916.
169. Edible vegetable fats and oils. 1917.
170. Sweetened condensed milk, condensed skimmed milk, sweetened condensed skimmed milk, dried milk, dried skimmed milk, and malted milk. 1917.
171. Macaroni, spaghetti, vermicelli, flour macaroni, flour spaghetti, and flour vermicelli. 1917.
172. Condiments other than vinegars and salt. 1918.
173. Canned vegetables, canned peas, and canned pea grades. 1918.
174. Baking powder. 1918.
175. Colors in food. (Amendment to food inspection decisions 76, 117, 129, and 164.) 1918.
176. Evaporated apples. 1918.
177. Soda water flavors and soda, soda water. 1918.
178. Milk and cream. 1919.
179. Amending regulation 29, which relates to marking the quantity of food in package form. 1919.
180. Colors in food. (Amendment to food inspection decisions 76, 117, 164, and 175.) 1919.
181. Cheeses. 1921.
182. Citrus fruits. 1921.
183. Joint regulations of the Department of Agriculture, the Department of Commerce, and the Treasury Department governing procedure on importations of goods subject to the food and drugs act of June 30, 1906. 1922.
184. Colors in food. (Amendment to food inspection decisions 76, 117, 129, 175, and 180.) 1922.
185. Soda water flavors and soda, soda water. 1923.
186. Condiments (other than vinegar and salt). 1923.
187. Edible vegetable oils and fats. 1923.
188. Grain products. 1923.
189. Condensed milk, evaporated milk, concentrated milk. 1923.
190. Butter. 1923.
191. Cacao products. 1923.
192. Mustard and mustard products. 1923.
193. Vinegar. 1924.
194. Marjoram, leaf marjoram. 1924.
195. Cumin seed. 1924.
196. Sauerkraut. 1925.
197. Almond paste and kernel pastes. 1925.

## NOTICES OF JUDGMENT

Nos. 1-13800. May, 1908, to December, 1925. (Nos. 3501-13800 are supplements to service and regulatory announcements.)

## POINTS FOR EGG SHIPPERS

1. How to load cars of eggs. 1918(?). Revised, 1919, as Department Circular 55.

## POINTS FOR POULTRY PACKERS

1. Not published.
2. Wheatless rations to flesh young chicks. 1918.
3. How to pick chickens. 1918. (Miscellaneous Circular 42.)
4. How to wrap beads. 1919. Is also Department Circular 52.)

## SERVICE AND REGULATORY ANNOUNCEMENTS

Nos. 1-28, January, 1914, to February, 1923.  
Supplements 1-206, April, 1915, to December, 1925. (Issued as Notices of Judgment 3501-13800.)

## UNNUMBERED PUBLICATIONS

Publications of the Bureau of Chemistry. 1901. Revised, 1902; 1903.  
Summary of pure-food laws of foreign countries affecting American exports. 1903.  
Food definitions and standards. 1903.  
Additional schedules: C. Sugars and related substances. D. Condiments. 1904.  
Additional schedules: 2 vegetable products. 1904.  
Additional schedules: E. Beverages (and vinegar). 1904.  
Recent methods suggested for the detection of formaldehyde and saccharin. 1904.  
Preliminary report on the unification of terms for reporting analytical results. 1905.  
Salad oils for which chemical limits are to be suggested. 1905.  
Standards of purity for food products. 1905.  
Table for the reduction of cuprous oxid to copper, using the factor 0.88826, and of reduced copper calculated to invert sugar according to E. Wein. 1905.  
Tables for calculating percentage of alcohol. 1905.

- The testing of chemical reagents. L. F. Kebler, A. L. Winton, and B. W. Kilgore. 1905.  
 Purity of food products. 1906.  
 Directions for sampling stock foods. 1907.  
 Directions for sampling water sold on the open market. 1907 (?).  
 Experimental work with pure yeast cultures in determining the chemical character of the fermented products. 1907.  
 Model denatured alcohol distillery. H. E. Sawyer. 1908.  
 Yeast cultures for experimental purposes. William B. Alwood. 1908. Rev. 1909.  
 A knife for killing poultry. H. C. Pierce. 1910.  
 Collection of samples by commissioned State officials under food and drugs act of June 30, 1906. 1910.  
 Inspection of imported meats and meat food products under the food and drugs act of June 30, 1906. 1910. Rev. December 30, 1910. Supplement, title: Complete list of veterinarians and official meat inspectors. Rev. to July 1, 1913. 1913.  
 Instructions to food and drug inspectors of the Bureau of Chemistry. 1910.  
 Manual of instructions for officials, analyses, and inspectors connected with the food and drug inspection of the Bureau of Chemistry. 1911.  
 Complete list of veterinarians and official meat inspectors. Revised to July 1, 1913. 1913. (Supplement to Inspection of imported meats, etc., 1910.)  
 The policies of cooperation between Federal and State food and drug officials recommended and adopted by the American Association of Dairy, Food and Drug Officials. J. S. Abbott. 1915.  
 Manual of procedure for the guidance of State health, food, and drug officials. 1915. Rev., 1916; 1919.  
 Directory of Federal and State dairy, food, drug, and feeding stuffs officials, 1916. 1916.  
 Directory of Federal and State dairy, food, drug, and feeding stuffs officials, 1917. J. S. Abbott. 1918.  
 Formulas for sugar-saving sirups. W. W. Skinner and J. W. Sale. 1918 (?).  
 Points for egg buyers. 1918. (Department Circular 25.)  
 Just a word about grain dust explosions. (United States Grain Corporation, cooperating.) 1919.  
 The food and drug manual: Effective February, 1920. 1920.  
 Chart showing import food and drug control of United States. W. W. Skinner and W. L. Morrison. 1924.

**BUREAU OF CROP ESTIMATES<sup>13</sup>**

ANNUAL REPORTS

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| 1915. Leon M. Estabrook. | 1918. Leon M. Estabrook. |
| 1916. Leon M. Estabrook. | 1919. Leon M. Estabrook. |
| 1917. Leon M. Estabrook. | 1920. Leon M. Estabrook. |

UNNUMBERED PUBLICATIONS

- Field agents handbook of agricultural statistics. 1914.  
 Special rural credit schedule. 1915.  
 Crop estimates, 1910-1919. 1920.  
*See also* Bureau of Agricultural Economics; Markets.

**BUREAU OF DAIRYING**

ANNUAL REPORT

1925. C. W. Larson.

SERVICE AND REGULATORY ANNOUNCEMENT

1. April, 1925.  
*See also* Bureau of Animal Industry.

**BUREAU OF ENTOMOLOGY<sup>14</sup>**

ANNUAL REPORTS

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| 1901. L. O. Howard.  | 1914. L. O. Howard. |
| 1902. C. L. Marlatt. | 1915. L. O. Howard. |
| 1903. L. O. Howard.  | 1916. L. O. Howard. |
| 1904. L. O. Howard.  | 1917. L. O. Howard. |
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| 1912. L. O. Howard.  | 1925. L. O. Howard. |
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BULLETINS<sup>15</sup>

27. Some insects injurious to the violet, rose, and other ornamental plants. F. H. Chittenden. 1901. Rev., 1901.  
 28. Insect enemies of the spruce in the Northeast. A. D. Hopkins. 1901.

<sup>13</sup> Succeeded Bureau of Statistics and Crop Estimates July 1, 1914. Combined with Bureau of Markets to form Bureau of Markets and Crop Estimates March 3, 1921.

<sup>14</sup> Organized as a division prior to July 1, 1904.

<sup>15</sup> Nos. 27-40 have "New series" after the number. "New series" dropped from title beginning with No. 41.

29. The fall army worm and variegated cutworm. F. H. Chittenden. 1901.
30. Some miscellaneous results of the Division of Entomology. V. 1901.
31. Proceedings of the thirteenth annual meeting of the Association of Economic Entomologists, Denver, Colo., August 23-24, 1901. 1902.
32. Insect enemies of the pine in the Black Hills Forest Reserve. A. D. Hopkins. 1902.
33. Some insects injurious to vegetable crops. F. H. Chittenden. 1902.
34. Principal insects liable to be distributed on nursery stock. Nathan Banks. 1902.
35. Report on codling-moth investigations in the Northwest during 1901. C. B. Simpson. 1902.
36. An index to bulletins Nos. 1-30 (new series) of the Division of Entomology. Nathan Banks. 1902.
37. Proceedings of the fourteenth annual meeting of the Association of Economic Entomologists, Pittsburgh, Pa., June 27-28, 1902. 1902.
38. Some miscellaneous results of the work of the Bureau of Entomology. VI. 1902.
39. The culture of the mulberry silkworm. Henrietta Aiken Kelly. 1903.
40. Proceedings of the fifteenth annual meeting of the Association of Economic Entomologists, Washington, D. C., December 26-27, 1902. 1903.
41. The codling moth. C. B. Simpson. 1903.
42. Some insects attacking the stems of growing wheat, rye, barley, and oats, with methods of prevention and suppression. F. M. Webster. 1903.
43. A brief account of the principal insect enemies of the sugar beet. F. H. Chittenden. 1903.
44. Some miscellaneous results of the work of the Bureau of Entomology. VII. 1904.
45. The Mexican cotton boll weevil. W. D. Hunter and W. E. Hinds. 1904.
46. Proceedings of the sixteenth annual meeting of the Association of Economic Entomologists, St. Louis, Mo., December 29-31, 1903. 1904.
47. Catalogue of the exhibit of economic entomology at the Louisiana Purchase Exposition, St. Louis, Mo., 1904. E. S. G. Titus and F. C. Pratt. 1904.
48. Catalogue of exhibits of insect enemies of forests and forest products at the Louisiana Purchase Exposition, St. Louis, Mo., 1904. A. D. Hopkins. 1904.
49. Report on the habits of the kelep, or Guatemalan cotton-boll-weevil ant. O. F. Cook. 1904.
50. The cotton bollworm. A. L. Quaintance and C. T. Brues. 1905.
51. The Mexican cotton boll weevil: A revision and amplification of Bulletin 45, to include the most important observations made in 1904. W. D. Hunter and W. E. Hinds. 1905.
52. Proceedings of the seventeenth annual meeting of the Association of Economic Entomologists, Philadelphia, Pa., December 29-30, 1904. 1905.
53. Catalogue of the exhibit of economic entomology at the Lewis and Clark Centennial Exposition, Portland, Ore., 1905. Kolla P. Currie. 1905.
54. Some miscellaneous results of the work of the Division of Entomology. VIII. 1905.
55. The rearing of queen bees. E. F. Phillips. 1905.
56. The Black Hills beetle. A. D. Hopkins. 1905.
57. Report on miscellaneous cotton insects in Texas. E. Dwight Sanderson. 1906.
58. Some insects injurious to forests: I. The locust borer. A. D. Hopkins. 1906. II. The western pine-destroying barkbeetle. J. L. Webb. 1906. III. Additional data on the locust borer. A. D. Hopkins. 1907. IV. The southern pine sawyer. J. L. Webb. 1909. V. Insect depredations in North American forests and practical methods of prevention and control. A. D. Hopkins. 1909.
59. Proliferation as a factor in the natural control of the Mexican cotton boll weevil. W. E. Hinds. 1906.
60. Proceedings of the eighteenth annual meeting of the Association of Economic Entomologists, New Orleans, La., January 1-4, 1906. 1906.
61. The laws in force against injurious insects and foul brood in the United States. L. O. Howard and A. F. Burgess. 1906.
62. The San José or Chinese scale. C. L. Marlatt. 1906.
63. Papers on the cotton boll weevil and related and associated insects. I. Hibernation and development of the cotton boll weevil. E. Dwight Sanderson. 1907. II. Notes on the biology of certain weevils related to the cotton boll weevil. W. E. Hinds. 1907. III. An ant enemy of the cotton boll weevil. W. E. Hinds. 1907. IV. A predatory bug reported as an enemy of the cotton boll weevil. A. C. Morgan. 1907. V. Notes on the pepper weevil. F. C. Pratt. 1907. VI. The strawberry weevil in the South Central States in 1905. A. W. Morrill. 1907. VII. The cotton stalk-borer. A. C. Morgan. 1907.
64. Some miscellaneous results of the work of the Bureau of Entomology—IX: I. The Mexican conchuela in western Texas in 1905. A. W. Morrill. 1907. II. Notes on the economic importance of sowbugs. W. Dwight Pierce. 1907. III. Notes on "punkies." F. C. Pratt. 1907. IV. An injurious North American species of aphid, with notes on related forms. F. H. Chittenden. 1908. V. Insects injurious to the loco weeds. F. H. Chittenden. 1908. VI. The greenhouse thrips. H. M. Russell. 1909. VII. New breeding records of the coffee-bean weevil. E. S. Tucker. 1909. VIII. The woolly white-fly: A new enemy of the Florida orange. E. A. Back. 1910. IX. Notes on a Colorado ant. H. O. Marsh. 1910. X. The pecan cigar case-bearer. H. M. Russell. 1910.
65. The tobacco thrips, a new and destructive enemy of shade-grown tobacco. W. A. Hooker. 1907.
66. Some insects injurious to truck crops. I. The asparagus miner. Notes on the asparagus beetles. F. H. Chittenden. 1907. II. The water-cress sowbug. The water-cress leaf-beetle. F. H. Chittenden. 1907. III. The cranberry spanworm. The striped garden caterpillar. F. H. Chittenden. 1907. IV. The leafhoppers of the sugar beet and their relation to the "curly-leaf" condition. E. D. Ball. 1909. V. The semitropical army worm. F. H. Chittenden and H. M. Russell. 1909. VI. The hop flea-beetle. F. H. Chittenden. 1909. VII. Miscellaneous notes on truck-crop insects. F. H. Chittenden. 1909.
67. Proceedings of the nineteenth annual meeting of the Association of Economic Entomologists, New York, N. Y., December 28-29, 1906. 1907.

68. Papers on deciduous fruit insects and insecticides: I. The pear thrips. Dudley Moulton. 1907. Rev. 1909. II. The spring canker-worm. A. L. Quaintance. 1907. III. The trumpet leaf-miner of the apple. A. L. Quaintance. 1907. IV. The lesser peach borer. A. A. Girault. 1907. V. The lesser apple worm. A. L. Quaintance. 1908. VI. Grape root-worm investigations in 1907. Fred Johnson. 1908. VII. Demonstration spraying for the codling moth. A. L. Quaintance, S. W. Foster, Fred Johnson, and A. A. Girault. 1908. VIII. The grape-leaf skeletonizer. P. R. Jones. 1909. IX. The peach-tree barkbeetle. H. F. Wilson. 1909.
69. The chinch bug. F. M. Webster. 1907.
70. Report of the meeting of inspectors of apiaries, San Antonio, Tex., November 12, 1906. 1907.
71. The periodical cicada. C. L. Marlatt. 1907.
72. Information concerning the North American fever tick, with notes on other species. W. D. Hunter and W. A. Hooker. 1907.
73. Studies of parasites of the cotton boll weevil. W. Dwight Pierce. 1908.
74. Some factors in the natural control of the Mexican cotton boll weevil. W. E. Hinds. 1907.
75. Miscellaneous papers on apiculture: I. Production and care of extracted honey. E. F. Phillips. Methods of honey testing for bee keepers. C. A. Browne. 1907. II. Wax moths and American foul brood. E. F. Phillips. 1907. III. Bee diseases in Massachusetts. Burton N. Gates. 1908. IV. The relation of the etiology (cause) of the diseases to the treatment. G. F. White. 1908. V. A brief survey of Hawaiian bee keeping. E. F. Phillips. 1909. VI. The status of apiculture in the United States. E. F. Phillips. 1909. VII. Bee keeping in Massachusetts. Burton N. Gates. 1909.
76. Fumigation for the citrus white fly, as adapted to Florida conditions. A. W. Morrill. 1908.
77. Hibernation of the Mexican cotton boll weevil. W. E. Hinds and W. W. Yothers. 1909.
78. Economic loss to the people of the United States through insects that carry disease. L. O. Howard. 1909.
79. Fumigation investigations in California. R. S. Woglum. 1909.
80. Papers on deciduous fruit insects and insecticides: I. The codling moth in the Ozarks. E. L. Jenne. 1909. II. The cigar case-breaker. A. G. Hammar. 1909. III. Additional observations on the lesser apple worm. S. W. Foster and P. R. Jones. 1909. IV. The pear thrips and its control. Dudley Moulton. 1909. V. On the nut-feeding habits of the codling moth. S. W. Foster. 1910. VI. Life history of the codling moth in northwestern Pennsylvania. A. G. Hammar. 1910. VII. (Revised.) The one-spray method in the control of the codling moth and the plum curculio. A. L. Quaintance, E. L. Jenne, E. W. Scott, and R. W. Braucher. 1911. VIII. Tests of sprays against the European fruit lecanium and the European pear scale. P. R. Jones. 1910.
81. A list of works on North American entomology. Nathan Banks. 1910.
82. Some insects injurious to truck crops: I. The Colorado potato beetle in Virginia in 1908. C. H. Popenoe. 1909. II. The parsnip leaf-miner. The parsley stalk weevil. The celery caterpillar. F. H. Chittenden. 1909. III. The lima-bean pod-borer. The yellow-necked flea beetle. F. H. Chittenden. 1909. IV. The life history and control of the hop flea-beetle. William B. Parker. 1910. V. Biologic and economic notes on the yellow-bear caterpillar. H. O. Marsh. 1910. VI. Notes on the cucumber beetles. F. H. Chittenden. Biologic notes on species of diabrotica in southern Texas. H. O. Marsh. 1910. VII. Notes on various truck-crop insects. F. H. Chittenden. 1911.
83. Practical information on the scolytid beetles of North American forests: I. Bark-beetles of the genus *Dendroctonus*. A. D. Hopkins. 1909.
84. Fumigation of apples for the San José scale. A. L. Quaintance. 1909.
85. Papers on cereal and forage insects: I. The lesser clover-leaf weevil. F. M. Webster. 1909. Rev. 1911. II. The slender seed-corn ground beetle. W. J. Phillips. 1909. III. The clover-root curculio. V. L. Wildermuth. 1910. IV. The sorghum midge. W. Harper Dean. 1910. Rev. 1911. V. The New Mexico range caterpillar. C. N. Ainslie. 1910. VI. Contributions to a knowledge of the corn root-aphis. R. A. Vickery. 1910. VII. The smoky crane-fly. James A. Hyslop. 1910. VIII. The cowpea curculio. Geo. G. Ainslie. 1910.
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114. The euonymus scale. J. G. Sanders. 1909.
115. The horn fly. C. L. Marlatt. 1910.
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## OFFICE OF EXPERIMENT STATIONS\*

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For later reports see Work and expenditures of the agricultural experiment stations.

\* From July 1, 1915, to July 1, 1923, this office was under the States Relations Service; from July 1, 1923, to date, under the office of the Secretary.

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88. Organization lists of the agricultural colleges and experiment stations in the United States, with a list of agricultural experiment stations in foreign countries. 1901.
89. Experiments on the effect of muscular work upon the digestibility of food and the metabolism of nitrogen, conducted at the University of Tennessee, 1897 to 1899. Charles E. Wait. 1901.
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93. A report on the work and expenditures of the agricultural experiment stations for the year ended June 30, 1900. 1901.
94. Fourth report on the agricultural investigations in Alaska, 1900. 1901.
95. Report on the agricultural resources and capabilities of Hawaii. William C. Stubbs. 1901.
96. Irrigation laws of the northwest territories of Canada and of Wyoming, with discussions by J. S. Dennis, Fred Bond, and J. M. Wilson. 1901.
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107. Nutrition investigations among fruitarians and Chinese at the California Agricultural Experiment Station, 1899-1901. M. E. Jaffa. 1901.
108. Irrigation practice among fruit growers on the Pacific coast. E. J. Wickson. 1902.
109. Experiments on the metabolism of matter and energy in the human body, 1898-1900. W. O. Atwater, F. G. Benedict, A. P. Bryant, A. W. Smith, and J. F. Snell. 1902.
110. Proceedings of the sixth annual meeting of the American Association of Farmers' Institute Workers, Buffalo, N. Y., September 18-19, 1901. 1902.
111. Organization lists of the agricultural colleges and experiment stations in the United States, with a list of agricultural experiment stations in foreign countries. 1902.
112. Agricultural experiment stations in foreign countries. A. C. True and D. J. Crosby. 1902. Revised, 1904.
113. Irrigation of rice in the United States. Frank Bond and G. H. Keeney. 1902.
114. Statistics of the land-grant colleges and agricultural experiment stations in the United States for the year ended June 30, 1901. 1902.
115. Proceedings of the fifteenth annual convention of the Association of American Agricultural Colleges and Experiment Stations, Washington, D. C., November 12-14, 1901. 1902.
116. Dietary studies in New York City in 1896 and 1897. W. O. Atwater and A. P. Bryant. 1902.
117. Experiments on the effect of muscular work upon the digestibility of food and the metabolism of nitrogen. Conducted at the University of Tennessee, 1899-1900. Charles E. Wait. 1902.
118. Irrigation from Big Thompson River. John E. Field. 1902.
119. Report of irrigation investigations for 1901. R. P. Teale, W. M. Reed, W. H. Code, A. J. McClatchie, E. W. Higard, W. Irving, A. E. Chandler, O. L. Waller, D. W. Ross, Samuel Fortier, A. P. Stover, O. V. P. Stout, H. J. Waters, F. H. King, E. B. Voorhees, and J. C. Nagle. 1902.
120. Proceedings of the seventh annual meeting of the American Association of Farmers' Institute Workers, Washington, D. C., June 24-26, 1902. 1902.
121. Experiments on the metabolism of nitrogen, sulphur, and phosphorus in the human organism. H. C. Sherman. 1902.
122. Organization lists of the agricultural colleges and experiment stations in the United States. 1903.
123. Proceedings of the sixteenth annual convention of the Association of American Agricultural Colleges and Experiment Stations, Atlanta, Ga., October 7-9, 1902. 1903.

124. Report of irrigation investigations in Utah. R. P. Teele, A. P. Stover, A. F. Doremus, J. D. Stannard, Frank Adams, and G. L. Swendsen. 1903.
125. A digest of recent experiments on horse feeding. C. F. Langworthy. 1903.
126. Studies on the digestibility and nutritive value of bread at the University of Minnesota in 1900-1902. Harry Snyder. 1903.
127. Instruction in agronomy at some agricultural colleges. A. C. True and D. J. Crosby. 1903.
128. Statistics of the land-grant colleges and agricultural experiment stations in the United States for the year ended June 30, 1902. 1903.
129. Dietary studies in Boston and Springfield, Mass., Philadelphia, Pa., and Chicago, Ill. Lydia Southard, Ellen H. Richards, Susannah Usher, Bertha M. Terrill, and Amelia Shapleigh. 1903.
130. Egyptian irrigation: A study of irrigation methods and administration in Egypt. Clarence T. Johnston. 1903.
131. Plans of structures in use on irrigation canals in the United States. From drawings exhibited by the Office of Experiment Stations at Paris in 1900 and at Buffalo in 1901. 1903.
132. Further investigations among fruitarians at the California Agricultural Experiment Station. 1901-1902. M. E. Jaffa. 1903.
133. Report of irrigation investigations for 1902. L. R. Morgan, J. D. Stannard, B. P. Fleming, O. L. Waller, Samuel Fortier, W. T. Clarke, C. W. Landis, A. B. Crane, Frank Bond, J. C. Nagle, H. J. Waters, A. R. Whitson, E. B. Voorhees, and Jared Smith. 1903.
134. Storage of water on Cache la Poudre and Big Thompson Rivers. C. E. Tait. 1903.
135. Legislation relating to farmers' institutes in the United States and the Province of Ontario, Canada. John Hamilton. 1903.
136. Experiments on the metabolism of matter and energy in the human body. 1900-1902. W. O. Atwater, F. G. Benedict, A. P. Bryant, R. D. Milner, and Paul Murrill. 1903.
137. Organization lists of the agricultural colleges and experiment stations in the United States. 1903.
138. Proceedings of the eighth annual meeting of the American Association of Farmers' Institute Workers, Toronto, Ontario, June 23-26, 1903. 1903.
139. Special and short courses in agricultural colleges. D. J. Crosby. 1903.
140. Acquisition of water rights in the Arkansas Valley in Colorado. J. S. Greene. 1903.
141. Experiments on losses in cooking meat, 1900-1903. H. S. Grindley and Timothy Mojonner. 1904.
142. Proceedings of the seventeenth annual convention of the Association of American Agricultural Colleges and Experiment Stations, Washington, D. C., November 17-19. 1903. 1904.
143. Studies on the digestibility and nutritive value of bread at the Maine Agricultural Experiment Station. 1899-1903. C. D. Woods and L. H. Merrill. 1904.
144. Irrigation in northern Italy: Part I. Elwood Mead. 1904.
145. Preparing land for irrigation and methods of applying water. 1904.
146. Current wheels: Their use in lifting water for irrigation. 1904.
147. Report on drainage investigations. 1903. C. G. Elliott. 1904.
148. Report on irrigation investigations in humid sections of the United States in 1903. Edward B. Voorhees, H. J. Waters, and A. B. Crane. 1904.
149. Studies of the food of Maine lumbermen. C. D. Woods and E. R. Mansfield. 1904.
150. Dietary studies at the Government Hospital for the Insane, Washington, D. C., H. A. Pratt and R. D. Milner. 1904.
151. Organization lists of the agricultural colleges and experiment stations in the United States. 1904.
152. Dietary studies with Harvard University students. Edward Mallinckrodt, jr. 1905.
153. Proceedings of the eighteenth annual convention of the Association of American Agricultural Colleges and Experiment Stations, Des Moines, Iowa, November 1-3, 1904. 1905.
154. Proceedings of the ninth annual meeting of the American Association of Farmers' Institute Workers, St. Louis, Mo., October 18-20, 1904. 1905.
155. Agricultural instruction for adults in the British Empire. John Hamilton. 1905.
156. Studies on the digestibility and nutritive value of bread and macaroni at the University of Minnesota. 1903-1905. Harry Snyder. 1905.
157. Water rights on interstate streams: The Platte River and tributaries. Results of investigation. R. P. Teele. Water rights within the States. Elwood Mead. 1905.
158. Annual report of irrigation and drainage investigations, 1904. R. P. Teele, S. Fortier, Frank Adams, E. J. Wickson, J. E. Roadhouse, J. N. Le Conte, F. L. Kent, O. L. Waller, William Francis Bartlett, J. J. Vernon, Harvey Culbertson, C. E. Tait, Aug. J. Bowie, jr., W. B. Gregory, J. G. Haney, A. E. Wright, A. B. Collins, O. V. P. Stout, A. R. Whitson, and C. G. Elliott. 1905.
159. A digest of Japanese investigations on the nutrition of man. Kintaro Oshima. 1905.
160. School gardens: a report upon some cooperative work with the normal schools of Washington, with notes on school-garden methods followed in other American cities. B. T. Galloway. 1905.
161. Organization lists of the agricultural colleges and experiment stations in the United States. 1905.
162. Studies on the influence of cooking upon the nutritive value of meats at the University of Illinois, 1903-1904. H. S. Grindley and A. D. Emmett. 1905.
163. Agricultural instruction for adults in continental countries. John Hamilton. 1905.
164. Proceedings of the nineteenth annual convention of the Association of American Agricultural Colleges and Experiment Stations, Washington, D. C., November 14-16, 1905. 1906.
165. Proceedings of the tenth annual meeting of the American Association of Farmers' Institute Workers, Washington, D. C., November 9-11, 1905. 1906.
166. Course in cheese making for movable schools of agriculture. L. L. VanSlyke. 1906.
167. Irrigation in the North Atlantic States. Aug. J. Bowie, jr. 1906.
168. The State engineer and his relation to irrigation. R. P. Teele. 1906.

169. Report on agricultural investigations in Alaska, 1905. C. C. Georgeson. 1906.
170. Report on agricultural investigations in Hawaii, 1905. J. G. Smith. 1906.
171. Report on agricultural investigations in Porto Rico, 1905. D. W. May. 1906.
172. Irrigation in Montana. Samuel Fortier, A. P. Stover, and J. S. Baker. 1906.
173. Corn-harvesting machinery. C. J. Zintheo. 1907.
174. History of farmers' institutes in the United States. John Hamilton. 1906.
175. Experiments on the metabolism of matter and energy in the human body, 1903-1904. F. G. Benedict and B. D. Milner. 1907.
176. Organization lists of the agricultural colleges and experiment stations in the United States. 1907.
177. Evaporation losses in irrigation and water requirements of crops. Samuel Fortier. 1907.
178. Course in fruit growing for movable schools of agriculture. Samuel B. Green. 1907.
179. Small reservoirs in Wyoming, Montana, and South Dakota. F. C. Herrmann. 1907.
180. List of publications of the agricultural experiment stations in the United States (to June 30, 1906). 1907.
181. Mechanical tests of pumping plants in California. J. N. Le Conte and C. E. Tait. 1907.
182. Proceedings of the eleventh annual meeting of the American Association of Farmers' Institute Workers, Baton Rouge, La., November 12-14, 1906. 1907.
183. Mechanical tests of pumps and pumping plants used for irrigation and drainage in Louisiana in 1905 and 1906. W. B. Gregory. 1907.
184. Proceedings of the twentieth annual convention of the Association of American Agricultural Colleges and Experiment Stations, Baton Rouge, La., November 14-16, 1906. 1907.
185. Iron in food and its functions in nutrition. H. C. Sherman. 1907.
186. Exercises in elementary agriculture: Plant production. Dick J. Crosby. 1907.
187. Studies on the digestibility and nutritive value of legumes at the University of Tennessee, 1901-1905. Charles E. Wait. 1907.
188. Irrigation in the Yakima Valley, Wash. S. O. Jayne. 1907.
189. Report on the drainage of the eastern parts of Cass, Traill, Grand Forks, Walsh, and Pembina Counties, N. Dak. John T. Stewart. 1907.
190. Irrigation in northern Italy, Part II. Elwood Mead. 1907.
191. Tests of internal-combustion engines on alcohol fuel. Charles Edward Lucke and S. M. Woodward. 1907.
192. Irrigation and drainage laws of Italy. Translated by R. P. Teele. 1907.
193. Studies of the effect of different methods of cooking upon the thoroughness and ease of digestion of meat at the University of Illinois. H. S. Grindley, Timothy Mojonier, and Horace C. Porter. 1907.
194. A review of investigations in soil bacteriology. Edward B. Voorhees and Jacob G. Lipman. 1907.
195. Simple exercises illustrating some applications of chemistry to agriculture. K. L. Hatch. 1908.
196. Proceedings of the twenty-first annual convention of the Association of American Agricultural Colleges and Experiment Stations, Lansing, Mich., May 28-30, 1907. 1907.
197. Organization lists of the agricultural colleges and experiment stations. 1907. 1907.
198. The prevention of injury by floods in the Neosho Valley, Kans. J. O. Wright. 1908.
199. Proceedings of the twelfth annual meeting of the American Association of Farmers Institute Workers, Washington, D. C., October 23-24, 1907. 1908.
200. Course in cereal foods and their preparation, for movable schools of agriculture. Margaret J. Mitchell. 1908.
201. Cost of pumping from wells for the irrigation of rice in Louisiana and Arkansas. W. B. Gregory. 1908.
202. Digestibility of starch of different sorts as affected by cooking. Edna D. Day. 1908.
203. Distribution of water in the soil in furrow irrigation. R. H. Loughridge. 1908.
204. School gardening and nature study in English rural schools and in London. Susan B. Sipe. 1909.
205. Irrigation in Wyoming. Clarence T. Johnston. 1909.
206. Organization lists of the agricultural colleges and experiment stations in the United States. 1909.
207. Irrigation in the Sacramento Valley, Calif. Samuel Fortier, O. W. Bryant, J. E. Roadhouse, A. E. Wright, and J. H. Barber. 1909.
208. The influence of muscular and mental work on metabolism and the efficiency of the human body as a machine. Francis G. Benedict and Thorne M. Carpenter. 1909.
209. Irrigation in Oregon. John H. Lewis and Percy A. Cupper. 1909.
210. Irrigation in South Dakota. Samuel H. Lea. 1909.
211. Irrigation in Kansas. Don H. Bark. 1909.
212. Proceedings of the twenty-second annual convention of the Association of American Agricultural College and Experiment Stations, Washington, D. C., November 18-20, 1908. 1909.
213. Proceedings of the thirteenth annual meeting of the American Association of Farmers' Institute Workers, Washington, D. C., November 26-27, 1908. 1909.
214. Irrigation in the State of Washington. O. L. Waller. 1909.
215. Irrigation in New Mexico. Vernon L. Sullivan. 1909.
216. Irrigation in Idaho. James Stephenson, jr. 1909.
217. Drainage of irrigated lands in the San Joaquin Valley, Calif. Samuel Fortier and Victor M. Cone. 1909.
218. Irrigation in Colorado. C. W. Beach and P. J. Preston. 1910.
219. Irrigation in North Dakota. T. R. Atkinson. 1909.
220. Secondary agricultural education in Alabama. C. J. Owens. 1909.
221. Dietary studies in rural regions in Vermont, Tennessee, and Georgia. J. L. Hills, Charles E. Wait, and H. C. White. 1909.
222. Irrigation in Texas. J. C. Nagle. 1910.
223. Dietary studies in public institutions in Philadelphia, Pa. Emma Smedley and R. D. Milner. Dietary studies in public institutions in Baltimore, Md. H. L. Knight, H. A. Pratt, and C. F. Langworthy.

224. Organization lists of the agricultural colleges and experiment stations in the United States. 1910.
225. Proceedings of the fourteenth annual meeting of the American Association of Farmers' Institute Workers, Portland, Oreg., August 16-17, 1909. 1910.
226. Irrigation experiments and investigations in western Oregon. A. P. Stover. 1910.
227. Calcium, magnesium, and phosphorus in food and nutrition. Henry C. Sherman, Arthur J. Mettler, and J. Edwin Sinclair. 1910.
228. Proceedings of the twenty-third annual convention of the Association of American Agricultural Colleges and Experiment Stations, Portland, Oreg., August 18-20, 1909. 1910.
229. Delivery of water to irrigators. Frank Adams. 1910.
230. Report on the St. Francis Valley drainage projects in northeastern Arkansas. Arthur E. Morgan and O. G. Baxter. 1911.
231. College extension in agriculture. Discussions before the graduate school of agriculture, at the Iowa State College, Ames, Iowa, July 4-27, 1910. 1910.
232. Consolidated rural schools and organization of a county system. George W. Knorr. 1910.
233. Organization lists of the agricultural colleges and experiment stations in the United States. 1911.
234. A report upon the reclamation of the overflowed lands in the Marais des Cygnes Valley, Kans. S. H. McCrory, D. L. Yarnell, and W. J. McEathron. 1911.
235. Irrigation in Arizona. R. H. Forbes. 1911.
236. The use of underground water for irrigation at Pomona, Calif. C. E. Tait. 1911. Rev. 1912.
237. Irrigation in California. F. W. Roeding. 1911.
238. Proceedings of the fifteenth annual meeting of the American Association of Farmers' Institute Workers, Washington, D. C., November 14-15, 1910. 1911.
239. Irrigation in the San Joaquin Valley, Calif. Victor M. Cone. 1911.
240. Tidal marshes and their reclamation. George M. Warren. 1911.
241. Legislation relating to farmers' institutes in the United States. John Hamilton. 1911.
242. County schools of agriculture and domestic economy in Wisconsin. A. A. Johnson. 1911.
243. Land drainage by means of pumps. S. M. Woodward. 1911.
244. Report on the Belzoni Drainage District in Washington County, Miss. H. A. Kipp. 1912.
245. Course in the use and preparation of vegetable foods for movable and correspondence schools of agriculture. Anna Burrows. 1912.
246. A report upon the Back swamp and Jacob swamp drainage district, Robeson County, N. C. Samuel H. McCrory and Carl W. Mengel. 1912.
247. Organization lists of the agricultural colleges and experiment stations in the United States. 1912.
248. Evaporation from irrigated soils. Samuel Fortier and S. H. Beckett. 1912.
249. The storage of water for irrigation purposes, Parts I and II. Samuel Fortier and F. L. Bixby. 1912.
250. Arkansas State agricultural schools. C. H. Lane. 1912.
251. Proceedings of the sixteenth annual meeting of the American Association of Farmers' Institute Workers, Columbus, Ohio, November 13-14, 1911. 1912.
252. Some types of children's garden work. Susan B. Sipe. 1912.
253. Organization lists of the agricultural colleges and experiment stations in the United States. 1913.
254. Irrigation resources of California and their utilization. Frank Adams. 1913.
255. Educational contests in agriculture and home economics. George I. Christie. 1913.
256. Proceedings of the seventeenth annual meeting of the American Association of Farmers' Institute Workers, Atlanta, Ga., November 11-13, 1912. 1913.

## CIRCULARS

45. Fifth report of committee on methods of teaching agriculture. 1901.
46. The functions and uses of food. C. F. Langworthy. 1901. Revised, 1903; 1904; Jan., 1906; Dec., 1906.
47. The card index of experiment station literature: Outline of the plane of construction. 1902. Revised, 1904; 1907; 1908; 1909.
48. What the Department of Agriculture is doing for irrigation. Elwood Mead. 1902.
49. Secondary courses in agriculture. 1902.
50. Preliminary plans and estimates for drainage of Fresno district, Calif. C. G. Elliott. 1903.
51. List of State directors of farmers' institutes and farmers' institute lecturers of the United States. John Hamilton. 1903. Revised, 1904; 1905; 1906; 1908. third revision, 1906; fourth revision, 1908.
52. A few good books and bulletins on nature study, school gardening, and elementary agriculture for common schools. D. J. Crosby. 1903. Revised 1905.
53. Report of the committee on rural engineering of the Association of American Agricultural Colleges and Experiment Stations. 1903.
54. Report of Committee on indexing agricultural literature. 1903.
55. The relation of the natural sciences to agriculture in a four-year college course. 1903.
56. Constitution of the Association of American Agricultural Colleges and Experiment Stations, as amended at the seventeenth annual convention of the association, Washington, D. C., November 17-19, 1903. 1903.
57. Supplemental report on drainage in the Fresno district, Calif. G. C. Elliott. 1904.
58. Irrigation in the Valley of Lost River, Idaho. Albert Eugene Wright. 1904.
59. Progress report of cooperative irrigation investigations in California. S. Fortier. 1904.
60. The teaching of agriculture in the rural common schools. 1904.
61. Statistics of land-grant colleges and agricultural experiment stations, 1904. 1905.

62. List of abbreviations employed in Experiment Station Record for titles of periodicals. 1905.
63. The work of the Office of Experiment Stations in irrigation and drainage. 1905.
64. Statistics of land-grant colleges and agricultural experiment stations, 1905. 1906.
65. Irrigation from Snake River, Idaho. H. G. Raschbacher. 1906.
66. Publications of the Office of Experiment Stations issued during 1905 and station publications received by the Office of Experiment Stations during 1905. 1906.
67. Investigations of irrigation practice in Oregon. A. P. Stover. 1906.
68. Federal legislation, regulations, and rulings affecting agricultural colleges and experiment stations. 1906. Revised, 1908; 1909; revised, 1911, as Office of Experiment Stations Circular 111. Revised, 1912.
69. A four-years' college course in agriculture. 1906.
70. Publications of the Office of Experiment Stations from its organization to June 30, 1906. 1907. Revised, 1907; 1908; 1909.
71. Report of committee on experiment station organization and policy. (Association of American Agricultural Colleges and Experiment Stations.) 1907.
72. Report of committee on extension work. (Association of American Agricultural Colleges and Experiment Stations.) 1907.
73. Country life education. W. M. Hays. 1907.
74. Excavating machinery used for digging ditches and building levees. J. O. Wright. 1907.
75. Report of committee on extension work. 1906-1907. (Association of American Agricultural Colleges and Experiment Stations.) 1907.
76. Swamp and overflowed lands in the United States; Ownership and reclamation. J. O. Wright. 1907.
77. A secondary course in agronomy. 1907. Revised, 1908.
78. Progress report on irrigation experiments in Willamette Valley, Oreg. A. P. Stover. 1908.
79. Form of organization for movable schools of agriculture. John Hamilton. 1908.
80. A report upon the drainage of agricultural lands in the Kankakee River Valley, Ind. 1909.
81. A report upon the drainage of the agricultural lands of Bolivar County, Miss. W. J. McFathron and S. H. McCrory. 1909.
82. Report of committee on station organization and policy. (Association of American Agricultural Colleges and Experiment Stations.) 1908.
83. The American system of agricultural education. A. C. True and Dick J. Crosby. 1909.
84. Education for country life. Willet M. Hays. 1909.
85. Farmers' institutes for women. John Hamilton. 1909.
86. A preliminary report on the St. Francis Valley drainage project in northeastern Arkansas. Arthur E. Morgan. 1909.
87. Organization, work, and publications of irrigation investigations. 1909.
88. Organization, work, and publications of drainage investigations. 1909. Revised, 1910.
89. Organization, work, and publications of food and nutrition investigations. 1909.
90. Normal school instruction in agriculture. M. J. Abbey. 1909.
91. Secondary education in agriculture in the United States. A. C. True. 1909.
92. Progress report on experiments in supplemental irrigation with small water supplies at Cheyenne and Newcastle, Wyo., 1905-1908. O. W. Bryant. 1910.
93. Organization, work, and publications of the agricultural education service. 1910.
94. Free publications of the Department of Agriculture classified for the use of teachers. Dick J. Crosby and F. W. Howe. 1910. Revised, 1910.
95. Experiments in supplemental irrigation with small water supplies at Cheyenne, Wyo., in 1909. John H. Gordon. 1910.
96. How to test seed corn in school. F. W. Howe. 1910.
97. Institutions in the United States giving instruction in agriculture. 1910. Revised, 1912.
98. Progress in agricultural education extension. John Hamilton. 1910.
99. Farmers' institutes for young people. John Hamilton and J. M. Stedman. 1910.
100. A secondary course in animal production. H. R. Smith. 1911.
101. The selection and installation of machinery for small pumping plants. W. B. Gregory. 1910.
102. Food and nutrition investigations of the Office of Experiment Stations—organization and publications. 1910.
103. The drainage situation in the lower Rio Grande Valley, Tex. L. L. Hiding. 1911.
104. A preliminary report on the drainage of the Fifth Louisiana Levee District, comprising the parishes of East Carroll, Madison, Tensas, and Concordia. A. E. Morgan, S. H. McCrory, and L. L. Hiding. 1911.
105. List of State directors of farmers' institutes and farmers' institute lecturers of the United States. 1910.
106. The American system of agricultural education. A. C. True and Dick J. Crosby. 1911. Revised, 1912.
107. The card index of experiment station literature: Outline of the plant of construction. 1911.
108. Second progress report of cooperative irrigation investigations in California. Frank Adams. 1911.
109. Agricultural fair associations and their utilization in agricultural education and improvement. John Hamilton. 1911.
110. Food customs and diet in American homes. C. F. Langworthy. 1911.
111. Federal legislation, regulations, and rulings affecting agricultural colleges and experiment stations. Revised to March 15, 1911. 1911. It is also a revision of Office of Experiment Stations Circular 68. Revised, 1912.
112. The transportation companies as factors in agricultural extension. John Hamilton. 1911.
113. Drainage of the wet lands of Effingham County, Ga. F. G. Eason. 1911.
114. List of State directors of farmers' institutes and farmers' institute lecturers of the United States. 1911. Revised 1911; 1913.
115. Report of the committee on instruction in agriculture, 1911. 1912.

116. The respiration calorimeter: Application to the study of problems of vegetable physiology. C. F. Langworthy and R. D. Milner. 1912.  
 117. A working erosion model for schools. Don Carlos Ellis. 1912.  
 118. The work of the agricultural colleges in training teachers of agriculture for secondary schools. 1913.

## DOCUMENTS

(Numbers not contained here are listed in other series of Office of Experiment Stations publications.)

238. List of publications of the Office of Experiment Stations on the food and nutrition of man. 1901. Revised, 1902; 1905.  
 358. List of publications of the Office of Experiment Stations on irrigation and drainage. (1900) Revised, 1901; 1902; October 15, 1903; November 15, 1903.  
 491. Federal legislation, regulations, and rulings affecting agricultural colleges and experiment stations. 1902.  
 614. General index to the Experiment Station Record, vols. 1-12, 1889-1901, and to Experiment Station Bulletin 2, 1903.  
 706. The American system of agricultural education. A. C. True and Dick J. Crosby. 1904.  
 710. Description of exhibits of colleges of agriculture and mechanic arts and experiment stations. Louisiana Purchase Exposition, St. Louis, Mo., 1904. W. H. Beal. 1904.  
 711. Farmers' institutes in the United States. John Hamilton. 1904.  
 713. Investigations on the nutrition of man in the United States. C. F. Langworthy and R. D. Milner. 1904.  
 715. List of publications of the Office of Experiment Stations on the food and nutrition of man. Corrected to June 1, 1904.  
 719. List of publications of the Office of Experiment Stations on irrigation and drainage. Corrected to June 1, 1904.  
 723. Irrigation and drainage investigations. R. P. Teele. 1904.  
 807. List of publications of the Office of Experiment Stations on agricultural education. Corrected to June 1, 1905. Corrected to August 1, 1905. Corrected to October 1, 1905.  
 810. List of publications of the Office of Experiment Stations on the food and nutrition of man. Corrected to June 1, 1905.  
 816. List of publications of the Office of Experiment Stations on irrigation and drainage. Corrected to June 30, 1905.  
 820. List of publications of the Office of Experiment Stations on the food and nutrition of man. Corrected to June 28, 1905.  
 852. List of publications of the Office of Experiment Stations on irrigation and drainage. Corrected to November 30, 1905.  
 865. List of publications of the Office of Experiment Stations on the food and nutrition of man. Corrected to March 1, 1906.  
 875. List of publications of the Office of Experiment Stations on irrigation and drainage. Corrected to May, 1906.  
 901. Opinions of the Comptroller of the Treasury on the Adams fund. 1906.  
 903. List of publications of the Office of Experiment Stations on the food and nutrition of man. Corrected to June 1, 1906.  
 917. List of publications of the Office of Experiment Stations on irrigation and drainage. Corrected to November 1, 1906.  
 933. List of publications of the Office of Experiment Stations on agricultural education. Corrected to November 1, 1906.  
 938. List of publications of the Office of Experiment Stations on the food and nutrition of man. Corrected to November 1, 1906.  
 968. Institutions in the United States giving instructions in agriculture. 1907. Reprinted, 1908.  
 992. List of publications of the Office of Experiment Stations on agricultural education. Corrected to May 1, 1907.  
 993. List of publications of the Office of Experiment Stations on the food and nutrition of man. Corrected to May 1, 1907.  
 994. List of publications of the Office of Experiment Stations on irrigation and drainage. Corrected to May 1, 1907.  
 1046. List of publications of the Office of Experiment Stations on irrigation and drainage. Corrected to October 1, 1907.  
 1051. List of publications of the Office of Experiment Stations on agricultural education. Corrected to November 1, 1907.  
 1052. List of publications of the Office of Experiment Stations on the food and nutrition of man. Corrected to October 15, 1907.  
 1063. List of publications of the Office of Experiment Stations on the food and nutrition of man. Corrected to December 10, 1907.  
 1066. Work and publications of drainage investigations. January, 1908.  
 1076. List of publications of the Office of Experiment Stations on agricultural education. Corrected to February 15, 1908.  
 1079. Organization, work, and publications of irrigation investigations. 1908.  
 1094. List of publications of the Office of Experiment Stations on agricultural education. Corrected to June 1, 1908. Corrected to October 1, 1908.  
 1095. Work and publications of drainage investigations. June 24, 1908.  
 1179. Constitution and by-laws of the American Association of Farmers' Institute Workers. 1909.  
 1180. Organization, work, and publications of irrigation investigations. Revised June, 1909.  
 1184. List of publications of the Office of Experiment Stations on agricultural education. Corrected to July 1, 1909.  
 1188. Organization, work, and publications of irrigation investigations. Revised May, 1909.  
 1210. Forestry in nature study. 1909.

## FARMERS' INSTITUTE LECTURES

1. Syllabus of illustrated lecture on the care of milk. R. A. Pearson. 1904.
  2. Syllabus of illustrated lecture on potato diseases and their treatment. F. C. Stewart and H. J. Eustace. 1904.
  3. Syllabus of illustrated lecture on acid soils. H. J. Wheeler. 1904.
  4. Syllabus of illustrated lecture on profitable cattle feeding. Frederick B. Mumford. 1905.
  5. Syllabus of illustrated lecture on silage and silo construction for the South. Andrew M. Soule. 1905. Revised, 1912.
  6. Syllabus of illustrated lecture on essentials of successful field experimentation. C. E. Thorne. 1905.
  7. Syllabus of illustrated lecture on roads and road building. 1907.
  8. Syllabus of illustrated lecture on farm architecture. Elmina T. Wilson. 1907.
  9. Syllabus of illustrated lecture on tobacco growing. J. N. Harper. 1907.
  10. Syllabus of illustrated lecture on the production and marketing of eggs and fowls. James Dryden. 1909. Revised, 1910.
  11. Syllabus of illustrated lecture on wheat culture. J. I. Schulte. 1910. Revised, 1918.
  12. Syllabus of illustrated lecture on farm homes. John Hamilton and George Nox McCain. 1912.
  13. Syllabus of illustrated lecture on the peanut: Its culture and uses. W. R. Beattie. 1912.
  14. Syllabus of illustrated lecture on farm home grounds—their planting and care. S. W. Fletcher. 1912.
  15. Illustrated lecture on the homemade fireless cooker. Mrs. K. C. Davis and Angeline Wood. 1914.
  16. Illustrated lecture on swine in the United States. Walter B. Jessee. 1914.
- For later issues see States Relations Service Syllabuses.

## INSULAR STATIONS

## ALASKA EXPERIMENT STATIONS

## ANNUAL REPORTS

1901. C. C. Georgeson. 1902.
1902. C. C. Georgeson. 1903.
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23. Leguminous crops for Hawaii. F. G. Krauss. 1911.
24. The assimilation of nitrogen by rice. W. P. Kelley. 1911.
25. The avocado in Hawaii. J. E. Higgins, C. J. Hunn, and V. S. Holt. 1911.
26. The function and distribution of manganese in plants and soils. W. P. Kelley. 1912.
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1907. D. W. May, Oscar Loew, M. J. Iorns, W. V. Tower, and J. W. Van Leenhoff. 1908.
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12. Lime-magnesia ratio as influenced by concentration. P. L. Gile. 1912.
13. Studies on acid soils of Porto Rico. Oscar Loew. 1913.
14. The red clay soil of Porto Rico. P. L. Gile and C. N. Ageton. 1914.
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16. The effect of strongly calcareous soils on the growth and ash composition of certain plants. P. L. Gile and C. N. Ageton. 1914.
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<sup>10</sup> Combined with Bureau of Markets and Crop Estimates to form Bureau of Agricultural Economics, July 1, 1922.

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32. Distribution of the agricultural exports of the United States, 1898-1902. Frank H. Hitchcock. 1903.
33. Foreign trade of the United States in forest products, 1902. Frank H. Hitchcock. 1903.
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<sup>20</sup> Organized as a section prior to July 1, 1902, and became subsidiary to Bureau of Statistics July 1, 1903.

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33. The western hemlock. Edward T. Allen. 1902.
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35. Eucalypts cultivated in the United States. Alfred James McClatchie. 1902.
36. The woodsman's handbook. Henry Solon Graves. 1902. Revised, 1903. Revised and enlarged. Henry S. Graves and E. A. Ziegler. 1910.
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43. A working plan for forest lands in Hampton and Beaufort Counties, S. C. Thomas H. Sherrard. 1903.
44. The diminished flow of the Rock River in Wisconsin and Illinois, and its relation to the surrounding forests. G. Frederick Schwarz. 1903.
45. The planting of white pine in New England. Harold B. Kempton. 1903.
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57. Federal and State forest laws. George W. Woodruff. 1904.
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63. The natural replacement of white pine on old fields in New England. S. N. Spring. 1905.
64. Loblolly pine in eastern Texas, with special reference to the production of crossties. Raphael Zon. 1905.
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67. Forest reserves in Idaho. 1905.
68. A working plan for forest lands in central Alabama. Franklin W. Reed. 1905.
69. Sugar pine and western yellow pine in California. Albert W. Cooper. 1906.
70. Effect of moisture upon the strength and stiffness of wood. Harry Donald Tiemann. 1906.
71. Rules and specifications for the grading of lumber adopted by the various lumber manufacturing associations of the United States. E. R. Hudson. 1906.
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74. Forest products of the United States: 1905. R. S. Kellogg and H. M. Hale. 1907.
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76. How to grow and plant conifers in the Northeastern States. C. R. Pettis. 1909.
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78. Wood preservation in the United States. W. F. Sherfese. 1909.
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90. Osage orange. 1907.
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4. State forestry laws, Maryland. Jeannie S. Peyton. 1915. (Misc. S-5.)
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13. State forestry laws, Indiana. Jeannie S. Peyton. 1915. (Misc. S-14.)
14. State forestry laws, Minnesota. Jeannie S. Peyton. 1916. (Misc. S-15.)
15. State forestry laws, Montana. Jeannie S. Peyton. 1916. (Misc. S-16.)
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17. State forestry laws, Ohio. Jeannie S. Peyton. 1916. (Misc. S-18.)
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19. State forestry laws, Massachusetts. Jeannie S. Peyton. 1917. (Misc. S-20.)
20. State forestry laws, New Hampshire. Jeannie S. Peyton. 1917. (Misc. S-21.)
21. State forestry laws, Colorado. Jeannie S. Peyton. 1918. (Misc. S-22.)
22. State forestry laws, West Virginia. Jeannie S. Peyton. 1918. (Misc. S-23.)
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25. State forestry laws, California. Jeannie S. Peyton. 1921. (Misc. S-26.)
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 Map of Umatilla National Forest and directions to tourists and campers. 1915.  
 Map of Whitman National Forest and directions to tourists and campers. 1915.  
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- Angeles National Forest, eastern division, Calif. 1923.  
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2. Forestry laws of Wisconsin. Jeannie S. Peyton. 1915. (Forestry laws leaflet 1.)  
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| 2. Port Orford cedar. 1907.   | 29. Blue spruce. 1908.                     |
| 3. Engelmann spruce. 1907.    | 30. California swamp pine. 1908.           |
| 4. White fir. 1907.           | 31. Black hemlock. 1908.                   |
| 5. Lowland fir. 1907.         | 32. Tamarack. 1908.                        |
| 6. Sitka spruce. 1907.        | 33. Digger pine. 1908.                     |
| 7. Noble fir. 1907.           | 34. Coulter pine. 1908.                    |
| 8. Red fir. 1907.             | 35. Alpine larch. 1908.                    |
| 9. Incense cedar. 1907.       | 36. Knobcone pine. 1908.                   |
| 10. Bigcone spruce. 1907.     | 37. White-bark pine. 1908.                 |
| 11. Giant arborvitae. 1907.   | 38. Paper birch. 1908.                     |
| 12. Yellow cedar. 1907.       | 39. Monterey pine. 1908.                   |
| 13. Western white pine. 1907. | 40. Swamp cottonwood. 1908.                |
| 14. Western larch. 1907.      | 41. Chestnut oak. 1908.                    |
| 15. White spruce. 1908.       | 42. Sugar maple. 1908.                     |
| 16. Single-leaf piñon. 1908.  | 43. Red or Norway pine. 1909.              |
| 17. Four-leaf piñon. 1908.    | 44. Jack pine. 1909.                       |
| 18. Redwood. 1908.            | 45. Western hemlock. 1912.                 |
| 19. Bigtree. 1908.            | 46. Limber pine. 1909.                     |
| 20. Weeping spruce. 1908.     | 47. Piñon pine. 1909.                      |
| 21. Jeffrey pine. 1908.       | 48. Pignut hickory. 1909.                  |
| 22. Amabilis fir. 1908.       | 49. Shagbark hickory. 1909.                |
| 23. Bristle-cone pine. 1908.  | 50. Big shellbark; king-nut hickory. 1909. |
| 24. Bristle-cone fir. 1908.   | 51. Broadleaf maple. 1912.                 |
| 25. Cottonwood. 1908.         | 52. Oregon oak. 1912.                      |
| 26. Foxtail pine. 1908.       | 53. Red alder. 1912.                       |
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 \_\_\_\_\_ October 3, 1905.  
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<sup>22</sup> Organized as an office and subsidiary to States Relations Service prior to July 1, 1923.

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## CIRCULARS

1. Powdery dry rot of potato. W. A. Orton and G. K. K. Link. 1918.
2. Potato black heart. 1918.
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1. The pistache nut. W. T. Swingle. 1916.
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355. Economize: Cut down the expenses of the farm. S. A. Knapp. 1908. Revised, 1910.
362. Cotton culture in the southwestern United States. T. H. Kearney. 1908.
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485. Farm notes: The corn crop. S. A. Knapp. 1909.
485. (b) The selection of cotton and corn seed for southern farms. S. A. Knapp. 1909.
495. Hints to settlers on the Umatilla project, Oregon. Byron Hunter. 1909.
503. Fall-breaking and the preparation of the seed bed. S. A. Knapp. 1909. Reprinted 1910; 1912. Revised, 1913. Bradford Knapp.
504. Publications of the Bureau of Plant Industry. September, 1909.
523. Field instructions for farmers' cooperative demonstration work. S. A. Knapp. 1909 (second revision). Revised, 1911; 1912; 1913. Bradford Knapp.
526. Publications of the Bureau of Plant Industry. November, 1909.
533. Plans for the continuation of the tobacco investigations in Texas. W. W. Garner. 1909.
535. Distribution of cottonseed in 1910. D. N. Shoemaker. 1910.
537. Cooperative distribution of new Smyrna figs and caprifigs. Walter T. Swingle. 1910. (Revised.)
548. Publications of the Bureau of Plant Industry. February, 1910.
555. Southern farm notes: The corn crop. S. A. Knapp. 1910.
564. Directions to cooperative corn breeders. C. H. Kyle. 1910.
578. Suggestions for setting permanent pastures with Bermuda grass as the basis. S. A. Knapp. 1910.
589. Have you a more productive corn than first-generation cross No. 182? C. P. Hartley. 1911.
619. The production of cotton under boll weevil conditions. S. A. Knapp. 1911.
629. The burning quality of tobacco, with suggestions for its improvement in the flue-cured types of eastern North Carolina and South Carolina. E. H. Mathewson. 1910.
631. Farm fertilizers. S. A. Knapp. January, 1911.
631. (Revised?) Canning. Mary E. Creswell and Ola Powell. 1915.
632. Crops for southern farms: The corn crop. S. A. Knapp. 1910.
633. Distribution of cottonseed in 1911. 1911.
644. Boys' demonstration work: The corn clubs. S. A. Knapp and O. B. Martin. 1911. Revised 1912. Bradford Knapp and O. B. Martin. Revised 1913. Bradford Knapp and O. B. Martin.
647. Results of boys' demonstration work in corn clubs in 1910. S. A. Knapp and O. B. Martin. 1911.
648. The control of cotton wilt and root-knot. W. A. Orton. 1911.
676. The relation of handling to decay in California navel oranges; season of 1910-11. A. V. Stubenrauch. 1911.
692. Farm fertilizers. W. B. Mercier and H. E. Savelly. August, 1911. (Revised.)
706. An effective method of preventing the erosion of hill lands. W. B. Mercier. 1911.
716. Distribution of cottonseed in 1912. 1911.
717. Suggestions on growing Egyptian cotton in the Southwest. Carl S. Scofield. 1912.
720. Memorandum of information concerning official cotton grades. N. A. Cobb. 1912.
730. The corn crop in the Southern States. Bradford Knapp. 1912.
741. Results of boys' demonstration work in corn clubs in 1911. Bradford Knapp and O. B. Martin. 1912.
747. Selection of cotton and corn seed on southern farms. Bradford Knapp. 1912. (Revised.)
756. Emergency crops for overflowed lands in the Mississippi Valley. Bradford Knapp. 1912.
803. Organization and instruction in boys' corn-club work. O. H. Benson. 1913.
813. Distribution of cottonseed in 1913. 1913.
865. Results of demonstration work in boys' and girls' clubs in 1912. O. B. Martin and I. W. Hill. 1913.
870. Girls' demonstration work: The canning clubs. I. W. Hill and O. B. Martin. 1913. (Revised.)
883. Tomato growing as club work in the North and West. L. C. Corbett. 1913.
884. Potato growing as club work in the North and West. William Stuart. 1913.
1009. Cotton as a crop for the Yuma reclamation project. Committee on southwestern cotton culture. Carl S. Scofield, Charles J. Brand, O. F. Cook, Thomas H. Kearney, and Walter T. Swingle. 1913.

1110. The dasheen, a root crop for the South. Robert A. Young. 1914.  
 1122. Distribution of tulip and narcissus bulbs in 1914. R. A. Oakley. 1914.  
 1130. Single stalk cotton culture. O. F. Cook. 1914.  
 2005. Distribution of tulip and narcissus bulbs in 1921. 1921.  
 2022. The lawn. 1921.  
 2113. Distribution of tulip and narcissus bulbs in 1921. 1921.

## OFFICE OF DRY LAND AGRICULTURE

## CIRCULARS

1. Cooperative shelter-belt planting on the Northern Great Plains. 1916. Revised, 1924.
2. Cooperative shelter-belt development on the Northern Great Plains. 1916.
3. Cooperative shelter-belt development on the Northern Great Plains. 1917.
4. Care of cooperative shelter belts on the Northern Great Plains. 1919.
5. Conifer additions to shelter belts on the Northern Great Plains. 1919.
6. Instructions for the planting and care of conifer trees in cooperative shelter belts. 1919.
7. Instructions to cooperators for the planting of fruit trees and small fruits on the Northern Great Plains. 1925.

## OFFICE OF ECONOMIC AND SYSTEMATIC BOTANY

## CIRCULAR

1. Directions for the preparation of plant specimens for identification. S. F. Blake. 1919.

## FARMERS' COOPERATIVE DEMONSTRATION WORK IN THE SOUTH

## CIRCULAR

1. Peppers. Ola Powell and Mary E. Creswell. 1915.

## OFFICE OF FOREIGN SEED AND PLANT INTRODUCTION

## CIRCULARS

1. New plant introductions: Descriptions of imported seeds and plants which will be sent to experimenters. Sixth annual list 1916-1917. 1917.
2. Recipes for the preparation of the dasheen. 1916.
3. New plant introductions: Descriptions of imported seeds and plants which will be sent to experimenters. Seventh annual list 1917-1918. 1917.

## INVENTORIES OF SEEDS AND PLANTS IMPORTED

These inventories list seeds and plants sought throughout the world by agents of the department and introduced by them into this country: Nos. 9-30 were issued as Bureau of Plant Industry Bulletins 5, 66, 97, 106, 132, 137, 142, 148, 153, 162, 168, 175, 205, 207, 208, 223, 227, 233, 242, 248, 261, 282. Subsequent inventories have been issued not as bulletins but with inventory number only. No. 74 covering the period January 1 to March 31, 1923, was the last number issued prior to December 31, 1925.

## UNNUMBERED PUBLICATIONS

The chayote. A new winter vegetable from the South. David Fairchild. 1908.  
 How to send living plant material to America. David Fairchild. 1914.  
 The forcing and blanching of dasheen shoots. Robert A. Young. 1914.  
 Making and maintaining a lawn. 1915. Rev. 1916; 1917; 1921.  
 Recipes for the dasheen—A delicious and nutritious vegetable. 1915.  
 The dasheen: A new vegetable of great value from the South. 1920.  
 The Penang taro. 1920.  
 Cultural requirements of the dasheen for the southern United States, from southeastern Texas to eastern South Carolina. 1921.  
 The dasheen: Recipes for plain cooking. 1921.  
 The chayote: A valuable new southern vegetable. 1923.  
 The chayote: A perennial ornamental vine. (No date.)

## OFFICE OF HORTICULTURAL AND POMOLOGICAL INVESTIGATIONS

## CIRCULAR

1. Varieties of the Satsuma orange group in the United States. L. B. Scott. 1918.

## PAPER-PLANT INVESTIGATIONS

## CIRCULAR

1. Crop plants for paper making. Charles J. Brand. 1916. (Reprint of B. P. I. Cir.<sup>27</sup> 82.)

<sup>27</sup> B. P. I. Cir.=Bureau of Plant Industry Circular.

## RECLAMATION PROJECT EXPERIMENT FARMS

Work of the Belle Fourche reclamation project experiment farm in 1913. Beyer Aune.  
1914.

1914. Beyer Aune. 1915. (B. P. I., W. I. A. 28 4.)  
1915. Beyer Aune. 1916. (B. P. I., W. I. A. 9.)  
1916. Beyer Aune. 1917. (B. P. I., W. I. A. 14.)  
1917. Beyer Aune. 1918. (B. P. I., W. I. A. 24.)  
1918 published as D. C. 29 60.  
1919-1922 published as D. C. 339.

The work of the Huntley reclamation project experiment farm in 1912. Dan Hansen.

1914. Published as B. P. I. Cir.<sup>27</sup> 121.  
1913. Dan Hansen. 1914.  
1914. Dan Hansen. 1915. (B. P. I., W. I. A. 2.)  
1915. Dan Hansen. 1916. (B. P. I., W. I. A. 8.)  
1916. Dan Hansen. 1917. (B. P. I., W. I. A. 15.)  
1917. Dan Hansen. 1918. (B. P. I., W. I. A. 22.)  
1918 published as D. C. 86.  
1919 published as D. C. 147.  
1921 published as D. C. 275.  
1922 published as D. C. 330.

The work of the Newlands (formerly the Truckee-Carson) reclamation project experiment farm in 1912. F. B. Headley. 1913. Published as B. P. I. Cir. 122.

1913. F. B. Headley. 1914.  
1914. F. B. Headley. 1915. (B. P. I., W. I. A. 3.)  
1915. F. B. Headley. 1916. (B. P. I., W. I. A. 13.)  
1916. F. B. Headley. 1918. (B. P. I., W. I. A. 19.)  
1917. F. B. Headley. 1918. (B. P. I., W. I. A. 23.)  
1918 published as D. C. 80.  
1919 published as D. C. 136.  
1920 and 1921 published as D. C. 267.  
1922 and 1923 published as D. C. 352.

Work of the San Antonio Experiment Farm in 1907. Frank B. Headley and Stephen H. Hastings. 1908. Published as B. P. I. Cir. 13.

- 1908 published as B. P. I. Cir. 34.  
1912 published as B. P. I. Cir. 120.  
1913. S. H. Hastings. 1914.  
1914. S. H. Hastings. 1915. (B. P. I., W. I. A. 5.)  
1915. S. H. Hastings. 1916. (B. P. I., W. I. A. 10.)  
1916. C. R. Letteer. 1917. (B. P. I., W. I. A. 16.)  
1917. C. R. Letteer. 1918. (B. P. I., W. I. A. 21.)  
1918 published as D. C. 73.  
1919 and 1920 published as D. C. 209.

Work of the Scottsbluff reclamation project experiment farm in 1912. Fritz Knorr.

1913. Published as B. P. I. Cir. 116.  
1913. Fritz Knorr. 1914.  
1914. Fritz Knorr. 1915. (B. P. I., W. I. A. 6.)  
1915. Fritz Knorr. 1916. (B. P. I., W. I. A. 11.)  
1916. Fritz Knorr. 1917. (B. P. I., W. I. A. 18.)  
1917. James A. Holden. 1918. (B. P. I., W. I. A. 27.)  
1918 and 1919 published as D. C. 173.

The work of the Umatilla reclamation project experiment farm in 1912. R. W. Allen.

1913. Published as B. P. I. Cir. 129.  
1913. R. W. Allen. 1914.  
1914. R. W. Allen. 1915. (B. P. I., W. I. A. 1.)  
1915 and 1916. R. W. Allen. 1917. (B. P. I., W. I. A. 17.)  
1917. R. W. Allen. 1919. (B. P. I., W. I. A. 26.)  
1918 and 1919 published as D. C. 110.  
1920-1922 published as D. C. 342.

The work of the Yuma reclamation project experiment farm in 1912. W. A. Peterson.

1913. Published as B. P. I. Cir. 126.  
1913. R. E. Blair. 1914.  
1914. R. E. Blair. 1915. (B. P. I., W. I. A. 7.)  
1915. R. E. Blair. 1916. (B. P. I., W. I. A. 12.)  
1916. R. E. Blair. 1918. (B. P. I., W. I. A. 20.)  
1917. R. E. Blair. 1918. (B. P. I., W. I. A. 25.)  
1918 published as D. C. 75.  
1919 and 1920 published as D. C. 221.

## SERVICE AND REGULATORY ANNOUNCEMENTS

Nos. 1-8. April, 1914, to April, 1925.

## UNNUMBERED PUBLICATIONS

Crimson clover seed. Edgar Brown. 1904.

Directions for making window gardens. W. W. Tracy, sr. 1904. Rev. 1905, January, 1909, March, 1909.

The school garden. L. C. Corbett. 1904. Rev. January 25, 1905; March 18, 1905 (Bureau of Plant Industry Document 140).

<sup>23</sup> B. P. I., W. I. A. = Bureau of Plant Industry, Western Irrigation Agriculture Circulars.

<sup>24</sup> D. C. = Department circular.

- Bulletins of the Bureau of Plant Industry. Sept. 8, 1905. Revised December 15, 1905; January 31, 1906; January 16, 1907; November 23, 1907; April 24, 1908; July 1, 1908; August 3, 1908.
- Le travail du Department d'Agriculture des Etats-Unis. 1905.
- Cooperative experiments with forage crops, autumn of 1906-spring of 1907. 1906; autumn of 1907-spring of 1908. 1907. (Bureau of Plant Industry Document 281.)
- Directions for using inoculating material. Sheet A, Sheet B. 1907.
- Testing seed corn for germination. 1907.
- The corn crop. S. A. Knapp. 1911.
- Girls' demonstration work: The canning clubs. O. H. Benson and O. B. Martin. 1912. Revised, 1913, by I. W. Hill and O. B. Martin. (Bureau of Plant Industry Document 870.)
- Banish the barberry. 1913.
- Circular letter to all members of boys' corn clubs. 1913.
- Field instructions for farmers' cooperative demonstration work in western Texas and Oklahoma. Bradford Knapp. 1913.
- Corn varieties for distribution in Texas, Oklahoma, and Louisiana. Ernest B. Brown. 1914.
- Making and maintaining a lawn. R. A. Oakley. 1914.
- Manziesia, a new stock-poisoning plant of the Northwestern States. C. Dwight Marsh. 1914.
- Principal poisonous plants of the western stock ranges. C. D. Marsh. 1914.
- Cooperative extension work in agriculture and home economics: Boys' and girls' club work. Corn. 1915.
- Cooperative extension work in agriculture and home economics: Suggestions and instructions for home canning club demonstrations. O. H. Benson. 1915.
- The county agent in farmers' cooperative demonstration work. Bradford Knapp. 1915 (?).
- The relation of washing to decay in Washington navel oranges: Season of 1914-1915. C. W. Mann. 1915.
- Economical methods of cutting seed potatoes. 1917.
- The dasheen. 1918 (?).
- Does potato wart occur in your section? Keep watch for warty potatoes at digging time. 1919.
- Handbook of the diseases of vegetables occurring under market storage and transit conditions. G. K. K. Link and Max W. Gardner. Preliminary edition printed for use of food products inspectors of the Bureau of Markets. 1919.
- The chayote: A perennial ornamental vine. 1921 (?).
- How to save your white pine crop. 1922.

## WESTERN IRRIGATION AGRICULTURE

## CIRCULARS

1. The work of the Umatilla reclamation project experiment farm in 1914. R. W. Allen. 1915.
2. The work of the Huntley reclamation project experiment farm in 1914. Dan Hansen. 1915.
3. The work of the Truckee-Carson experiment farm in 1914. F. B. Headley. 1915.
4. The work of the Belle Fourche reclamation project experiment farm in 1914. Beyer Aune. 1915.
5. The work of the San Antonio Experiment Farm in 1914. S. H. Hastings. 1915.
6. The work of the Scottsbluff reclamation project experiment farm in 1914. Fritz Knorr. 1915.
7. The work of the Yuma reclamation project experiment farm in 1914. R. E. Blair. 1915.
8. The work of the Huntley reclamation project experiment farm in 1915. Dan Hansen. 1916.
9. The work of the Belle Fourche reclamation project experiment farm in 1915. Beyer Aune. 1916.
10. The work of the San Antonio Experiment Farm in 1915. S. H. Hastings. 1916.
11. The work of the Scottsbluff reclamation project experiment farm in 1915. Fritz Knorr. 1916.
12. The work of the Yuma reclamation experiment farm in 1915. R. E. Blair. 1916.
13. The work of the Truckee-Carson Experiment Farm in 1915. F. B. Headley. 1916.
14. The work of the Belle Fourche reclamation project experiment farm in 1916. Beyer Aune. 1917.
15. The work of the Huntley reclamation project experiment farm in 1916. Dan Hansen. 1917.
16. The work of the San Antonio experiment farm in 1916. C. R. Letteer. 1917.
17. The work of the Umatilla reclamation project experiment farm in 1915 and 1916. R. W. Allen. 1917.
18. The work of the Scottsbluff reclamation project experiment farm in 1916. Fritz Knorr. 1918.
19. The work of the Truckee-Carson reclamation project experiment farm in 1916. F. B. Headley. 1918.
20. The work of the Yuma reclamation project experiment farm in 1916. R. E. Blair. 1918.
21. The work of the San Antonio experiment farm in 1917. C. R. Letteer. 1918.
22. The work of the Huntley reclamation project experiment farm in 1917. Dan Hansen. 1918.
23. The work of the Truckee-Carson reclamation project experiment farm in 1917. F. B. Headley. 1918.
24. The work of the Belle Fourche reclamation project experiment farm in 1917. Beyer Aune. 1918.
25. The work of the Yuma reclamation project experiment farm in 1917. R. E. Blair. 1918.

26. The work of the Umatilla reclamation project experiment farm in 1917. R. W. Allen. 1919.  
 27. The work of the Scottsbluff reclamation project experiment farm in 1917. J. A. Holden. 1918.

DIVISION OF POMOLOGY<sup>9</sup>

## BULLETINS

9. The fig: Its history, culture, and curing, with a descriptive catalogue of the known varieties of figs. Gustav Eisen. 1901.  
 10. Prunes and prune culture in western Europe, with special reference to existing conditions in the Pacific Northwest. Edward R. Lake. 1901.

BUREAU OF PUBLIC ROADS<sup>30</sup>

## ANNUAL REPORTS

- |                          |                           |
|--------------------------|---------------------------|
| 1901. Martin Dodge.      | 1914. L. W. Page.         |
| 1902. Martin Dodge.      | 1915. L. W. Page.         |
| 1903. Martin Dodge.      | 1916. L. W. Page.         |
| 1904. Martin Dodge.      | 1917. L. W. Page.         |
| 1905. Logan Waller Page. | 1918. L. W. Page.         |
| 1906. Logan Waller Page. | 1919. Thos. H. MacDonald. |
| 1907. Logan Waller Page. | 1920. Thos. H. MacDonald. |
| 1908. Logan Waller Page. | 1921. Thos. H. MacDonald. |
| 1909. Logan Waller Page. | 1922. Thos. H. MacDonald. |
| 1910. Logan Waller Page. | 1923. Thos. H. MacDonald. |
| 1911. Logan Waller Page. | 1924. Thos. H. MacDonald. |
| 1912. L. W. Page.        | 1925. Thos. H. MacDonald. |
| 1913. L. W. Page.        |                           |

## BULLETINS

21. Proceedings of the International Good Roads Congress, Buffalo, N. Y., September 16 to 21, 1901. 1901.  
 22. Proceedings of the third annual good roads convention of the State of New York, held at Albany, N. Y., January 28 and 29, 1902. 1902.  
 23. Road conventions in the Southern States, and object-lesson roads constructed under the supervision of the Office of Public Road Inquiries, with the cooperation of the Southern Railway. 1902.  
 24. Proceedings of the North Carolina good roads convention, Raleigh, February 12 and 13, 1902. J. A. Holmes. 1903.  
 25. Proceedings of the Jefferson Memorial and interstate good roads convention, Charlottesville, Va., April 2-4, 1902. 1902.  
 26. Proceedings of the national good roads convention, St. Louis, Mo., April 27-29, 1903. 1903.  
 27. The construction of sand-clay and burnt-clay roads. William L. Spoon. 1906.  
 28. The decomposition of the feldspars. Allerton S. Cushman and Prévost Hubbard. 1907.  
 29. The construction of macadam roads. Austin B. Fletcher. 1907.  
 30. The corrosion of iron. Allerton S. Cushman. 1907.  
 31. Examination and classification of rocks for road building, including the physical properties of rocks with reference to their mineral composition and structure. Edwin C. E. Lord. 1907.  
 32. Public-road mileage, revenues, and expenditures in the United States in 1904. Maurice O. Eldridge. 1907.  
 33. Road materials of southern and eastern Maine. Henry Leighton and Edson S. Bastin. 1908.  
 34. Dust preventives. Prévost Hubbard. 1908.  
 35. The preservation of iron and steel. Allerton S. Cushman. 1909.  
 36. Descriptive catalogue of the road model exhibit. 1911.  
 37. Examination and classification of rocks for road building, including the physical properties of rocks with reference to their mineral composition and structure. Edwin C. E. Lord. 1911.  
 38. Methods for the examination of bituminous road materials. Prévost Hubbard and Charles S. Reeve. 1911.  
 39. Highway bridges and culverts. Charles H. Hoyt and William H. Burr. 1911.  
 40. The road material resources of Minnesota. George W. Cooley. 1911.  
 41. Mileage and cost of public roads in the United States in 1909. J. E. Pennybacker, jr., and Maurice O. Eldridge. 1912.  
 42. New Hampshire highways. Charles H. Hoyt. 1912.  
 43. Highway bridges and culverts. Charles H. Hoyt and William H. Burr. 1912.  
 44. The physical testing of rock for road building, including the methods used and the results obtained. Albert T. Goldbeck and Frank H. Jackson, jr. 1912.  
 45. Data for use in designing culverts and short-span bridges. Charles H. Moorefield. 1913.  
 46. Oil-mixed Portland cement concrete. Logan Waller Page. 1912.  
 47. Descriptive catalogue of the road models of the Office of Public Roads. 1913.  
 48. Repair and maintenance of highways. Laurence I. Hewes. 1913.

<sup>9</sup> Became part of Bureau of Plant Industry July 1, 1901.

<sup>30</sup> Known as Office of Public Road Inquiries 1901-1904; as Office of Public Roads 1905-1915; as Office of Public Roads and Rural Engineering 1916-1919; as the Bureau of Public Roads 1919-1925.



## CIRCULARS

36. List of National, State, and local road associations and kindred organizations in the United States. 1902. Revised, 1902.
37. The railroads and the wagon roads. 1904.
38. A study of rock decomposition under the action of water. Allerton S. Cushman. 1905.
39. Public roads of the State of Washington: Mileage and expenditures in 1904. 1906.
40. Public roads of Arizona: Mileage and expenditures in 1904. 1906.
41. Public roads of Arkansas: Mileage and expenditures in 1904. 1906.
42. Public roads of Oregon: Mileage and expenditures in 1904. 1906.
43. Public roads of Iowa: Mileage and expenditures in 1904. 1906.
44. Public roads of Virginia: Mileage and expenditures in 1904. 1906.
45. Public roads of North Carolina: Mileage and expenditures in 1904. 1906.
46. Public roads of Alabama: Mileage and expenditures in 1904. 1906.
47. Tar and oil for road improvement: Report of progress of experiments at Jackson, Tenn. 1906.
48. Public roads of Tennessee: Mileage and expenditures in 1904. 1906.
49. Public roads of New Hampshire: Mileage and expenditures in 1904. 1906.
50. Public roads of Maryland: Mileage and expenditures in 1904. 1906.
51. Public roads of Maine: Mileage and expenditures in 1904. 1906.
52. Public roads of New Mexico: Mileage and expenditures in 1904. 1906.
53. Public roads of Pennsylvania: Mileage and expenditures in 1904. 1906.
54. Public roads of Montana: Mileage and expenditures in 1904. 1906.
55. Public roads of Wyoming: Mileage and expenditures in 1904. 1906.
56. Public roads of North Dakota: Mileage and expenditures in 1904. 1906.
57. Public roads of South Dakota: Mileage and expenditures in 1904. 1906.
58. Public roads of Kentucky: Mileage and expenditures in 1904. 1906.
59. Public roads of Florida: Mileage and expenditures in 1904. 1906.
60. Public roads of South Carolina: Mileage and expenditures in 1904. 1906.
61. Public roads of Nebraska: Mileage and expenditures in 1904. 1906.
62. Public roads of Nevada: Mileage and expenditures in 1904. 1906.
63. Public roads of Kansas: Mileage and expenditures in 1904. 1906.
64. Public roads of Idaho: Mileage and expenditures in 1904. 1906.
65. Public roads of Colorado: Mileage and expenditures in 1904. 1906.
66. Public roads of Indiana: Mileage and expenditures in 1904. 1907.
67. Public roads of Oklahoma: Mileage and expenditures in 1904. 1907.
68. Public roads of Utah: Mileage and expenditures in 1904. 1907.
69. Public roads of California: Mileage and expenditures in 1904. 1907.
70. Public roads of California: Mileage and expenditures in 1904. 1907.
71. Public roads of New Jersey: Mileage and expenditures in 1904. 1907.
72. Public roads of Missouri: Mileage and expenditures in 1904. 1907.
73. Public roads of Louisiana: Mileage and expenditures in 1904. 1907.
74. Public roads of New York: Mileage and expenditures in 1904. 1907.
75. Public roads of Ohio: Mileage and expenditures in 1904. 1907.
76. Public roads of Georgia: Mileage and expenditures in 1904. 1907.
77. Public roads of Mississippi: Mileage and expenditures in 1904. 1907.
78. Public roads of West Virginia: Mileage and expenditures in 1904. 1907.
79. Public roads of Wisconsin: Mileage and expenditures in 1904. 1907.
80. Public roads of Minnesota: Mileage and expenditures in 1904. 1907.
81. Public roads of Delaware: Mileage and expenditures in 1904. 1907.
82. Public roads of Michigan: Mileage and expenditures in 1904. 1907.
83. Public roads of Rhode Island: Mileage and expenditures in 1904. 1907.
84. Public roads of Massachusetts: Mileage and expenditures in 1904. 1907.
85. Public roads of Texas: Mileage and expenditures in 1904. 1907.
86. Public roads of Connecticut: Mileage and expenditures in 1904. 1907.
87. Public roads of Vermont: Mileage and expenditures in 1904. 1907.
88. Publications of the Office of Public Roads. 1907. Revised, 1908.
89. Progress reports of experiments with dust preventives. 1908.
90. Progress reports of experiments in dust prevention, road preservation, and road construction. 1909.
91. Sand-clay and earth roads in the Middle West. W. L. Spoon. 1910.
92. Progress reports of experiments in dust prevention and road preservation. 1910.
93. Bitumens and their essential constituents for road construction and maintenance. Prévost Hubbard. 1911.
94. Progress reports of experiments in dust prevention and road preservation, 1910. 1911.
95. Special road problems in the Southern States. D. H. Winslow. 1911.
96. Naphthalene in road tars. Prévost Hubbard and Clifton N. Draper. 1911.
97. Coke-oven tars of the United States. Prévost Hubbard. 1912.
98. Progress reports of experiments in dust prevention and road preservation, 1911. 1912.
99. Progress reports of experiments in dust prevention and road preservation, 1912. 1913.
100. Typical specifications for the fabrication and erection of steel highway bridges. 1913.

## UNNUMBERED PUBLICATIONS

- Object-lesson road at Charlottesville, Va. Martin Dodge. 1902.
- Instructions for selecting and shipping samples (of road materials for testing). 1907.
- Exhibit of the Office of Public Roads. Alaska-Yukon-Pacific Exposition. 1909.
- Report of a study of the California highway system by the United States Bureau of Public Roads to the California Highway Commission and highway engineer. Newell D. Darlington, Charles A. Whitmore, George C. Mansfield, and Austin B. Fletcher. 1920. Revised, 1921.

The Bureau of Public Roads and its exhibit: Supplementing exhibit of the Bureau of Public Roads at the Brazil Centennial Exposition, Rio de Janeiro, Brazil, 1922-23. Thomas H. MacDonald. 1922.  
 Prime pyratol this way. 1924. Reprint 1925.  
 Road under construction: Map of detour. 1924.  
 Report of a study of highway traffic and the highway system of Cook County, Ill., by the Bureau of Public Roads and the Cook County Highway Department. 1925.

BUREAU OF SOILS <sup>21</sup>

## ANNUAL REPORTS

1901. Milton Whitney.	1913. Milton Whitney.
1902. Milton Whitney.	1914. Milton Whitney.
1903. Milton Whitney.	1915. Milton Whitney.
1904. Milton Whitney.	1916. Milton Whitney.
1905. Milton Whitney.	1917. Milton Whitney.
1906. Milton Whitney.	1918. Milton Whitney.
1907. Milton Whitney.	1919. Milton Whitney.
1908. Milton Whitney.	1920. Milton Whitney.
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1910. Milton Whitney.	1923. Milton Whitney.
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1912. Milton Whitney.	

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- Soil solutions: Their nature and functions, and the classification of alkali lands. Frank K. Cameron. 1901.
- Solution studies of salts occurring in alkali soils. Frank K. Cameron, Lyman J. Briggs, and Atherton Seidell. 1901.
- Capillary studies and filtration of clay from soil solutions. Lyman J. Briggs and Macy H. Lapham. 1902.
- Growing Sumatra tobacco under shade in the Connecticut Valley. Milton Whitney. 1902.
- Reclamation of alkali lands in Egypt: As adapted to similar work in the United States. Thos. H. Means. 1903.
- The chemistry of the soil as related to crop production. Milton Whitney and F. K. Cameron. 1903.
- Investigations in soil fertility. Milton Whitney and F. K. Cameron. 1904.
- The centrifugal method of mechanical soil analysis. Lyman J. Briggs, F. O. Martin, and J. R. Pearce. 1904.
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22. Soils of the eastern United States and their use—I. The Norfolk fine sandy loam. Jay A. Bonsteel. 1911.
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31. Soils of the eastern United States and their use—IX. The Miami clay loam. Jay A. Bonsteel. 1911.
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 78. Not published.  
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 1912. (Fourteenth report) Milton Whitney. Accompanying papers by assistants in charge of field parties. 1915.  
 1913. (Fifteenth report) Milton Whitney. Accompanying papers by assistants in charge of field parties. 1916.  
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SOIL SURVEYS<sup>22</sup>

## ALASKA

1914. Soil reconnaissance in Alaska, with an estimate of the agricultural possibilities. 1915.  
 1916. Report on a reconnaissance of the soils, agriculture, and other resources of the Kenai Peninsula region of Alaska. 1918.

## ALABAMA

- |                              |   |
|------------------------------|---|
| 1908. Autauga County. 1910.  | 1903. Cherokee County. (See Fort Payne area.) |
| 1909. Baldwin County. 1911.  | 1911. Chilton County. 1913.                   |
| 1914. Barbour County. 1916.  | 1921. Choctaw County. 1925.                   |
| 1908. Bibb County. 1910.     | 1912. Clarke County. 1913.                    |
| 1905. Blount County. 1906.   | 1915. Clay County. 1916.                      |
| 1913. Bullock County. 1915.  | 1913. Cleburne County. 1915.                  |
| 1907. Butler County. 1909.   | 1909. Coffee County. 1911.                    |
| 1908. Calhoun County. 1910.  | 1908. Colbert County. 1909.                   |
| 1909. Chambers County. 1911. |   |

<sup>22</sup> The date preceding the title refers to the year in which the survey was made.

## ALABAMA—continued

1912. Conecuh County. 1914.  
 1912. Covington County. 1914.  
 1921. Crenshaw County. 1924.  
 1908. Cullman County. 1910.  
 1910. Dale County. 1911.  
 1905. Dallas County. 1905.  
 1903. Dekalb County. (See Fort Payne Area.)  
 1911. Elmore County. 1913.  
 1913. Escambia County. 1915.  
 1908. Etowah County. 1910.  
 1917. Fayette County. 1920.  
 1903. Fort Payne Area (parts of Dekalb and Cherokee Counties). 1904.  
 1920. Geneva County. 1924.  
 1909. Hale County. 1910.  
 1908. Henry County. 1909.  
 1920. Houston County. 1923.  
 1903. Huntsville Area (parts of Limestone and Madison Counties). 1904.  
 1911. Jackson County. 1912.  
 1908. Jefferson County. 1910.  
 1908. Lamar County. 1909.  
 1905. Lauderdale County. 1905.  
 1914. Lawrence County. 1916.  
 1906. Lee County. 1907.  
 1914. Limestone County (see also Huntsville Area). 1916.  
 1916. Lowndes County. 1918.  
 1904. Macon County. 1905.  
 1911. Madison County (see also Huntsville Area). 1913.  
 1920. Margeno County. 1923.  
 1907. Marion County. 1908.  
 1911. Marshall County. 1913.  
 1903. Mobile area (part of Mobile County). 1904.  
 1911. Mobile County. 1912.  
 1916. Monroe County. 1918.  
 1905. Montgomery County. 1906.  
 1918. Morgan County. 1921.  
 1902. Perry County. 1903.  
 1916. Pickens County. 1917.  
 1910. Pike County. 1911.  
 1911. Randolph County. 1912.  
 1913. Russell County. 1915.  
 1917. Shelby County. 1920.  
 1917. St. Clair County. 1920.  
 1904. Sumter County. 1905.  
 1907. Talladega County. 1908.  
 1909. Tallapoosa County. 1910.  
 1911. Tuscaloosa County. 1912.  
 1915. Walker County. 1916.  
 1915. Washington County. 1917.  
 1916. Wilcox County. 1918.

## ARIZONA

1921. Benson area (part of Cochise County). 1924.  
 1921. Cochise County (see Benson and San Simon area).  
 1921. Coconino County (see Winslow area).  
 1903. Graham County (see Solomonsville area).  
 1917. Maricopa County (see Middle Gila Valley and Salt River Valley areas).  
 1917. Middle Gila Valley area (parts of Maricopa and Pinal Counties). 1920.  
 1921. Navajo County (see Winslow area).  
 1917. Pinal County (see Middle Gila Valley area).  
 1900. Salt River Valley (part of Maricopa County). 1902.  
 1921. San Simon area (part of Cochise County). 1924.  
 1903. Solomonsville area (part of Graham County). 1904.  
 1921. Winslow area (parts of Coconino and Navajo Counties). 1924.  
 1902. Yuma area (part of Yuma County). 1903.  
 1904. Yuma area (parts of Yuma County, Ariz., and Imperial County, Calif.). 1905.  
 1905. Yuma County (see Yuma area).

## ARKANSAS

1902. Arkansas County (see Stuttgart area).  
 1913. Ashley County. 1914.  
 1906. Benton County (see Fayetteville area).  
 1914. Columbia County. 1916.  
 1907. Conway County. 1908.  
 1916. Craighead County. 1917.  
 1917. Drew County. 1919.  
 1917. Faulkner County. 1919.  
 1906. Fayetteville area (parts of Benton and Washington Counties). 1907.  
 1916. Hempstead County. 1917.  
 1917. Howard County. 1919.  
 1915. Jefferson County. 1916.  
 1921. Lonoke County. 1925.  
 1903. Miller County. 1904.  
 1914. Mississippi County. 1916.  
 1920. Perry County. 1923.  
 1913. Pope County. 1915.  
 1906. Prairie County. 1907.  
 1902. Stuttgart area (part of Arkansas County). 1903.  
 1906. Washington County (see Fayetteville area).  
 1915. Yell County. 1917.

*Reconnaissance*

1911. Ozark region, Arkansas and Missouri (Baxter, Benton, Boone, Carroll, Cleburne, Conway, Crawford, Faulkner, Fulton, Izard, Johnson, Madison, Marion, Newton, Pope, Searcy, Sharp, Stone, Van Buren, and Washington Counties, and part of Franklin, Independent, Lawrence, Lonoke, Pulaski, Randolph, and White Counties, Ark.; and Barry, Benton, Camden, Carter, Christian, Cole, Crawford, Dade, Dallas, Dent, Douglas, Franklin, Gasconade, Greene, Hickory, Howell, Iron, Jefferson, Laclede, Lawrence, McDonald, Madison, Maries, Miller, Monticue, Morgan, Newton, Oregon, Osage, Ozark, Perry, Phelps, Polk, Pulaski, Reynolds, Ste. Genevieve, St. Francois, Shannon, Stone, Taney, Texas, Washington, Wayne, Webster, and Wright Counties, and parts of Barton, Bollinger, Butler, Cape Girardeau, Cedar, Cooper, Jasper, Pettis, Ripley, St. Clair, and St. Louis Counties, Mo.). 1914.

## CALIFORNIA

1910. Alameda County (see Livermore and San José areas).  
 1916. Anaheim area (parts of Los Angeles, Orange, and San Bernardino Counties). 1919.  
 1904. Bakersfield area (part of Kern County). 1905.  
 1920. Big Valley area (parts of Modoc and Lassen Counties). 1924.  
 1920. Brawley area (part of Imperial County). 1923.  
 1907. Butte County (see Colusa and Red Bluff areas).  
 1907. Butte Valley area (part of Siskiyou County). 1909.  
 1907. Colusa area (parts of Colusa, Glenn, Tehama and Butte Counties). 1909.  
 1909. Colusa County (see Woodland, Marysville, and Colusa areas).

## CALIFORNIA—continued

1910. Contra Costa County (see Livermore area).  
 1918. El Centro area (part of Imperial County). 1922.  
 1904. Eldorado County (see Sacramento area).  
 1921. Eureka area (part of Humboldt County). 1925.  
 1900. Fresno area (parts of Fresno and Tulare Counties). 1902.  
 1912. Fresno area (part of Fresno County). 1914.  
 1900. Fresno County (see Fresno and Hanford areas).  
 1912. Fresno County (see Fresno area).  
 1907. Glenn County (see Colusa area).  
 1918. Grass Valley area (part of Nevada County). 1921.  
 1901. Hanford area (parts of Fresno and Kings Counties). 1903.  
 1915. Healdsburg area (part of Sonoma County). 1917.  
 1915. Honey Lake area (part of Lassen County). 1917.  
 1921. Humboldt County (see Eureka area).  
 1901. Imperial area (part of Imperial County). 1902. (Bureau of Soils, Circular 9.)  
 1903. Imperial area (parts of Imperial County, Calif., and Yuma County, Ariz.). 1904.  
 1920. Imperial County (see Brawley, El Centro, and Imperial and Palo Verde areas).  
 1903. Indio area (part of Riverside County). 1904.  
 1904. Kern County (see Bakersfield area).  
 1922. Kern County (see Lancaster area).  
 1901. Kings County (see Hanford area).  
 1920. Lassen County (see Honey Lake area and Big Valley area).  
 1910. Livermore area (parts of Alameda and Contra Costa Counties). 1911.  
 1903. Los Angeles area (parts of Los Angeles and Orange Counties). 1904.  
 1916. Los Angeles area (part of Los Angeles County). 1919.  
 1916. Los Angeles County (see Anaheim, Los Angeles, Pasadena, San Bernardino, San Fernando Valley, San Gabriel, Lancaster, and Ventura areas).  
 1916. Los Angeles County (see Los Angeles area).  
 1901. Lower Salinas Valley (part of Monterey County). 1903.  
 1910. Madera area (part of Madera County). 1911.  
 1910. Madera County (see Madera area).  
 1909. Marysville area (parts of Colusa, Placer, Sacramento, Sutter, and Yuba Counties). 1911.  
 1914. Mendocino County (see Ukiah and Willits areas).  
 1914. Merced area (part of Merced County). 1916.  
 1914. Merced County (see Merced area).  
 1908. Modesto-Turlock area (parts of San Joaquin and Stanislaus Counties). 1909.  
 1908. Modoc County (see Klamath Reclamation Project area, Oreg.).  
 1920. Modoc County (see Big Valley area).  
 1908. Monterey County (see Pajaro Valley area).  
 1911. Monterey County (see Lower Salinas Valley area).  
 1918. Nevada County (see Grass Valley area).  
 1916. Orange County (see Anaheim, Los Angeles, and Santa Ana areas).  
 1908. Pajaro Valley (parts of Monterey and Santa Cruz Counties). 1910.  
 1915. Pasadena area (parts of Los Angeles and San Bernardino Counties). 1917.  
 1904. Placer County (see Sacramento area).  
 1909. Placer County (see Marysville area).  
 1908. Portersville area (part of Tulare County). 1909.  
 1910. Red Bluff area (parts of Butte and Tehama Counties). 1912.  
 1907. Redding area (part of Shasta County). 1908.  
 1915. Riverside area (parts of Riverside and San Bernardino Counties). 1917.  
 1915. Riverside County (see Indio, Riverside, and San Bernardino and Palo Verde areas).  
 1904. Sacramento area (parts of Eldorado, Placer, Sacramento, and Sutter Counties). 1905.  
 1904. Sacramento County (see Sacramento area).  
 1909. Sacramento County (see Marysville area).  
 1904. San Bernardino area (parts of Los Angeles, Riverside, and San Bernardino Counties). 1905.  
 1916. San Bernardino County (see Anaheim, Pasadena, Riverside, San Bernardino, San Gabriel, and Victorville areas).  
 1915. San Fernando Valley (part of Los Angeles County). 1917.  
 1901. San Gabriel area (parts of Los Angeles and San Bernardino Counties). 1903.  
 1908. San Joaquin County (see Modesto-Turlock and Stockton areas).  
 1903. San José area (parts of Alameda and Santa Clara Counties). 1904.  
 1916. San Luis Obispo County (see Santa Maria area).  
 1900. Santa Ana area (part of Orange County). 1902.  
 1916. Santa Barbara County (see Santa Maria area).  
 1903. Santa Clara County (see Sn José area).  
 1908. Santa Cruz County (see Pajaro Valley area).  
 1916. Santa Maria area (parts of San Luis Obispo and Santa Barbara Counties). 1919.  
 1907. Shasta County (see Redding area).  
 1919. Shasta Valley area (part of Siskiyou County). 1923.  
 1907. Siskiyou County (see Klamath Reclamation Project area, Oreg., and Butte Valley area, Calif.).  
 1919. Siskiyou County (see Shasta Valley area).  
 1915. Sonoma County (see Healdsburg area).  
 1908. Stanislaus County (see Modesto-Turlock area).  
 1905. Stockton area (part of San Joaquin County). 1906.  
 1904. Sutter County (see Sacramento area).  
 1909. Sutter County (see Marysville area).  
 1907. Tehama County (see Colusa and Red Bluff area).  
 1900. Tulare County (see Fresno area).  
 1908. Tulare County (see Portersville area).  
 1914. Ukiah area (part of Mendocino County). 1916.  
 1901. Ventura area (part of Ventura County). 1903.  
 1917. Ventura area (parts of Los Angeles and Ventura Counties). 1920.  
 1917. Ventura County (see Ventura area).

## CALIFORNIA—continued

1921. Victorville area (part of San Bernardino County) 1924.  
 1918. Willits area (part of Mendocino County) 1920.  
 1909. Woodland area (parts of Colusa and Yolo Counties). 1911.  
 1909. Yolo County (see Woodland area).  
 1909. Yuba County (see Marysville area).

*Reconnaissance*

1917. Central-Southern (parts of Los Angeles, Orange, Riverside, San Bernardino and San Diego Counties). 1921.  
 1915. Lower San Joaquin Valley area (parts of Alameda, Calaveras, Contra Costa, Fresno, Madera, Merced, San Joaquin, Stanislaus, and Tuolumne Counties). 1918.  
 1916. Middle San Joaquin Valley area (parts of Fresno, Kings, and Tulare Counties). 1919.  
 1913. Sacramento Valley area (parts of Amador, Butte, Colusa, Contra Costa, Glenn, Placer, Sacramento, San Joaquin, Solano, Sutter, Tehama, Yolo, and Yuba Counties). 1915.  
 1915. San Diego area (parts of Orange, Riverside, and San Diego Counties). 1918.  
 1914. San Francisco Bay area (San Francisco and San Mateo Counties, and parts of Alameda, Contra Costa, Marin, Napa, San Joaquin, Santa Clara, Santa Cruz, Solano, and Sonoma Counties). 1917.  
 1917. Upper San Joaquin Valley area (parts of Fresno, Kern, Kings, San Luis Obispo, Santa Barbara, and Tulare Counties). 1921.

## COLORADO

1902. Bent County (see Lower Arkansas Valley area).  
 1903. Conejos County (see San Luis Valley).  
 1903. Costilla County (see San Luis Valley).  
 1910. Delta County (see Uncompahgre Valley).  
 1905. Grand Junction area (part of Mesa County). 1906.  
 1904. Greeley area (part of Weld and Larimer Counties). 1905.  
 1904. Larimer County (see Greeley area).  
 1902. Lower Arkansas Valley (parts of Bent, Otero, and Prowers Counties). 1903.  
 1905. Mesa County (see Grand Junction area).  
 1910. Montrose County (see Uncompahgre Valley).  
 1910. Ouray County (see Uncompahgre Valley).  
 1902. Otero County (see Lower Arkansas Valley).  
 1902. Prowers County (see Lower Arkansas Valley).  
 1903. Rio Grande County (see San Luis Valley).  
 1903. Saguache County (see San Luis Valley).  
 1903. San Luis Valley (parts of Saguache, Rio Grande, Conejos, and Costilla Counties). 1904.  
 1910. Uncompahgre Valley area (parts of Delta, Montrose, and Ouray Counties). 1912.  
 1904. Weld County (see Greeley area).

## CONNECTICUT

1903. Connecticut Valley (parts of Hartford and Tolland Counties, Conn., and Franklin, Hampshire, and Hampden Counties, Mass.). 1903.  
 1903. Hartford County (see Connecticut Valley).  
 1912. New London County. 1913.  
 1903. Tolland County (see Connecticut Valley).  
 1911. Windham County. 1912.

## DELAWARE

1903. Dover area (part of Kent County). 1904.  
 1913. Kent County (also see Dover area). 1920.  
 1915. New Castle County. 1917.  
 1919. Sussex County. 1924.

## FLORIDA

1904. Alachua County (see Gainesville area).  
 1913. Bradford County. 1914.  
 1913. Brevard County (see Indian River area).  
 1912. Citrus County (see Ocala area).  
 1915. Dade County (see Fort Lauderdale area).  
 1921. Duval County. 1923.  
 1906. Escambia County. 1907.  
 1918. Flagler County. 1922.  
 1915. Fort Lauderdale area (parts of Dade and Palm Beach Counties). 1915.  
 1915. Franklin County. 1916.  
 1903. Gadsden County. 1903.  
 1904. Gainesville area (parts of Alachua, Levy & Marion Counties). 1905.  
 1914. Hernando County. 1915.  
 1916. Hillsborough County. 1918.  
 1913. Indian River area (parts of Brevard, Palm Beach, and St. Lucie Counties). 1915.  
 1909. Jackson County (see Mariana area).  
 1910. Jacksonville area (part of Duval County). 1911.  
 1907. Jefferson County. 1908.  
 1905. Leon County. 1906.  
 1912. Levy County (see Ocala and Gainesville areas).  
 1909. Mariana area (part of Jackson County). 1910.  
 1912. Marion County (see Ocala and Gainesville areas).  
 1912. Ocala area (parts of Citrus, Levy, Marion & Sumter Counties). 1913.  
 1919. Orange County. 1922.  
 1915. Palm Beach County (see Fort Lauderdale area and Indian River area).  
 1913. Pinellas County. 1914.  
 1914. Putnam County. 1916.  
 1912. Sumter County (see Ocala area).  
 1917. St. John's County. 1920.  
 1913. St. Lucie County (see Indian River area).



## GEORGIA

1904. Bainbridge area (part of Decatur County). 1905.
1912. Ben Hill County. 1913.
1916. Brooks County. 1918.
1910. Bulloch County. 1911.
1917. Burke County. 1919.
1919. Butts-Henry Counties. 1922.
1921. Carroll County. 1924.
1911. Chatham County. 1912.
1912. Chattooga County. 1913.
1914. Clay County. 1916.
1901. Cobb County. 1903.
1914. Colquitt County. 1915.
1911. Columbia County. 1912.
1901. Covington area (parts of Jasper, Newton, Walton, Morgan, and Rockdale Counties). 1903.
1919. Coweta and Fayette Counties. 1922.
1916. Crisp County. 1917.
1904. Decatur County (see Bainbridge area).
1914. DeKalb County. 1915.
1904. Dodge County. 1905.
1912. Dougherty County. 1913.
1918. Early County. 1921.
1919. Fayette County (see Coweta and Fayette Counties).
1917. Floyd County. 1921.
1903. Fort Valley area (parts of Macon and Houston Counties). 1904.
1909. Franklin County. 1910.
1911. Glynn County. 1912.
1913. Gordon County. 1914.
1908. Grady County. 1909.
1918. Greene County (see Oconee, Morgan, Greene, and Putnam Counties).
1913. Habersham County. 1914.
1909. Hancock County. 1910.
1919. Henry County (see Butts-Henry Counties).
1903. Houston County (see Fort Valley area).
1914. Jackson County. 1915.
1916. Jasper County (see also Covington area). 1918.
1913. Jeff Davis County. 1914.
1913. Jones County. 1914.
1915. Laurens County. 1916.
1917. Lowndes County. 1920.
1903. Macon County (see Fort Valley area).
1918. Madison County. 1921.
1916. Meriwether County. 1917.
1913. Miller County. 1914.
1919. Mitchell County. 1922.
1920. Monroe County. 1922.
1919. Morgan County (see Oconee, Morgan, Greene, and Putnam Counties and Covington area).
1901. Newton County (see Covington area).
1919. Oconee, Morgan, Greene, and Putnam Counties. 1922.
1918. Pierce County (see also Waycross area). 1920.
1909. Pike County. 1910.
1914. Polk County. 1916.
1918. Pulaski County. 1920.
1918. Putnam County (see Oconee, Morgan, Greene, and Putnam Counties).
1920. Rabun County. 1924.
1916. Richmond County. 1917.
1920. Rockdale County. 1923.
1901. Rockdale County (see Covington area).
1920. Screven County. 1924.
1905. Spalding County. 1905.
1913. Stewart County. 1915.
1910. Sumter County. 1911.
1913. Talbot County. 1914.
1914. Tattnall County. 1915.
1914. Terrell County. 1915.
1908. Thomas County. 1909.
1909. Tift County. 1910.
1912. Troup County. 1913.
1915. Turner County. 1916.
1910. Walker County. 1911.
1901. Walton County (see Covington area).
1906. Ware County (see Waycross area).
1915. Washington County. 1916.
1906. Waycross area (part of Ware and small part of Pierce Counties). 1907.
1915. Wilkes County. 1916.

*Reconnaissance*

1912. Tattnall County (no map). 1913.

## IDAHO

1901. Ada County (see Boise area).
1918. Bannock County (see Portneuf area).
1903. Bingham County (see Blackfoot area).
1903. Blackfoot area (parts of Bingham and Fremont Counties). 1904.
1901. Boise area (parts of Ada and Canyon Counties). 1903.
1901. Canyon County (see Boise area).
1907. Cassia County (see Minidoka area).
1903. Fremont County (see Blackfoot area).
1919. Kootenai County. 1923.
1915. Latah County (see also Lewiston area). 1917.
1917. Lewis County (see Nez Perce and Lewis Counties).
1902. Lewiston area (parts of Nez Perce and Latah Counties). 1903.
1907. Lincoln County (see Minidoka area).
1907. Minidoka area (parts of Lincoln and Cassia Counties). 1908.
1917. Nez Perce County (see Nez Perce and Lewis Counties and Lewiston area).
1917. Nez Perce and Lewis Counties. 1920.
1918. Portneuf area (part of Bannock County). 1921.
1921. Twin Falls area (part of Twin Falls County). 1925.

## ILLINOIS

1904. Calhoun County (see O'Fallon area).
1902. Clay County. 1903.
1902. Clinton County. 1903.
1904. Jersey County (see O'Fallon area).
1902. Jo Daviess County (see Dubuque area, Iowa).
1903. Johnson County. 1904.
1903. Knox County. 1904.
1903. McLean County. 1904.
1904. O'Fallon area (parts of Lincoln, St. Charles, Warren, and St. Louis Counties, Mo.; and Calhoun and Jersey Counties, Ill.). 1905.
1903. Sangamon County. 1904.
1902. St. Clair County. 1903.
1902. Tazewell County. 1903.
1912. Will County. 1914.
1903. Winnebago County. 1904.

## INDIAN TERRITORY

1906. Tishomingo area. 1907.

## INDIANA

1921. Adams County. 1923.
1908. Allen County. 1909.
1916. Benton County. 1917.
1912. Boone County. 1914.
1904. Booneville area (parts of Warrick and Spencer Counties). 1905.

## INDIANA—continued

1914. Clinton County. 1915.  
 1919. Decatur County. 1922.  
 1913. Delaware County. 1915.  
 1914. Elkhart County. 1916.  
 1915. Grant County. 1917.  
 1906. Greene County. 1907.  
 1912. Hamilton County. 1914.  
 1913. Hendricks County. 1915.  
 1917. Lake County. 1921.  
 1903. Madison County. 1904.  
 1907. Marion County. 1908.  
 1904. Marshall County. 1905.  
 1912. Montgomery County. 1914.  
 1905. Newton County. 1906.  
 1916. Porter County. 1918.  
 1902. Posey County. 1903.  
 1904. Scott County. 1905.  
 1904. Spencer County (see Boonville area).  
 1915. Starke County. 1917.  
 1905. Tippecanoe County. 1906.  
 1912. Tipton County. 1914.  
 1914. Warren County. 1916.  
 1904. Warrick County (see Boonville area).  
 1915. Wells County. 1917.  
 1915. White County. 1917.

## IOWA

1919. Adair County. 1921.  
 1921. Benton County. 1925.  
 1917. Blackhawk County. 1919.  
 1920. Boone County. 1923.  
 1913. Bremer County. 1914.  
 1917. Buena Vista County. 1919.  
 1919. Cedar County. 1921.  
 1903. Cerro Gordo County. 1904.  
 1916. Clay County. 1918.  
 1915. Clinton County. 1917.  
 1920. Dallas County. 1924.  
 1922. Delaware County. 1925.  
 1921. Des Moines County. 1925.  
 1920. Dickinson County. 1923.  
 1902. Dubuque area (parts of Dubuque, Jackson, and Jones Counties, Iowa, and Jo Daviess County, Ill.). 1903.  
 1902. Dubuque County (see Dubuque area).  
 1920. Dubuque County. 1923.  
 1920. Emmet County. 1923.  
 1919. Fayette County. 1922.  
 1921. Greene County. 1924.  
 1921. Grundy County. 1925.  
 1917. Hamilton County. 1920.  
 1920. Hardin County. 1923.  
 1917. Henry County. 1919.  
 1902. Jackson County (see Dubuque area).  
 1921. Jasper County. 1925.  
 1922. Jefferson County. 1925.  
 1919. Johnson County. 1922.  
 1902. Jones County (see Dubuque area).  
 1914. Lee County. 1916.  
 1917. Linn County. 1920.  
 1918. Louisa County. 1921.  
 1918. Madison County. 1921.  
 1919. Mahaska County. 1922.  
 1919. Marshall County. 1921.  
 1920. Mills County. 1923.  
 1916. Mitchell County. 1918.  
 1917. Montgomery County. 1919.  
 1914. Muscatine County. 1916.  
 1921. O'Brien County. 1924.  
 1921. Page County. 1924.  
 1918. Palo Alto County. 1921.  
 1918. Polk County. 1921.  
 1914. Pottawattamie County. 1916.  
 1916. Ringgold County. 1918.  
 1915. Scott County. 1917.  
 1915. Sioux County. 1917.  
 1903. Story County. 1904.  
 1904. Tama County. 1905.  
 1915. Van Buren County. 1917.  
 1917. Wapello County. 1919.  
 1918. Wayne County. 1920.  
 1914. Webster County. 1916.  
 1918. Winnebago County. 1921.  
 1919. Woodbury County. 1923.  
 1922. Worth County. 1925.  
 1919. Wright County. 1922.

## KANSAS

1904. Allen County. 1905.  
 1911. Atchison County (see Platte County, Mo.).  
 1905. Brown County. 1906.  
 1902. Butler County (see Wichita area).  
 1912. Cherokee County (also see Parsons area). 1914.  
 1915. Cowley County. 1917.  
 1903. Crawford County (see Parsons area).  
 1904. Finney County (see Garden City area).  
 1904. Garden City area (parts of Finney and Gray Counties). 1905.  
 1904. Gray County (see Garden City area).  
 1912. Greenwood County. 1914.  
 1912. Jewell County. 1914.  
 1903. Labette County (see Parsons area).  
 1919. Leavenworth County (see also Platte County, Mo.). 1923.  
 1913. Montgomery County. 1915.  
 1903. Parsons area (parts of Labette, Cherokee, and Crawford Counties). 1904.  
 1911. Reno County. 1913.  
 1906. Riley County. 1908.  
 1903. Russell area (part of Russell County). 1904.  
 1903. Russell County (see Russell area).  
 1902. Sedgwick County (see Wichita area).  
 1911. Shawnee County. 1913.  
 1902. Wichita area (parts of Sedgwick and Butler Counties). 1903.  
*Reconnaissance*  
 1910. Western Kansas (Barber, Barton, Cheyenne, Clark, Comanche, Decatur, Edwards, Ellis, Finney, Ford, Gove, Graham, Grant, Gray, Greeley, Hamilton, Haskell, Hodgeman, Kearney, Kiowa, Lane, Logan, Meade, Morton, Ness, Norton, Osborne, Pawnee, Phillips, Pratt, Rawlins, Rooks, Rush, Russell, Scott, Seward, Sheridan, Sherman, Smith, Stafford, Stanton, Stevens, Thomas, Trego, Wallace, and Wichita Counties). 1912.

## KENTUCKY

1912. Christian County. 1914.  
 1921. Garrard County. 1924.  
 1915. Jessamine County. 1916.  
 1919. Logan County. 1922.  
 1905. McCracken County. 1906.  
 1905. Madison County. 1906.  
 1903. Mason County. 1904.  
 1919. Muhlenberg County. 1924.  
 1910. Rockcastle County. 1911.  
 1903. Scott County. 1904.  
 1916. Shelby County. 1919.  
 1902. Union County. 1903.  
 1904. Warren County. 1905.

## LOUISIANA

1903. Acadia Parish. 1904.  
 1908. Bienville Parish. 1909.  
 1906. Caddo Parish. 1907.  
 1901. Calcasieu Parish (see Lake Charles area).  
 1910. Concordia Parish. 1911.

## LOUISIANA—continued

1904. De Soto Parish. 1905.  
 1905. East Baton Rouge Parish. 1905.  
 1908. East Carroll and West Carroll Parishes. 1909.  
 1912. East Feliciana Parish. 1913.  
 1911. Iberia Parish. 1912.  
 1903. Jefferson Parish (see New Orleans area).  
 1915. LaFayette Parish. 1916.  
 1901. Lake Charles Area (part of Calcasieu Parish). 1903.  
 1918. LaSalle Parish. 1920.  
 1909. Lincoln Parish. 1910.  
 1921. Natchitoches Parish. 1925.  
 1903. New Orleans area (parts of Jefferson, Orleans, Plaquemines, St. Charles, and St. John the Baptist Parishes). 1904.  
 1903. Orleans Parish (see New Orleans area).  
 1903. Ouachita Parish. 1904.  
 1903. Plaquemines Parish (see New Orleans area).  
 1916. Rapides Parish. 1918.  
 1919. Sabine Parish. 1922.  
 1903. St. Charles Parish (see New Orleans area).  
 1903. St. John the Baptist Parish (see New Orleans area).  
 1917. St. Martin Parish. 1919.  
 1905. Tangipahoa Parish. 1906.  
 1922. Washington Parish. 1925.  
 1914. Webster Parish. 1916.  
 1908. West Carroll Parish (see East and West Carroll Parishes).  
 1907. Winn Parish. 1909.

## MAINE

1917. Aroostook area (part of Aroostook County). 1921.  
 1917. Aroostook County (see Aroostook and Caribou Areas).  
 1908. Caribou area (part of Aroostook County). 1910.  
 1915. Cumberland County. 1917.  
 1909. Orono area (part of Penobscot County). 1910.  
 1909. Penobscot County (see Orono area).

## MARYLAND

1921. Allegany County. 1925.  
 1909. Anne Arundel County. 1910.  
 1917. Baltimore County. 1919.  
 1900. Calvert County. 1902.  
 1907. Caroline County. (See Easton area.)  
 1919. Carroll County. 1922.  
 1900. Cecil County. 1902.  
 1918. Charles County. 1922.  
 1907. Easton area (Caroline, Queen Annes, Talbot Counties). 1909.  
 1919. Frederick County. 1922.  
 1901. Harford County. 1903.  
 1916. Howard County. 1917.  
 1900. Kent County. 1902.  
 1914. Montgomery County. 1916.  
 1901. Prince Georges County. 1903.  
 1907. Queen Annes County. (See Easton area.)  
 1920. Somerset County. 1924.  
 1900. St. Marys County. 1902.  
 1907. Talbot County. (See Easton area.)  
 1917. Washington County. 1910.  
 1921. Wicomico County. 1925.  
 1903. Worcester County. 1904.

## MASSACHUSETTS

1903. Connecticut Valley (parts of Hampshire, Hampden, and Franklin Counties, Mass., and Hartford and Tolland Counties, Conn.). 1904.  
 1903. Franklin County (see Connecticut Valley).  
 1903. Hampden County (see Connecticut Valley).  
 1903. Hampshire County (see Connecticut Valley).  
 1920. Norfolk, Bristol, and Barnstable Counties. 1924.  
 1911. Plymouth County. 1912.

## MICHIGAN

1904. Alger County (see Munising area).  
 1901. Allegan County. 1903.  
 1904. Alma area (part of Gratiot County). 1905.  
 1904. Bay County (see Saginaw area).  
 1916. Calhoun County. 1919.  
 1906. Cass County. 1907.  
 1912. Genesee County. 1914.  
 1904. Gratiot County (see Alma area).  
 1904. Huron County (see Saginaw area).  
 1902. Monroe County (see Toledo area, Ohio).  
 1904. Munising area (part of Alger County). 1905.  
 1903. Oakland County (see Oxford and Pontiac areas).  
 1904. Owosso area (part of Shiawassee County). 1905.  
 1905. Oxford area (part of Oakland County). 1906.  
 1903. Pontiac area (part of Oakland County). 1904.  
 1904. Saginaw area (parts of Saginaw, Bay, Huron, and Tuscola Counties). 1905.  
 1904. Saginaw County (see Saginaw area).  
 1904. Shiawassee County (see Owosso area).  
 1921. St. Joseph County. 1923.  
 1904. Tuscola County (see Saginaw area).  
 1908. Wexford County. 1909.  
 1921. Ontonagon County. 1923.

*Reconnaissance*

## MINNESOTA

1916. Anoka County. 1918.  
 1906. Blue Earth County. 1907.  
 1905. Carlton area (parts of Carlton and St. Louis Counties, Minn., and Douglas County, Wis.). 1906.  
 1905. Carlton County (see Carlton area).  
 1906. Crookston area (part of Polk County). 1907.  
 1913. Goodhue County. 1915.  
 1903. Lyon County (see Marshall area).  
 1903. Marshall area (part of Lyon County). 1904.  
 1914. Pennington County. 1916.  
 1906. Polk County (see Crookston area).  
 1914. Ramsey County. 1916.  
 1909. Rice County. 1911.  
 1919. Stevens County. 1922.  
 1905. St. Louis County (see Carlton area, Minn., and Superior area, Wis.).

## MISSISSIPPI

1910. Adams County. 1911.  
 1921. Alcorn County. 1924.  
 1917. Amite County. 1919.  
 1904. Biloxi area (part of Harrison County). 1904.  
 1915. Chickasaw County. 1917.  
 1920. Choctaw County. 1923.  
 1914. Clarke County. 1915.  
 1909. Clay County. 1911.  
 1915. Coahoma County. 1916.  
 1917. Covington County. 1919.  
 1904. Copiah County (see Jackson and Crystal Springs areas).  
 1905. Crystal Springs area (parts of Simpson and Copiah Counties). 1905.  
 1911. Forrest County. 1912.  
 1922. George County. 1925.  
 1915. Grenada County. 1917.  
 1903. Hancock County (see McNeill area).  
 1904. Harrison County (see Biloxi area).  
 1916. Hinds County (see also Jackson area). 1918.  
 1908. Holmes County. 1909.  
 1902. Issaquena County (see Smedes and Yazoo areas).  
 1904. Jackson area (parts of Copiah, Hinds, Rankin, and Simpson Counties). 1904.  
 1909. Jackson County (see Scranton area).  
 1907. Jasper County. 1908.  
 1915. Jefferson Davis County. 1916.  
 1913. Jones County. 1915.  
 1912. Lafayette County. 1914.  
 1919. Lamar County. 1922.  
 1910. Lauderdale County. 1912.  
 1916. Lee County. 1918.  
 1912. Lincoln County. 1913.  
 1911. Lowndes County. 1912.  
 1917. Madison County (see also Smedes area). 1920.  
 1908. Monroe County. 1910.  
 1906. Montgomery County. 1907.  
 1903. McNeill area (parts of Pearl River and Hancock Counties). 1904.  
 1916. Newton County. 1918.  
 1910. Noxubee County. 1911.  
 1907. Oktibbeha County. 1908.  
 1918. Pearl River County (see also McNeill area). 1920.  
 1918. Pike County. 1921.  
 1906. Pontotoc County. 1907.  
 1907. Prentiss County. 1908.  
 1904. Rankin County (see Jackson area).  
 1909. Scranton area (part of Jackson County). 1910.  
 1902. Sharkey County (see Smedes and Yazoo areas).  
 1919. Simpson County (see also Jackson and Crystal Springs areas). 1921.  
 1902. Smedes area (parts of Yazoo, Madison, Issaquena and Sharkey Counties). 1903.  
 1920. Smith County. 1923.  
 1912. Warren County. 1914.  
 1911. Wayne County. 1913.  
 1913. Wilkinson County. 1915.  
 1912. Winston County. 1913.  
 1901. Yazoo area (parts of Yazoo, Sharkey, and Issaquena Counties). 1903.  
 1902. Yazoo County (see Smedes and Yazoo areas).

## MISSOURI

1921. Andrew County. 1925.  
 1909. Atchison County. 1910.  
 1916. Barry County. 1918.  
 1912. Barton County. 1914.  
 1908. Bates County. 1910.  
 1915. Buchanan County. 1917.  
 1921. Caldwell County. 1924.  
 1916. Callaway County. 1919.  
 1910. Cape Girardeau County. 1912.  
 1912. Carroll County. 1914.  
 1912. Cass County. 1914.  
 1909. Cedar County. 1911.  
 1918. Chariton County. 1921.  
 1920. Cole County. 1924.  
 1909. Cooper County. 1911.  
 1905. Crawford County. 1906.  
 1914. DeKalb County. 1916.  
 1914. Dunklin County. 1916.  
 1911. Franklin County. 1913.  
 1913. Greene County. 1915.  
 1914. Grundy County. 1916.  
 1914. Harrison County. 1916.  
 1902. Howell County. 1903.  
 1910. Jackson County. 1912.  
 1914. Johnson County. 1916.  
 1917. Knox County. 1921.  
 1911. Laclede County. 1912.  
 1920. Lafayette County. 1923.  
 1917. Lincoln County (see also O'Fallon area). 1920.  
 1911. Macon County. 1913.  
 1910. Marion County. 1911.  
 1912. Miller County. 1914.  
 1921. Mississippi County. 1924.  
 1915. Newton County. 1917.  
 1913. Nodaway County. 1915.  
 1904. O'Fallon area (parts of Lincoln, St. Charles, Warren, and St. Louis Counties, Mo., and Calhoun and Jersey Counties, Ill.). 1905.  
 1910. Pemisicot County. 1912.  
 1913. Perry County. 1915.  
 1914. Pettis County. 1916.  
 1912. Pike County. 1914.  
 1911. Platte County (also small parts of Atchison and Leavenworth Counties, Kan.). 1912.  
 1906. Putham County. 1908.  
 1913. Ralls County. 1914.  
 1918. Reynolds County. 1921.  
 1915. Ripley County. 1917.  
 1904. Saline County. 1905.  
 1905. Scotland County. 1906.  
 1903. Shelby County. 1904.  
 1904. St. Charles County (see O'Fallon area).  
 1918. St. Francois County. 1921.  
 1904. St. Louis County (see O'Fallon area).  
 1919. St. Louis County. 1923.  
 1912. Stoddard County. 1914.  
 1917. Texas County. 1919.  
 1904. Warren County (see O'Fallon area).  
 1904. Webster County. 1905.

## Reconnaissance

1911. Ozark region. Arkansas and Missouri (Baxter, Benton, Boone, Carroll, Cleburne, Conway, Crawford, Faulkner, Fulton, Izard, Johnson, Madison, Marion, Newton, Pope, Searcy, Sharp, Stone, Van Buren, and Washington Counties, and parts of Franklin, Independence, Lawrence, Lonoke, Pulaski, Randolph, and White Counties, Ark.; and Barry, Benton, Camden, Carter, Christian, Cole, Crawford, Dade, Dallas, Dent, Douglas, Franklin, Gasconade, Greene, Hickory, Howell, Iron, Jefferson, Laclede, Lawrence, McDonald, Madison, Maries, Miller, Moniteau, Morgan, Newton, Oregon, Osage, Ozark, Perry, Phelps, Polk, Pulaski, Reynolds, Ste. Genevieve, St. Francois, Shannon, Stone, Taney, Texas, Washington, Wayne, Webster, and Wright Counties, and parts of Barton, Bollinger, Butler, Cape Girardeau, Cedar, Cooper, Jasper, Pettis, Ripley, St. Clair, and St. Louis Counties, Mo.). 1914.

## MONTANA

1902. Billings area (parts of Yellowstone and Stillwater Counties). 1903.  
 1914. Bitter Root Valley area (parts of Missoula and Ravalli Counties). 1917.  
 1905. Gallatin County (see Gallatin Valley area).  
 1905. Gallatin Valley area (part of Gallatin County). 1906.  
 1914. Missoula County (see Bitter Root Valley area).  
 1914. Ravalli County (see Bitter Root Valley area).  
 1902. Stillwater County (see Billings area).  
 1902. Yellowstone County (see Billings area).

## NEBRASKA

1921. Antelope County. 1924.  
 1919. Banner County. 1921.  
 1921. Boone County. 1925.  
 1916. Box Butte County. 1918.  
 1904. Buffalo County (see Kearney and Green Island areas).  
 1913. Cass County. 1914.  
 1917. Chase County. 1919.  
 1918. Cheyenne County. 1920.  
 1919. Dakota County. 1921.  
 1915. Dawes County. 1917.  
 1904. Dawson County (see Kearney area).  
 1922. Dawson County. 1925.  
 1921. Deuel County. 1924.  
 1916. Dodge County. 1918.  
 1913. Douglas County. 1915.  
 1916. Fillmore County. 1918.  
 1914. Gage County. 1916.  
 1904. Gosper County (see Kearney area).  
 1903. Grand Island area (parts of Hall, Buffalo, Hamilton, and Merrick Counties). 1904.  
 1916. Hall County (also see Grand Island area). 1918.  
 1903. Hamilton County (see Grand Island area).  
 1920. Howard County. 1924.  
 1921. Jefferson County. 1925.  
 1920. Johnson County. 1924.  
 1904. Kearney area (parts of Dawson, Buffalo, Phelps, Kearney, and Gosper Counties). 1904.  
 1904. Kearney County (see Kearney area).  
 1916. Kimball County. 1917.  
 1906. Lancaster County. 1908.
1907. Lincoln County (see North Platte area).  
 1920. Madison County (see also Stanton area). 1923.  
 1903. Merrick County (see Grand Island area).  
 1917. Morrill County. 1920.  
 1922. Nance County. 1925.  
 1914. Nemaha County. 1916.  
 1907. North Platte area (part of Lincoln County). 1908.  
 1912. Otoe County. 1913.  
 1920. Pawnee County. 1924.  
 1921. Perkins County. 1924.  
 1917. Phelps County (see also Kearney area). 1919.  
 1903. Pierce County (see Stanton area).  
 1915. Polk County. 1917.  
 1919. Redwillow County. 1921.  
 1915. Richardson County. 1917.  
 1905. Sarpy County. 1906.  
 1913. Saunders County. 1915.  
 1913. Scotts Bluff County (see also Fort Laramie area, Wyo.). 1915.  
 1914. Seward County. 1916.  
 1918. Sheridan County. 1921.  
 1919. Sioux County. 1922.  
 1903. Stanton County (see Stanton area).  
 1903. Stanton area (parts of Pierce, Madison, Stanton, and Wayne Counties). 1904.  
 1914. Thurston County. 1916.  
 1915. Washington County. 1917.  
 1917. Wayne County (see also Stanton area). 1919.

*Reconnaissance*

1911. Western Nebraska (Adams, Banner, Blaine, Box, Butte, Boyd, Brown, Buffalo, Chase, Cherry, Cheyenne, Custer, Dawes, Dawson, Deuel, Dundy, Frontier, Franklin, Furnas, Garden, Garfield, Gosper, Grant, Greeley, Hall, Harlan, Hayes, Hitchcock, Hooker, Holt, Howard, Kearney, Keith, Keyapaha, Kimball, Lincoln, Logan, Loup, McPherson, Morrill, Perkins, Phelps, Redwillow, Rock, Scottsbluff, Sheridan, Sherman, Sioux, Thomas, Valley, Webster, and Wheeler Counties). 1913.

## NEVADA

1909. Churchill County (see Fallon area).  
 1909. Fallon area (parts of Lyon and Churchill Counties). 1911.  
 1909. Lyon County (see Fallon area).

## NEW HAMPSHIRE

1909. Hillsboro County (see Nashua area).  
 1906. Merrimack County. 1908.  
 1909. Nashua area (part of Hillsboro County). 1910.

## NEW JERSEY

1915. Atlantic County (see Camden, Millville, and Chatsworth areas).  
 1917. Belvidere area (parts of Hunterdon, Mercer, Morris, Somerset, Sussex, and Warren Counties). 1920.  
 1919. Bernardsville area (parts of Hunterdon, Middlesex, Morris, Somerset, Sussex, and Union Counties). 1923.  
 1915. Burlington County (see Camden, Trenton, and Chatsworth area).  
 1915. Camden area (parts of Atlantic, Burlington, Camden, Cumberland, Gloucester, and Salem Counties). 1917.
1915. Camden County (see Camden and Chatsworth areas).  
 1918. Cape May County (see Millville area).  
 1919. Chatsworth area (parts of Atlantic, Burlington, Monmouth, and Camden Counties and all of Ocean County). 1923.  
 1915. Cumberland County (see Camden, Millville, and Salem areas).  
 1913. Freehold area (parts of Monmouth and Middlesex Counties). 1916.  
 1915. Gloucester County (see Camden, Millville, and Salem areas).  
 1917. Hunterdon County (see Belvidere, Trenton, and Bernardsville areas).

## NEW JERSEY—continued

1917. Mercer County (see Belvidere and Trenton areas).  
 1913. Middlesex County (see Freehold, Trenton, and Bernardsville areas).  
 1917. Millville area (Cape May County and parts of Atlantic, Cumberland, Gloucester, and Salem Counties). 1921.  
 1913. Monmouth County (see Freehold, Chatsworth, and Trenton areas).  
 1917. Morris County (see Belvidere, Sussex, and Bernardsville areas).  
 1902. Ocean County (see Trenton and Chatsworth areas).  
 1911. Passaic County (see Sussex area).  
 1901. Salem area (parts of Cumberland, Gloucester, and Salem Counties). 1903.  
 1915. Salem County (see Camden, Millville, and Salem areas).  
 1917. Somerset County (see Belvidere, Trenton, and Bernardsville areas).  
 1917. Sussex County (see Belvidere, Sussex, and Bernardsville areas).  
 1911. Sussex area (parts of Morris, Passaic, Sussex, and Warren Counties). 1913.  
 1902. Trenton area (parts of Burlington, Hunterdon, Mercer, Middlesex, Monmouth, Somerset, and Ocean Counties, N. J., and Bucks County, Pa.). 1903.  
 1919. Union County (see Bernardsville area).  
 1917. Warren County (see Belvidere and Sussex areas).

## NEW MEXICO

1912. Bernalillo County (see Middle Rio Grande area).  
 1912. Dona Ana County (see Mesilla Valley area).  
 1912. Mesilla Valley area (parts of Dona Ana County, N. Mex., and El Paso County, Tex.). 1914.  
 1912. Middle Rio Grande Valley area (parts of Bernalillo, Sandoval, Socorro, and Valencia Counties). 1914.  
 1912. Sandoval County (see Middle Rio Grande area).  
 1912. Socorro County (see Middle Rio Grande area).  
 1912. Valencia County (see Middle Rio Grande area).

## NEW YORK

1904. Auburn area (part of Cayuga County). 1905.  
 1902. Bigflats area (parts of Chemung and Steuben Counties). 1903.  
 1905. Binghamton area (part of Broome County). 1903.  
 1905. Broome County (see Binghamton area).  
 1903. Cayuga County (see Auburn and Syracuse areas).  
 1914. Chautauqua County (see also Westfield area). 1916.  
 1902. Chemung County (see Bigflats area).  
 1918. Chenango County. 1920.  
 1914. Clinton County. 1916.  
 1916. Cortland County. 1917.  
 1907. Dutchess County. 1909.  
 1904. Essex County (see Vergennes area, Vermont).  
 1911. Jefferson County. 1913.  
 1903. Kings County (see Long Island area).  
 1908. Livingston County. 1910.  
 1903. Long Island area (parts of Kings, Nassau, Queens, and Suffolk Counties). 1904.  
 1902. Lyons area (parts of Ontario, Seneca, and Wayne Counties). 1903.  
 1906. Madison County. 1907.  
 1910. Monroe County. 1912.  
 1908. Montgomery County. 1909.  
 1903. Nassau County (see Long Island area).  
 1906. Niagara County. 1908.  
 1913. Oneida County. 1915.  
 1903. Onondaga County (see Syracuse area).  
 1910. Ontario County (see also Lyons area). 1912.  
 1912. Orange County. 1914.  
 1917. Oswego County (see also Syracuse area). 1919.  
 1918. Putnam County (see White Plains area).  
 1903. Queens County (see Long Island area).  
 1918. Rockland County (see White Plains area).  
 1917. Saratoga County. 1919.  
 1915. Schoharie County. 1917.  
 1902. Seneca County (see Lyons area).  
 1902. Steuben County (see Bigflats area).  
 1903. Syracuse area (parts of Cayuga, Onondaga, and Oswego Counties). 1904.  
 1903. Suffolk County (see Long Island area).  
 1905. Tompkins County. 1906.  
 1920. Tompkins County. 1924.  
 1909. Washington County. 1911.  
 1902. Wayne County (see Lyons area).  
 1919. Wayne County. 1923.  
 1918. Westchester County (see White Plains area).  
 1901. Westfield area (part of Chautauqua County). 1903.  
 1919. White Plains area (Putnam, Rockland, and Westchester Counties). 1922.  
 1916. Yates County. 1918.

## NORTH CAROLINA

1901. Alamance County. 1903.  
 1902. Alexander County (see Hickory area).  
 1915. Alleghany County. 1917.  
 1915. Anson County. 1917.  
 1912. Ashe County. 1914.  
 1903. Asheville area (parts of Buncombe, Haywood, and Madison Counties). 1904.  
 1917. Beaufort County (see also Craven area). 1919.  
 1918. Bertie County. 1920.  
 1914. Bladen County. 1915.  
 1920. Buncombe County. 1923.  
 1903. Buncombe County (see Asheville and Mount Mitchell areas).  
 1902. Burke County (see Hickory area).  
 1916. Cabarrus County. 1911.  
 1917. Caldwell County (see also Hickory area). 1919.  
 1901. Cary area (part of Wake County). 1903.  
 1908. Caswell County. 1910.  
 1902. Catawba County (see Hickory and Statesville areas).  
 1921. Cherokee County. 1924.  
 1906. Chowan County. 1907.

## NORTH CAROLINA—continued

1916. Cleveland County. 1918.  
 1915. Columbus County. 1917.  
 1903. Craven area (parts of Beaufort, Craven, Greene, Jones, Lenoir, and Pitt Counties). 1904.  
 1903. Craven County (see Craven and Raleigh to Newbern areas).  
 1922. Cumberland County. 1925.  
 1915. Davidson County. 1917.  
 1901. Davie County (see Statesville area).  
 1905. Duplin County. 1905.  
 1920. Durham County. 1924.  
 1907. Edgecombe County. 1908.  
 1913. Forsyth County. 1914.  
 1909. Gaston County. 1911.  
 1910. Granville County. 1912.  
 1913. Greene County (see Craven and Raleigh to Newbern areas).  
 1920. Guilford County. 1923.  
 1916. Halifax County. 1918.  
 1916. Harnett County. 1917.  
 1922. Haywood County (see also Asheville area). 1925.  
 1907. Henderson County. 1908.  
 1916. Hertford County. 1917.  
 1902. Hickory area (parts of Alexander, Burke, Caldwell, Catawba, Iredell, and Lincoln Counties). 1903.  
 1918. Hoke County. 1921.  
 1909. Hyde County (see Lake Mattamuskeet area).  
 1902. Iredell County (see Hickory and Statesville areas).  
 1911. Johnston County (see also Raleigh to Newbern area). 1913.  
 1903. Jones County (see Craven and Raleigh to Newbern areas).  
 1909. Lake Mattamuskeet area (part of Hyde County). 1910.  
 1903. Lenoir County (see Craven and Raleigh to Newbern areas).  
 1914. Lincoln County (see also Statesville area). 1916.  
 1903. Madison County (see Asheville and Mount Mitchell areas).  
 1902. McDowell County (see Mount Mitchell area).  
 1910. Mecklenburg County (see also Statesville area). 1912.  
 1902. Mitchell County (see Mount Mitchell area).  
 1919. Moore County. 1922.  
 1902. Mt. Mitchell area (parts of Buncombe, McDowell, Madison, Mitchell, and Yancey Counties). 1903.  
 1906. New Hanover County. 1907.  
 1921. Onslow County. 1923.  
 1918. Orange County. 1921.  
 1905. Pasquotank and Perquimans Counties. 1905.  
 1912. Pender County. 1914.  
 1905. Perquimans County (see Pasquotank and Perquimans Counties).  
 1909. Pitt County (see also Craven area). 1910.  
 1900. Raleigh to Newbern area (parts of Craven, Greene, Johnston, Jones, Lenoir, Wake, and Wayne Counties). 1901.  
 1913. Randolph County. 1915.  
 1911. Richmond County. 1912.  
 1908. Robeson County. 1909.  
 1914. Rowan County (see also Statesville area). 1915.  
 1909. Scotland County. 1911.  
 1916. Stanley County. 1918.  
 1901. Statesville area (parts of Catawba, Davie, Iredell, Lincoln, Mecklenburg, and Rowan Counties). 1903.  
 1906. Transylvania County. 1907.  
 1920. Tyrrell County. 1924.  
 1914. Union County. 1916.  
 1918. Vance County. 1921.  
 1914. Wake County (see also Cary and Raleigh to Newbern areas). 1916.  
 1915. Wayne County (see also Raleigh to Newbern areas). 1916.  
 1918. Wilkes County. 1921.  
 1902. Yancey County (see Mount Mitchell area).

## NORTH DAKOTA

1907. Adams County (see Morton area).  
 1912. Barnes County (see also Jamestown area). 1914.  
 1915. Bottineau County. 1917.  
 1904. Cando area (part of Towner County). 1905.  
 1905. Carrington area (parts of Foster and Griggs Counties). 1906.  
 1902. Cass County (see Fargo area).  
 1914. Dickey County. 1916.  
 1903. Fargo area (part of Cass County). 1904.  
 1905. Foster County (see Carrington area).  
 1902. Grand Forks area (part of Grand Forks County). 1903.  
 1902. Grand Forks County (see Grand Forks area).  
 1905. Griggs County (see Carrington area).  
 1907. Hettinger County (see Morton area).  
 1903. Jamestown area (parts of Barnes and Stutsman Counties). 1904.  
 1914. Lamoure County. 1917.  
 1921. McHenry County. 1925.  
 1907. McKenzie area (part of McKenzie County). 1908.  
 1907. McKenzie County (see McKenzie area).  
 1907. Morton area (parts of Adams, Hettinger and Morton Counties). 1908.  
 1907. Morton County (see Morton area).  
 1906. Ransom County. 1907.  
 1906. Richland County. 1909.  
 1917. Sargent County. 1920.  
 1903. Stutsman County (see Jamestown area).  
 1904. Towner County (see Cando area).  
 1918. Traill County. 1920.  
 1906. Williams County (see Williston area).  
 1906. Williston area (part of Williams County). 1903.

*Reconnaissance*

1908. Western North Dakota (Adams, Billings, Bottineau, Bowman, Burke, Burleigh, Divide, Dunn, Emmons, Golden Valley, Hettinger, McHenry, McKenzie, McLean, Mercer, Morton, Mountrail, Oliver, Renville, Stark, Sheridan, Ward, and Williams Counties). 1910.

## OHIO

1903. Ashtabula County (see Ashtabula area).  
 1903. Ashtabula area (part of Ashtabula County). 1904.  
 1909. Auglaize County. 1910.  
 1905. Cleveland area (parts of Cuyahoga, Lorain, Medina and Summit Counties). 1906.  
 1902. Columbus area (parts of Fairfield, Franklin, Licking, Madison, and Pickaway Counties). 1903.  
 1904. Coshocton County. 1905.  
 1905. Cuyahoga County (see Cleveland area).  
 1905. Delaware County (see Westerville area).  
 1902. Fairfield County (see Columbus area).  
 1905. Franklin County (see Westerville and Columbus areas).  
 1915. Geauga County. 1916.  
 1915. Hamilton County. 1917.  
 1905. Licking County (see Westerville and Columbus areas).  
 1905. Lorain County (see Cleveland area).  
 1902. Lucas County (see Toledo area).  
 1905. Madison County (see Westerville and Columbus areas).  
 1917. Mahoning County. 1919.  
 1916. Marion County. 1918.  
 1904. Medina County (see Wooster and Cleveland areas).  
 1906. Meigs County. 1908.  
 1916. Miami County. 1918.  
 1900. Montgomery County. 1902.  
 1902. Ottawa County (see Toledo area).  
 1914. Paulding County. 1915.  
 1902. Pickaway County (see Columbus area).  
 1914. Portage County. 1916.  
 1917. Sandusky County. 1920.  
 1913. Stark County (also see Wooster area). 1915.  
 1904. Summit County (see Wooster and Cleveland areas).  
 1902. Toledo area (parts of Lucas, Ottawa, and Wood Counties, Ohio, and Monroe County, Mich.). 1903.  
 1914. Trumbull County. 1916.  
 1905. Union County (see Westerville area).  
 1904. Wayne County (see Wooster area).  
 1905. Westerville area (parts of Delaware, Franklin, Licking, Madison, and Union Counties). 1906.  
 1902. Wood County (see Toledo area).  
 1904. Wooster area (parts of Medina, Stark, Summit, and Wayne Counties). 1905.

*Reconnaissance*

1912. Entire State. 1915.

## OKLAHOMA

1906. Bryan County (see Tishomingo area).  
 1914. Bryan County. 1915.  
 1917. Canadian County. 1919.  
 1906. Johnston County (see Tishomingo area).  
 1915. Kay County. 1917.  
 1906. Marshall County (see Tishomingo area).  
 1913. Muskogee County. 1915.  
 1906. Oklahoma County. 1907.  
 1916. Payne County. 1918.  
 1914. Roger Mills County. 1916.  
 1906. Tishomingo area, Indian Territory (part of District No. 22, or parts of Bryan, Johnston, and Marshall Counties). 1907.

## OREGON

1903. Baker City area (parts of Baker and Union Counties). 1904.  
 1903. Baker County (see Baker City Area).  
 1920. Benton County. 1924.  
 1909. Coos County. (See Marshfield area).  
 1909. Curry County. (See Marshfield area).  
 1912. Hood River-White Salmon River area (parts of Hood River County, Oregon and Klickitat and Shania Counties, Wash.). 1914.  
 1911. Jackson County (see Medford area).  
 1919. Josephine County. 1923.  
 1908. Klamath County (see Klamath reclamation project area).  
 1908. Klamath reclamation project area (parts of Klamath County, Oreg., and Modoc and Siskiyou Counties, Calif.). 1910.  
 1909. Marshfield area (parts of Coos and Curry Counties). 1911.  
 1903. Marion County (see Salem area).  
 1911. Medford area (part of Jackson County). 1913.  
 1919. Multnomah County. 1922.  
 1903. Polk County (see Salem area).  
 1903. Salem area (parts of Marion and Polk Counties). 1904.  
 1903. Union County (see Baker City area).  
 1919. Washington County. 1923.  
 1917. Yamhill County. 1920.

## PENNSYLVANIA

1904. Adams County. 1905.  
 1911. Bedford County (see also Johnstown area). 1913.  
 1909. Berks County. 1911.  
 1915. Blair County (see also Johnstown area). 1917.  
 1911. Bradford County. 1913.



## PENNSYLVANIA—continued

1902. Bucks County (see Trenton area, New Jersey).  
 1915. Cambria County (see also Johnstown area). 1917.  
 1908. Center County. 1910.  
 1905. Chester County. 1906.  
 1916. Clearfield County. 1919.  
 1903. Clinton County (see Lockhaven area).  
 1901. Dauphin County (see Lebanon area).  
 1910. Erie County. 1911.  
 1921. Greene County. 1925.  
 1907. Johnstown area (parts of Blair, Bedford, and Cambria Counties). 1909.  
 1900. Lancaster area (part of Lancaster County). 1902.  
 1914. Lancaster County (see also Lancaster and Lebanon areas). 1916.  
 1901. Lebanon area (parts of Dauphin, Lancaster, and Lebanon Counties). 1903.  
 1901. Lebanon County (see Lebanon area).  
 1912. Lehigh County. 1914.  
 1903. Lockhaven area (part of Clinton County). 1904.  
 1917. Mercer County. 1919.  
 1905. Montgomery County. 1906.  
 1910. Washington County. 1911.  
 1912. York County. 1914.

*Reconnaissance*

1911. Northeastern Pennsylvania (Bradford, Clinton, Lackawanna, Lycoming, Pike, Sullivan, Susquehanna, Tioga, Wayne, and Wyoming Counties). 1913.  
 1908. Northwestern Pennsylvania (Cameron, Crawford, Elk, Erie, Forest, Lawrence, McKean, Mercer, Potter, Venango, and Warren Counties). 1910.  
 1910. South Central Pennsylvania (Adams, Bedford, Blair, Cambria, Center, Clearfield, Cumberland, Franklin, Fulton, Huntingdon, Juniata, Mifflin, Perry, Snyder, Somerset, and Union Counties). 1912.  
 1912. Southeastern Pennsylvania (Berks, Bucks, Carbon, Chester, Columbia, Dauphin, Delaware, Lancaster, Lebanon, Lehigh, Luzerne, Monroe, Montgomery, Montout, Northampton, Northumberland, Philadelphia, Schuylkill, and York Counties). 1914.  
 1909. Southwestern Pennsylvania (Allegheny, Armstrong, Beaver, Butler, Clarion, Fayette, Greene, Indiana, Jefferson, Washington, and Westmoreland Counties). 1911.

## PORTO RICO

1902. Soil survey from Arecibo to Ponce. 1903.

## RHODE ISLAND

1904. Entire State. 1905.

## SOUTH CAROLINA

1902. Abbeville area (parts of Abbeville, Anderson, Greenwood, and Laurens Counties). 1903.  
 1902. Abbeville County (see Abbeville area).  
 1909. Anderson County (see also Abbeville area). 1910.  
 1913. Bamberg County. 1914.  
 1912. Barnwell County. 1914.  
 1916. Berkeley County. 1918.  
 1904. Calhoun County (see Orangeburg area).  
 1903. Campobello area (parts of Greenville and Spartanburg Counties). 1904.  
 1904. Charleston area (parts of Charleston and Colleton Counties). 1905.  
 1904. Charleston County (see Charleston area).  
 1905. Cherokee County. 1906.  
 1912. Chester County. 1913.  
 1914. Chesterfield County. 1915.  
 1910. Clarendon County. 1912.  
 1904. Colleton County (see Charleston area).  
 1909. Conway area (part of Horry County). 1910.  
 1902. Darlington area (Darlington County and part of Lee County). 1903.  
 1902. Darlington County (see Darlington area).  
 1915. Dorchester County. 1917.  
 1911. Fairfield County. 1913.  
 1914. Florence County. 1916.  
 1911. Georgetown County. 1912.  
 1921. Greenville County. 1924.  
 1903. Greenville County (see Campobello area).  
 1902. Greenwood County (see Abbeville area).  
 1915. Hampton County. 1917.  
 1918. Horry County (see also Conway area). 1920.  
 1919. Kershaw County. 1922.  
 1904. Lancaster County. 1905.  
 1902. Laurens County (see Abbeville area).  
 1907. Lee County (see also Darlington area). 1908.  
 1922. Lexington County. 1925.  
 1917. Marlboro County. 1919.  
 1918. Newberry County. 1921.  
 1907. Oconee County. 1908.  
 1904. Orangeburg area (parts of Calhoun and Orangeburg Counties). 1905.  
 1913. Orangeburg County (see also Orangeburg area). 1915.  
 1916. Richland County. 1918.  
 1909. Saluda County. 1910.  
 1921. Spartanburg County. 1924.  
 1903. Spartanburg County (see Campobello area).  
 1907. Sumter County. 1908.  
 1913. Union County. 1914.  
 1905. York County. 1906.

## SOUTH DAKOTA

1920. Beadle County. 1924.  
 1907. Belle Fourche area (parts of Butte and Meade Counties). 1908.  
 1903. Brookings area (part of Brookings County). 1904.  
 1903. Brookings County (see Brookings area).  
 1907. Butte County (see Belle Fourche area).  
 1921. McCook County. 1924.  
 1907. Meade County (see Belle Fourche area).  
 1921. Union County. 1924.

*Reconnaissance*

1909. Western South Dakota (Armstrong, Bennett, Butte, Corson, Custer, Dewey, Fall River, Gregory, Harding, Lawrence, Lyman, Meade, Mellette, Pennington, Perkins, Shannon, Stanley, Todd, Tripp, Washabaugh, Washington, and Schnasse Counties). 1911.

## TENNESSEE

1903. Bledsoe County (see Pikeville area).  
 1904. Cocke County (see Greeneville area).  
 1908. Coffee County. 1910.  
 1903. Cumberland County (see Pikeville area).  
 1903. Davidson County. 1904.  
 1907. Giles County. 1909.  
 1906. Grainger County. 1907.  
 1904. Greene County (see Greeneville area).  
 1904. Greeneville area (parts of Greene, Hawkins, Cocke, and Sullivan Cos., Tennessee; and Madison County, North Carolina). 1905.  
 1904. Hawkins County (see Greeneville area).  
 1905. Henderson County. 1906.  
 1922. Henry County. 1925.  
 1913. Jackson County. 1915.
1904. Lawrence County. 1905.  
 1906. Madison County. 1907.  
 1919. Meigs County. 1921.  
 1901. Montgomery County. 1903.  
 1908. Overton County. 1909.  
 1903. Pikeville area (parts of Bledsoe, Cumberland, Rhea, and Van Buren Counties). 1904.  
 1912. Putnam County. 1914.  
 1903. Rhea County (see Pikeville area).  
 1912. Robertson County. 1914.  
 1916. Shelby County. 1919.  
 1904. Sullivan County (see Greeneville area).  
 1909. Sumner County. 1910.  
 1903. Van Buren County (see Pikeville area).

## TEXAS

1904. Anderson County. 1905.  
 1903. Angelina County (see Lufkin area).  
 1912. Archer County. 1914.  
 1904. Austin area (parts of Bastrop, Caldwell, Hays, Travis, and Williamson Counties). 1905.  
 1905. Basque County (see Waco area).  
 1904. Bastrop County (see Austin area).  
 1907. Bastrop County (see also San Marcos area). 1908.  
 1916. Bell County. 1918.  
 1904. Bexar County (see San Antonio area).  
 1918. Bowie County. 1921.  
 1902. Brazoria area (part of Brazoria County). 1903.  
 1902. Brazoria County (see Brazoria area).  
 1914. Brazos County. 1916.  
 1907. Brownsville area (part of Cameron County). 1908.  
 1906. Caldwell County (see Austin area).  
 1907. Bastrop County (see also San Marcos area). 1908.  
 1907. Cameron County (see Brownsville area).  
 1908. Camp County. 1910.  
 1903. Cherokee County (see Jacksonville area).  
 1907. Cooper area (Delta County and part of Lamar County). 1908.  
 1908. Corpus Christi area (part of Nueces County). 1909.  
 1920. Dallas County. 1924.  
 1907. Delta County (see Cooper area).  
 1918. Denton County. 1922.  
 1916. Eastland County. 1917.  
 1912. El Paso County (see Mesilla Valley area, N. Mex.).  
 1910. Ellis County. 1911.  
 1920. Erath County. 1923.  
 1908. Franklin County. 1909.  
 1918. Freestone County. 1921.  
 1909. Grayson County. 1910.  
 1906. Guadalupe County (see San Marcos area).  
 1912. Harrison County. 1913.  
 1906. Hays County (see Austin area).  
 1906. Hays County (see San Marcos area).  
 1906. Henderson area (part of Rusk County). 1907.  
 1905. Houston County. 1906.  
 1903. Jacksonville area (part of Cherokee County). 1904.
1913. Jefferson County. 1915.  
 1907. Lamar County (see Cooper and Paris areas).  
 1906. Laredo area (part of Webb County). 1908.  
 1905. Lavaca County. 1905.  
 1905. Lee County. 1906.  
 1917. Lubbock County. 1920.  
 1903. Lufkin area (part of Angelina County). 1904.  
 1905. McLennan County (see Waco area).  
 1901. Montgomery County (see Willis area).  
 1909. Morris County. 1910.  
 1903. Nacogdoches area (part of Nacogdoches County). 1904.  
 1903. Nacogdoches County (see Nacogdoches area).  
 1908. Nueces County (see Corpus Christi area).  
 1903. Paris area (part of Lamar County). 1904.  
 1919. Red River County. 1923.  
 1907. Robertson County. 1909.  
 1906. Rusk County (see Henderson area).  
 1904. San Antonio area (part of Bexar County). 1904.  
 1906. San Marcos area (parts of Bastrop, Caldwell, Guadalupe, and Hays Counties). 1907.  
 1916. San Saba County. 1917.  
 1915. Smith County. 1917.  
 1920. Tarrant County. 1924.  
 1915. Taylor County. 1918.  
 1909. Titus County. 1910.  
 1904. Travis County (see Austin area).  
 1903. Tyler County (see Woodville area).  
 1902. Vernon area (part of Wilbarger County). 1903.  
 1905. Waco area (parts of Basque and McLennan Counties). 1906.  
 1913. Washington County. 1915.  
 1906. Webb County (see Laredo area).  
 1902. Wilbarger County (see Vernon area).  
 1904. Williamson County (see Austin area).  
 1901. Willis area (part of Montgomery County). 1903.  
 1907. Wilson County. 1908.  
 1903. Woodville area (part of Tyler County). 1904.

*Reconnaissance*

1910. Central Gulf Coast Texas (Aransas, Bee, Brazoria, Calhoun, De Witt, Goliad, Jackson, Karnes, Matagorda, Refugio, Victoria, and Wharton Counties). 1911.

1919. Northwest Texas (Bailey, Cochran, Cottle, Crosby, Dickens, Floyd, Foard, Garza, Hale, Hardeman, Haskell, Hockley, Kent, King, Knox, Lamb, Lubbock, Lynn, Motley, Stonewall, Terry, and Yoakum Counties). 1922.
1910. Panhandle Texas (Armstrong, Brisco, Carson, Castro, Childress, Collingsworth, Dallam, Deaf Smith, Donley, Gray, Hall, Hansford, Hartley, Hemphill, Hutchinson, Lipscomb, Moore, Ochiltree, Oldham, Parmer, Potter, Randall, Roberts, Sherman, Swisher, and Wheeler Counties). 1911.
1913. South Central Texas (Bandera, Blanco, Burnett, Comal, Crockett, Edwards, Gillespie, Kendall, Kerr, Kimble, Llano, Mason, Menard, Schleicher, Sutton, and Valverde Counties, and parts of Hays, Real, and Travis Counties). 1915.
1909. South Texas (Cameron, Duval, Hidalgo, Nueces, San Patricio, Starr, Webb, and Zapata Counties). 1910.
1911. Southwest Texas (Atascosa, Bexar, Dimmit, Frio, Kinney, La Salle, Live Oak, Maverick, McMullen, Medina, Uvalde, Wilson, and Zavalla Counties). 1912.

## UTAH

1920. Ashley Valley area. 1924.
1904. Bear River area (part of Box Elder County). 1905.
1904. Box Elder County (see Bear River and Weber areas).
1913. Cache County (see Cache Valley area).
1913. Cache Valley area (part of Cache County). 1915.
1900. Davis County (see Weber area).
1919. Delta area (part of Millard County). 1922.
1919. Millard County (see Delta area).
1903. Provo area (part of Utah County). 1904.
1900. Sanpete County (see Sevier Valley).
1900. Sevier Valley (parts of Sanpete and Sevier Counties). 1902.
1921. Uintah River Valley area. 1925.
1903. Utah County (see Provo area).
1900. Weber area (parts of Box Elder, Davis, and Weber Counties). 1902.

## VERMONT

1904. Addison County (see Vergennes area).
1904. Vergennes area (part of Addison County, Vt., and Essex County, N. Y.). 1905.
1916. Windsor County. 1918.

## VIRGINIA

1917. Accomac and Northampton Counties. 1920.
1902. Albemarle area (parts of Albemarle, Buckingham, Greene, Augusta, Nelson, Page, and Rockingham Counties). 1903.
1902. Albemarle County (see Albemarle area).
1915. Alexandria County (see Fairfax and Alexandria Counties).
1901. Amelia County (see Prince Edward area).
1904. Appomattox County. 1905.
1915. Arlington County (see Alexandria and Fairfax Counties).
1902. Augusta County (see Albemarle area).
1901. Bedford area (parts of Bedford, Botetourt, Franklin, and Roanoke Counties). 1903.
1901. Bedford County (see Bedford area).
1901. Botetourt County (see Bedford area).
1902. Buckingham County (see Albemarle area).
1909. Campbell County. 1911.
1901. Charlotte County (see Prince Edward area).
1906. Chesterfield County. 1908.
1905. Elizabeth City County (see Yorktown area).
1915. Fairfax and Alexandria Counties. 1917.
1915. Fairfax County (see Fairfax and Alexandria Counties).
1901. Franklin County (see Bedford area).
1914. Frederick County. 1916.
1905. Gloucester County (see Yorktown area).
1902. Greene County (see Albemarle area).
1905. Hanover County. 1906.
1913. Henrico County. 1914.
1905. James City County (see Yorktown area).
1903. Leesburg area (parts of Loudoun County, Virginia, Frederick and Washington Counties, Maryland, and Jefferson County, W. Va.). 1904.
1903. Loudoun County (see Leesburg area).
1905. Louisa County. 1906.
1901. Lunenburg County (see Prince Edward area).
1907. Montgomery County. 1908.
1903. Nansemond County (see Norfolk area).
1902. Nelson County (see Albemarle area).
1903. Norfolk area (parts of Nansemond, Norfolk, and Princess Anne Counties). 1904.
1903. Norfolk County (see Norfolk area).
1901. Northampton County (see Accomac and Northampton Counties).
1901. Nottoway County (see Prince Edward area).
1902. Page County (see Albemarle area).
1918. Pittsylvania County. 1922.
1903. Princess Anne County (see Norfolk area).
1901. Prince Edward County (see Prince Edward area).
1901. Prince Edward area (parts of Amelia, Charlotte, Lunenburg, Nottoway, and Prince Edward Counties). 1903.
1901. Roanoke County (see Bedford area).
1902. Rockingham County (see Albemarle area).
1905. Warwick County (see Yorktown area).
1905. York County (see Yorktown area).
1905. Yorktown area (all of Elizabeth City, Gloucester, James City, Warwick, and York Counties). 1906.

## WASHINGTON

1907. Bellingham area (part of Whatcom County). 1909.  
 1916. Benton County. 1919.  
 1918. Chelan County (see Wenatchee area).  
 1905. Everett area (part of Snohomish County). 1906.  
 1914. Franklin County. 1917.  
 1911. Grant County (see Quincy area).  
 1912. Hood River-White Salmon River area, Oregon-Washington (parts of Hood River County, Oreg., and Klickitat and Skamania Counties, Wash.). 1914.  
 1905. Island County. 1906.  
 1912. Klickitat County (see Hood River area).  
 1911. Quincy area (part of Grant County). 1913.  
 1912. Skamania County (see Hood River area).  
 1905. Snohomish County (see Everett area).  
 1917. Spokane County. 1921.  
 1913. Stevens County. 1915.  
 1902. Walla Walla area (part of Walla Walla County). 1903.  
 1902. Walla Walla County (see Walla Walla area).  
 1918. Wenatchee area (part of Chelan County). 1922.  
 1907. Whatcom County (see Bellingham area).  
 1901. Yakima area (part of Yakima County). 1903.  
 1901. Yakima County (see Yakima area).

*Reconnaissance*

1909. Puget Sound Basin, eastern part, Washington (parts of King, Pierce, Skagit, Snohomish, and Whatcom Counties). 1911.  
 1910. Puget Sound Basin, western part, Washington (Island, Kitsap, San Juan, and Thurston Counties, and parts of Chehalis, Clallam, Jefferson, Mason, and Pierce Counties). 1912.  
 1911. Southwestern Washington (Clarke, Cowlitz, Pacific, and Wankiakum Counties, and parts of Lewis and Skamania Counties). 1913.

## WEST VIRGINIA

1917. Barbour and Upshur Counties. 1919.  
 1916. Berkeley County (see Jefferson, Berkeley, and Morgan Counties).  
 1913. Boone County. 1915.  
 1918. Braxton and Clay Counties. 1920.  
 1906. Brooke County (see Wheeling area).  
 1911. Cabell County (see Huntington area).  
 1909. Calhoun County (see Spencer area).  
 1910. Clarksburg area (Harrison and Doddridge Counties). 1912.  
 1918. Clay County (see Braxton and Clay Counties).  
 1910. Doddridge County (see Clarksburg area).  
 1919. Fayette County. 1921.  
 1915. Gilmer County (see Lewis and Gilmer Counties).  
 1906. Hancock County (see Wheeling area).  
 1910. Harrison County (see Clarksburg area).  
 1911. Huntington area (Cabell, Lincoln, and Wayne Counties). 1912.  
 1910. Jackson County (see Point Pleasant area).  
 1916. Jefferson, Berkeley, and Morgan Counties. 1918.  
 1916. Jefferson County (see Jefferson, Berkeley, and Morgan Counties). 1918.  
 1912. Kanawha County. 1914.  
 1915. Lewis and Gilmer Counties. 1917.  
 1911. Lincoln County (see Huntington area).  
 1913. Logan and Mingo Counties. 1915.  
 1914. McDowell and Wyoming Counties. 1916.  
 1911. Marion County (see Morgantown area).  
 1906. Marshall County (see Middlebourne and Wheeling areas).  
 1910. Mason County (see Point Pleasant area).  
 1907. Middlebourne area (Marshall, Tyler, and Wetzel Counties). 1909.  
 1913. Mingo County (see Logan and Mingo Counties).  
 1911. Monongalia County (see Morgantown area).  
 1916. Morgan County (see Jefferson, Berkeley, and Morgan Counties).  
 1911. Morgantown area (Marion, Monongalia, and Taylor Counties). 1912.  
 1919. Nicholas County. 1922.  
 1906. Ohio County (see Wheeling area).  
 1908. Parkersburg area (Pleasants, Ritchie, and Wood Counties). 1909.  
 1908. Pleasants County (see Parkersburg area).  
 1910. Point Pleasant area (Jackson, Mason, and Putnam Counties). 1911.  
 1910. Preston County. 1914.  
 1910. Putnam County (see Point Pleasant area).  
 1914. Raleigh County. 1916.  
 1908. Ritchie County (see Parkersburg area).  
 1909. Roane County (see Spencer area).  
 1909. Spencer area (Calhoun, Roane, and Wirt Counties). 1910.  
 1911. Taylor County (see Morgantown area).  
 1921. Tucker County. 1925.  
 1907. Tyler County (see Middlebourne area).  
 1905. Upshur County (see also Barbour and Upshur Counties). 1906.  
 1911. Wayne County (see Huntington area).  
 1918. Webster County. 1920.  
 1907. Wetzel County (see Middlebourne area).  
 1906. Wheeling area (Brooke, Hancock, and Ohio Counties, and part of Marshall County). 1907.  
 1909. Wirt County (see Spencer area).  
 1908. Wood County (see Parkersburg area).  
 1914. Wyoming County (see McDowell and Wyoming Counties).

## WISCONSIN

1920. Adams County. 1924.  
 1910. Ashland County (see Bayfield area).  
 1910. Bayfield area (parts of Bayfield and Ashland Counties). 1912.  
 1910. Bayfield County (see Bayfield area).  
 1913. Buffalo County. 1915.  
 1911. Columbia County. 1913.  
 1913. Dane County (see also Janesville area). 1915. 1918.  
 1916. Door County. 1918.  
 1904. Douglas County (see Superior area, Wisconsin, and Carlton area, Minn.).  
 1911. Fond du Lac County. 1913.  
 1910. Iowa County. 1912.  
 1918. Jackson County. 1922.  
 1902. Janesville area (parts of Dane and Rock Counties). 1903.  
 1912. Jefferson County. 1914.  
 1911. Juneau County. 1913.  
 1919. Kenosha and Racine Counties. 1922.  
 1911. Kewaunee County. 1913.  
 1911. La Crosse County. 1913.  
 1916. Milwaukee County. 1918.  
 1903. Monroe County (see Viroqua area).  
 1918. Outagamie County. 1921.  
 1905. Portage County. 1906.  
 1915. Portage County. 1917.  
 1906. Racine County. 1907.  
 1919. Racine County (see Kenosha and Racine Counties).  
 1917. Rock County (see also Janesville area). 1920.  
 1904. Superior area (parts of Douglas County, Wis.; and St. Louis County, Minn.). 1905.  
 1903. Vernon County (see Viroqua area).  
 1903. Viroqua area (parts of Monroe and Vernon Counties). 1904.  
 1919. Walworth County. 1924.  
 1910. Waukesha County. 1912.  
 1917. Waupaca County. 1920.  
 1909. Waushara County. 1911.  
 1915. Wood County. 1917.

*Recannatssance*

1909. Marinette County. 1911.  
 1913. Northeastern Wisconsin (Florence, Forest, Langlade, Marinette, Oconto and Shawano Counties). 1915.  
 1914. North part north-central Wisconsin (Iron, Oneida, Price and Vilas Counties, and parts of Ashland and Rusk Counties). 1916.  
 1915. South part north-central Wisconsin (Clark, Lincoln, Marathon, and Taylor Counties). 1917.

## WYOMING

1903. Albany County (see Laramie area).  
 1917. Fort Laramie area (parts of Goshen County, Wyo., and Scotts Bluff County, Nebr.). 1921.  
 1917. Goshen County (see Fort Laramie area).  
 1903. Laramie area (part of Albany County). 1904.

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- List of soil types established by the Division of Soils in 1899 and 1900, with brief description. Milton Whitney. 1901.  
 Catalogue of Connecticut shade-grown tobacco. 1902.  
 Catalogue of Texas, Alabama, South Carolina, and Ohio grown tobacco. 1904.  
 List of publications. October, 1904; March, 1905; March, 1906; April, 1907; February, 1909.  
 Instructions to field parties, and description of soil types: Field season, 1904. 1904. Revised, 1906. Title: Soil survey field book. Field season, 1906. 1906. Revised, 1914. Title: Instructions to field parties.  
 Assignment of field parties. Milton Whitney. December, 1905. Revised, January 13, 1906; February 13, 1906; March 15, 1906.  
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 List of soil surveys. 1907; 1908; 1909; 1910; 1911; 1912; 1913; 1914; 1915; 1917.  
 Soil survey assignment sheet. 1908.  
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 Important soils of the United States. 1916.

STATES RELATIONS SERVICE<sup>33</sup>

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| 1916. A. C. True. | 1920. A. C. True. |
| 1917. A. C. True. | 1921. A. C. True. |
| 1918. A. C. True. | 1922. A. C. True. |
| 1919. A. C. True. | 1923. A. C. True. |

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- Boys' and girls' club work: Suggestions for club meetings and programs. 1915.
- A model constitution for boys' and girls' clubs, with suggestions for parliamentary procedure. 1915.
- Address list of agricultural experiment stations in the United States. 1915. Revised, 1917.
- Address list of agricultural and mechanical colleges in the United States. 1915. Revised, 1917.
- Suggestions No. 4 to club leaders and demonstrators in home canning club projects. O. H. Benson. 1915. Revised, 1916. Title: Suggestions and information for canning demonstrators. O. H. Benson. Revised, 1917.
- Potato starch and its use in the home. O. H. Benson. 1915.
- Home canning instructions: Canning of soups and meats. George E. Farrell. 1915.
- Boys' and girls' club work: Hints to potato growers. George E. Farrell. 1915.

<sup>33</sup> Work continued by other branches of the department, July 1, 1923.

11. Boys' and girls' club work: Tinning, capping, and soldering cans. O. H. Benson. 1915.
12. Additional receipts, tested and determined, for use in the boys' and girls' home canning club work. George E. Farrell. 1916. Revised, 1917. Title: Home canning instructions—additional recipes. George E. Farrell.
13. Address list of State institutions and officers in charge of agricultural extension work. October 1, 1917.
15. Boys' and girls' club work: Canning windfall and cull apples and use of by-products. O. H. Benson. 1915. Revised. 1917. Title: Utilizing windfall and cull apples and apple by-products.
16. Boys' and girls' club work: Receipts for the use of potatoes and homemade potato starch. Marie Willoughby Rogers. 1915.
17. Boys' and girls' club work: Home canning club instructions to save fruit and vegetable waste. O. H. Benson. 1915. Revised, 1917. Title: Classification of fruits and vegetables for club canning. O. H. Benson.
18. Home canning instructions. O. H. Benson. 1915. Revised, 1917.
19. Mother-daughter home canning club and vacation canning club: Project report (blank form). George E. Farrell. 1915. Revised, 1917. Title: Mother-daughter home canning clubs (blank form).
20. Suggestions for organization of mother-daughter home canning clubs. O. H. Benson. 1915. Revised, 1917. Title: The mother-daughter home canning club. O. H. Benson. 1917.
21. Apple club project: Crop report (blank form). George E. Farrell.
22. Canning, preserving, pickling. Mary E. Creswell and Ola Powell. 1916.
24. Suggestions No. 3—Boys' and girls' club agents, State, district, and county. O. H. Benson. 1915.
25. 4-H brand seed corn labels. O. H. Benson.
26. Farm and home handicraft clubs. O. H. Benson. 1915.
27. Organization of boys' agricultural club work in the Southern States. O. B. Martin and I. W. Hill. 1915. Revised, 1918. Title: Boys' agricultural club work in the Southern States. I. W. Hill and C. L. Chambers.
28. Canning club and home demonstration work. O. B. Martin and Mary E. Creswell. 1915.
29. Development of the boys' club work. O. B. Martin. 1915.
30. Farm manures and fertilizers. W. B. Mercier and H. E. Savelly. 1916.
31. Boys' and girls' club work. Recipes for canned vegetables; their preparation for table use. Caroline L. Hunt. 1916. Revised, 1917. Title: Preparing home-canned vegetables for the table. Caroline L. Hunt.
32. Status and results of county agricultural agent work in the Northern and Western States, 1915. W. A. Lloyd. 1916.
33. Boys' and girls' club work. Common home canning difficulties and how to avoid them. O. H. Benson and George E. Farrell. 1916. Revised, 1917. Title: Some home canning difficulties and how to avoid them. O. H. Benson and George E. Farrell.
34. Office filing system for county agricultural agents in the Northern and Western States. H. B. Fuller. 1917. Revised, 1918.
35. Boys' and girls' club work. Home canning club aprons and caps. A. H. Whittelsey. 1917.
36. Methods of growing cotton under boll weevil conditions. 1917.
37. Key to subject index of experiment station literature. Revised December 1, 1916, 1917; January 1, 1918, 1918.
38. Farm records and accounts. Suggestions for teaching the subject in secondary schools. H. P. Barrows. 1917.
39. Peppers. Ola Powell and Mary E. Creswell. 1917.
40. Cooperative agricultural extension work. Organization and finances. 1917. Revised, 1918; 1919.
41. An effective method of preventing the erosion of hill lands. W. B. Mercier. 1917.
42. Agricultural exhibits and contests. Suggestions for teaching the subject in secondary schools. H. P. Barrows. 1917.
43. Soy beans in the Cotton Belt. W. J. Morse. 1917.
44. Velvet beans. C. V. Piper. 1917.
45. Peanut growing in the Cotton Belt. H. C. Thompson. 1917.
46. Boys' and girls' club work. Seed and plants for the home garden. To supply vegetables for a family of four persons. C. P. Close. 1917.
47. Boys' and girls' club work. Preparation for home canning club demonstrations. O. H. Benson. 1917.
48. Boys' and girls' club work. Plant a garden. 1917.
49. Boys' and girls' club work: Home gardens. Vegetables to grow and how to grow them. C. P. Close. 1917. Revised, 1918. Title: How to grow vegetables in the home garden.
50. Food requirements of the human body: Suggestions for teachers in secondary schools. 1917.
51. A method of mapping, charting, and recording county-agent work. L. R. Simons. 1917.
52. Boys' and girls' club work: Home gardens. Insects and diseases of vegetables and how to combat them. C. P. Close. 1917.
53. Boys' and girls' club work: Suggestions to local leaders in poultry-club work. George E. Farrell. 1917.
54. Farm-bureau organization plan. L. R. Simons. 1917.
55. Boys' and girls' club work: Suggestions for boys' and girls' exhibits (at local, county, and State fairs). Milton Danziger. 1917. Revised, 1918.
56. Boys' and girls' club work: Common poultry diseases. 1917.
57. Raising ducks, geese, and turkeys: Suggestions for teachers in secondary schools. H. P. Barrows. 1917.
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59. Boys' and girls' club work: Instructions to local leaders of boys' and girls' home garden and canning clubs. George F. Farrell. 1917.

60. County agricultural agent work in the Northern and Western States: Status and results in 1916. W. A. Lloyd. 1917.
61. Boys' and girls' club work: Feeding and housing winter layers. Animal Husbandry Division, Bureau of Animal Industry. 1917.
62. Home floriculture and home-ground improvement: Suggestions for teachers in secondary schools. H. P. Barrows. 1917.
63. The propagation and pruning of plants: Suggestions for teachers in secondary schools. H. P. Barrows. 1917.
64. Partial substitutes for wheat in bread making. Hannah L. Wessling. 1917.
65. Handbook on farm-bureau organization for county agricultural agents. L. R. Simons. 1917.
66. Boys' and girls' club work: A simple trap nest for poultry. 1917.
67. Boys' and girls' club work: Selection and care of poultry breeding stock. 1917.
68. Boys' and girls' club work: How to set a hen and care for her. 1917.
69. Boys' and girls' club work: Care and feeding of chicks. 1917.
70. Boys' and girls' club work: How to build a brood coop for hen and chicks. 1918.
71. Boys' and girls' club work: Poultry mites and lice. 1918.
72. Marketing farm products: Suggestions for teachers in secondary schools. H. P. Barrows. 1917.
73. Increasing production on the farm: Suggestions for teachers in secondary schools. H. P. Barrows. 1917.
74. Boys' and girls' club work: Produce the infertile egg for market. 1918.
75. Boys' and girls' club work: Preserving eggs for home use. 1918.
76. Instruction in sheep and goat husbandry: Suggestions for teachers in secondary schools. H. P. Barrows. 1918.
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79. Capons and caponizing. 1918.
80. Home canning of meats and sea foods with the steam-pressure canner. Franz P. Lund. 1918. Revised, 1919.
81. Beef production: Suggestions for teachers in secondary schools. H. P. Barrows. 1918.
82. Safe farming and what it means for the South in 1918. Bradford Knapp. 1918.
83. Sewing for girls' club work. 1918.
84. Boys' and girls' club work: Plan and tools for the home garden. C. P. Close. 1918.
85. The card index of experiment station literature. (Outline of plan of procedure.) 1918.
86. Boys' and girls' club work: Selection, preparation, and planting of the potato plot. W. Stuart and H. B. Hendrick. 1918.
87. Boys' and girls' club work: Growing seeds for the home garden. C. P. Close. 1918.
88. Status and results of county-agent work: Northern and Western States. 1917-18. W. A. Lloyd. 1918.
89. Organization of a county for extension work: The farm-bureau plan. L. R. Simons. 1919.
90. Cooperative extension work in agriculture and home economics. 1918.
91. Use of poultry club products. 1919.
92. Gardening instructions for club members. 1919.
93. Berry culture. 1919.
94. Currant and gooseberry culture. 1919.
95. Insect enemies and diseases of the tomato. F. H. Chittenden. 1919.
96. Safe farming in the Southern States in 1919. Bradford Knapp. 1919.
97. Boys' and girls' club work: Directions for home canning in tin and mechanical sealing. O. H. Benson and George E. Farrell. 1919.
98. Boys' and girls' club work: Tomato growing for club work. W. R. Reattie. 1919.
99. Making vinegar in the home. 1919.

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- How teachers in rural elementary schools may use Farmers' Bulletin 602: Clean milk—Production and handling. Alvin Dille. 1919. (Department Circular 67.)
- How teachers in rural elementary schools may use Farmers' Bulletin 642: Tomato growing in the South. E. A. Miller. 1917.
- How teachers of rural elementary schools may use Farmers' Bulletin 660: Weeds—How to control them. F. E. Heald. 1917.
- How teachers may use Farmers' Bulletin No. 687: Eradication of ferns from pasture lands. F. E. Heald. 1916.
- How teachers may use Farmers' Bulletin 693: Bur clover. E. A. Miller. 1916.
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- How teachers may use Farmers' Bulletin 729: Corn culture in the Southeastern States. E. A. Miller. 1916.
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- How teachers in rural elementary schools may use Farmers' Bulletin 756: Culture of rye in the eastern half of the United States. F. E. Heald. 1917.
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- How teachers of elementary schools may use Farmers' Bulletin No. 881: Salting, fermentation, and pickling of vegetables. Alvin Dille. 1918.
- How teachers in elementary schools may use Farmers' Bulletin No. 889: Backyard poultry keeping. F. E. Heald. 1917.
- How teachers in rural elementary schools may use Farmers' Bulletin 934: Home gardening in the South. F. E. Heald. 1918.
- How teachers of elementary schools may use Farmers' Bulletin 936: The city and suburban vegetable garden. F. E. Heald. 1918.
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- How teachers may use Farmers' Bulletin 1087: Beautifying the farmstead. C. H. Schopmeyer. 1921. (Department Circular 155.)
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- How teachers in rural elementary schools may use a soil survey. C. H. Lane. 1917.
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1917. C. C. Georgeson, G. W. Gasser, M. D. Snodgrass, Hiram E. Pratt, and F. E. Rader. 1919.
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1920. C. C. Georgeson, G. W. Gasser, M. D. Snodgrass, F. E. Rader, and W. T. White. 1922.
1921. C. C. Georgeson, H. Lindberg, F. E. Rader, G. W. Gasser, C. S. Hahn, and W. T. White. 1923.
1922. C. C. Georgeson. 1923.
1923. C. C. Georgeson. 1925.

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4. Production of improved hardy strawberries for Alaska. C. C. Georgeson. 1923.
5. Eradication of tuberculosis in cattle at the Kodiak Experiment Station. C. C. Georgeson and W. T. White. 1924.

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1. Para and paspalum: Two introduced grasses of Guam. Glen Briggs. 1921.
2. Vegetable growing in Guam. Glen Briggs. 1922.
3. The sorghum in Guam. Glen Briggs. 1922.
4. Leguminous crops for Guam. Glen Briggs. 1922.

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1. Para and paspalum grasses. Glen Briggs. 1921.

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1. Plans for boys' and girls' agricultural clubs for 1921. W. J. Green. 1920.
2. The home garden for club members. Glen Briggs. 1921.
3. Corn growing in Guam for club members. W. J. Green. 1923.



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1916. J. M. Westgate, J. E. Higgins, Maxwell O. Johnson, C. W. Carpenter, C. A. Sahr, F. G. Krauss, J. B. Thompson, and A. T. Longley. 1917.  
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 1921. J. M. Westgate, W. T. Pope, H. L. Chung, J. C. Ripperton, F. G. Krauss, Mrs. N. A. Russell, R. A. Goff. 1922.  
 1922. J. M. Westgate, W. T. Pope, H. L. Chung, J. C. Ripperton, R. A. Goff, Mrs. N. A. Russell, F. G. Krauss, and J. F. O'Brien. 1924.  
 1923. J. M. Westgate, W. T. Pope, H. L. Chung, J. C. Ripperton, R. A. Goff, H. F. Willey, Mrs. Nellie A. Russell, and Mabel Greene. 1924.

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39. The biochemical decomposition of nitrogenous substances in soils. W. P. Kelley. 1915.  
 40. The soils of the Hawaiian Islands. W. P. Kelley, W. T. McGeorge, and Alice R. Thompson. 1915.  
 41. Phosphate fertilizers for Hawaiian soils, and their availability. W. T. McGeorge. 1916.  
 42. Composition of Hawaiian soil particles. W. T. McGeorge. 1917.  
 43. Chemical studies of the efficiency of legumes as green manures in Hawaii. Alice R. Thompson. 1917.  
 44. The litchi in Hawaii. J. E. Higgins. 1917.  
 45. Potato diseases in Hawaii and their control. C. W. Carpenter. 1920.  
 46. The pigeon pea (*Cajanus indicus*), its culture and utilization in Hawaii. F. G. Krauss. 1921.  
 47. Application of the principles of jelly making to Hawaiian fruits. J. C. Ripperton. 1923.  
 48. Swine raising in Hawaii. F. G. Krauss. 1923.

## EXTENSION BULLETINS

1. Extension notes—I. 1917.  
 2. Extension notes—II. 1917.  
 3. Emergency series—I. Field production of beans. 1917.  
 4. Emergency series—II. Methods of combating garden pests. C. W. Carpenter. 1917.  
 5. Emergency series—III. Peanuts: How to grow them. F. G. Krauss. 1917.  
 6. Emergency series—IV. The banana as an emergency food crop. J. E. Higgins. 1917.  
 7. Emergency series—V. Frying as a method of food preservation in Hawaii. Maxwell O. Johnson. 1918.  
 8. Emergency series—VI. Bean spot disease. C. W. Carpenter. 1918.

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1916. D. W. May, P. L. Gile, J. O. Carrero, C. F. Kinman, T. B. McClelland, R. H. Van Zwaluwenburg, and E. W. Brandes. 1918.  
 1917. D. W. May, P. L. Gile, J. O. Carrero, C. F. Kinman, T. B. McClelland, H. E. Thomas, L. R. Hesler, R. H. Van Zwaluwenburg, W. P. Snyder, H. C. Henriksen, and W. A. Mace. 1918.  
 1918. D. W. May, T. B. McClelland, W. V. Tower, J. O. Carrero, W. P. Snyder, H. C. Henriksen, and W. A. Mace. 1920.  
 1919. D. W. May, L. G. Willis, J. O. Carrero, T. B. McClelland, W. V. Tower, W. P. Snyder, H. C. Henriksen, and W. A. Mace. 1920.  
 1920. D. W. May, L. G. Willis, J. O. Carrero, T. B. McClelland, J. P. Griffith, W. V. Tower, H. C. Henriksen, and W. A. Mace. 1921.  
 1921. D. W. May, L. G. Willis, J. O. Carrero, T. B. McClelland, Thomas Bregger, W. P. Snyder, J. A. Saldaña, W. V. Tower, and H. C. Henriksen. 1922.  
 1922. D. W. May, L. G. Willis, J. O. Carrero, T. B. McClelland, Thomas Bregger, W. P. Snyder, J. A. Saldaña, W. V. Tower, H. C. Henriksen, and C. M. Tucker. 1923.  
 1923. D. W. May, J. O. Carrero, T. B. McClelland, Thomas Bregger, W. P. Snyder, J. A. Saldaña, W. V. Tower, C. M. Tucker, and H. C. Henriksen. 1924.

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19. Cover crops for Porto Rico. C. F. Kinman. 1916. Also Spanish edition.  
 20. Experiments on the supposed deterioration of varieties of vegetables in Porto Rico, with suggestions for seed preservation. C. F. Kinman and T. B. McClelland. 1916. Also Spanish edition.  
 21. Some profitable and unprofitable coffee lands. T. B. McClelland. 1917. Also Spanish edition.  
 22. Effect of different methods of transplanting coffee. T. B. McClelland. 1917. Also Spanish edition.  
 23. The changa or West Indian mole cricket. R. H. Van Zwaluwenburg. 1918.  
 24. The mango in Porto Rico. C. F. Kinman. 1918.  
 25. The bat mannos of Porto Rico and their fertilizing value. P. L. Gile and J. O. Carrero. 1918.  
 26. Vanilla: A promising new crop for Porto Rico. T. B. McClelland. 1919.  
 27. Yam culture in Porto Rico. C. F. Kinman. 1921.

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28. The coffee leaf spot (*Stibella flavida*) in Porto Rico. T. B. McClelland. 1921. Also Spanish edition.  
 29. Dairying in Porto Rico. D. W. May. 1922. Also Spanish edition.

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16. Rearing queen bees in Porto Rico. R. H. Van Zwaluwenburg and Rafael Vidal. 1918. Also Spanish edition.  
 17. Some means of controlling insects, fungi, and other pests in Porto Rico. R. H. Van Zwaluwenburg and H. E. Thomas. 1918.  
 17. The selection of seed corn in Porto Rico. H. C. Henriksen. 1920.  
 19. Poultry keeping in Porto Rico. H. C. Henriksen. 1921. Also Spanish edition.  
 20. Mosquito survey of Mayaguez. W. V. Tower. 1921.

## VIRGIN ISLANDS EXPERIMENT STATION

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1919. Longfield Smith. 1920.  
 1920. Longfield Smith and C. E. Wilson. 1921.  
 1921. Longfield Smith and C. E. Wilson. 1922.  
 1922. J. B. Thompson and C. E. Wilson. 1923.  
 1923. J. B. Thompson and W. M. Perry. 1924.

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1. Sea-island cotton in St. Croix. Longfield Smith. 1921.  
 2. Sugar cane in St. Croix. Longfield Smith. 1921.  
 3. Insect pests of cotton in St. Croix and means of combating them. Charles E. Wilson. 1923.  
 4. Truck crop insect pests in the Virgin Islands and methods of combating them. Charles E. Wilson. 1923.

## REPORT ON THE RECEIPTS, EXPENDITURES, AND RESULTS IN EXTENSION WORK IN AGRICULTURE AND HOME ECONOMICS IN THE UNITED STATES

- |                   |                   |
|-------------------|-------------------|
| 1915. A. C. True. | 1919. A. C. True. |
| 1916. A. C. True. | 1920. A. C. True. |
| 1917. A. C. True. | 1921. A. C. True. |
| 1918. A. C. True. | 1922. A. C. True. |

For later reports see Office of the Secretary, Extension Service, Cooperative extension work.

## SYLLABUSES

17. Illustrated lecture on the production of poultry and eggs on the farm. Harry M. Lamon. 1915.  
 18. Illustrated lecture on the production of clean milk. 1915.  
 19. Illustrated lecture on how to make good farm butter. J. H. McClain. 1916.  
 20. Illustrated lecture on the production of alfalfa east of the ninety-fifth meridian. H. L. Westover and H. B. Hendrick. 1916.  
 21. Illustrated lecture on corn production. C. P. Hartley and H. B. Hendrick. 1916.  
 22. Illustrated lecture on cattle-tick eradication. 1916.  
 23. Illustrated lecture on orchard management. H. M. Conolly and E. J. Glasson. 1916.  
 24. Illustrated lecture on leguminous forage crops for the South. Charles V. Piper and H. B. Hendrick. 1917.  
 25. Illustrated lecture on leguminous forage crops for the North. Charles V. Piper and H. B. Hendrick. 1917.  
 26. Illustrated lecture on sweet potatoes: Culture and storage. H. M. Conolly. 1917.  
 27. Illustrated lecture on the farm vegetable garden. H. C. Thompson and H. M. Conolly. 1917.  
 28. Illustrated lecture on practical improvement of farm grounds. F. L. Mulford and H. M. Conolly. 1917.  
 29. Illustrated lecture on public-road improvement. 1917.  
 30. Illustrated lecture on cow testing and dairy records. Duncan Stuart. 1917.  
 31. Illustrated lecture on renovating the neglected apple orchard. H. M. Conolly. 1918.  
 32. Illustrated lecture on growing and handling Irish potatoes. William Stuart and H. B. Hendrick. 1918.  
 33. Illustrated lecture on the city and suburban vegetable garden. H. M. Conolly. 1918.  
 34. Illustrated lecture on green manuring. A. J. Pieters. 1918.  
 35. Illustrated lecture on soy beans. W. J. Morse and H. B. Hendrick. 1919.

For earlier issues see Office of Experiment Stations, Farmers' Institute Lectures. See also Office of Experiment Stations.

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- Boys' and girls' club work. Corn. (Blank form.) 1915.  
 Suggestions and instructions for home canning club demonstrations. O. H. Benson. 1915.  
 Five little pigs and how four made money for farm boys and girls. 1917. (?)  
 How a county agent obtained farm labor from towns. Thomas B. Symons. 1918.  
 Save wheat: Use wheat substitutes. 1918.  
 Boys and girls livestock record book (blank forms). 1920.  
 Statistics of cooperative extension work, 1919-1920. 1920.  
 Education and research in agriculture and home economics in the United States, supplementing exhibit of the States Relations Service, United States Department of Agriculture, at the Brazil Centennial Exposition, Rio de Janeiro, Brazil, 1922-1923. A. C. True. 1922. Also Spanish and Portuguese editions.

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1915. Issued in 1917.	1920. Issued in 1922.
1916. Issued in 1918.	1921. Issued in 1923.
1917. Issued in 1918.	1922. Issued in 1924.
1918. Issued in 1920.	1923. Issued in 1925.
1919. Issued in 1921.	

BUREAU OF STATISTICS AND CROP ESTIMATES<sup>64</sup>

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1901. John Hyde.	1908. C. C. Clark.
1902. John Hyde.	1909. Victor H. Olmstead.
1903. Edwin S. Holmes, jr.	1910. Victor H. Olmstead.
1904. John Hyde.	1911. Victor H. Olmstead.
1905. W. M. Hays.	1912. Victor H. Olmstead.
1906. Victor H. Olmstead.	1913. Nat C. Murray.
1907. C. C. Clark.	1914. Leon M. Estabrook.

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18. The course of prices of farm implements and machinery for a series of years. George K. Holmes. 1901.
19. The cotton crop of 1899-1900. James L. Watkins. 1901.
20. Wheat growing and general agricultural conditions in the Pacific coast region of the United States. Edwin S. Holmes, jr. 1901.
21. Rates of charge for transporting garden truck, with notes on the growth of the industry. Edward G. Ward, jr., and Edwin S. Holmes, jr. 1901.
22. Wages of farm labor in the United States: Results of 11 statistical investigations, 1866-1899. 1901.
23. Statistics on the fruit industry of California. Edwin S. Holmes, jr. 1901.
24. Relations of population and food products in the United States, exclusive of Alaska and insular possessions; mainly as indicated by census reports, 1850-1900. James H. Blodgett. 1903.
25. Milk transportation: Freight rates to the largest 15 cities in the United States. Edward G. Ward, jr. 1903.
26. Wages of farm labor in the United States: Results of 12 statistical investigations 1866-1902. James H. Blodgett. 1903.
27. Wheat production and farm life in Argentina. Frank W. Bicknell. 1904.
28. The commercial cotton crops of 1900-1901, 1901-1902, and 1902-1903. James L. Watkins. 1904.
29. Methods and routes for exporting farm products. Edward G. Ward, jr. 1904.
30. International sugar situation; Origin of the sugar problem and its present aspects under the Brussels convention. Frank R. Rutter. 1904.
31. Imports of farm and forest products, 1901-1903, by countries from which consigned. 1905.
32. Exports of farm and forest products, 1901-1903, by countries to which consigned. 1905.
33. Trade with noncontiguous possessions in farm and forest products, 1901-1903. 1905.
34. The commercial cotton crop of 1903-1904. James L. Watkins. 1905.
35. Imports of farm and forest products, 1902-1904, by countries from which consigned. 1905.
36. Exports of farm and forest products, 1902-1904, by countries to which consigned. 1905.
37. Trade with noncontiguous possessions in farm and forest products, 1902-1904. 1905.
38. Crop export movement and port facilities on the Atlantic and Gulf coasts. Frank Andrews. 1905.
39. Meat in foreign markets, tariffs of 14 importing nations, and countries of surplus. 1905.
40. Meat animals and packing-house products imported into 11 principal countries, 1895-1904. 1906.
41. Norway, Sweden, and Russia as markets for packing-house products. Imports from principal countries, 1895-1904. 1906.
42. Russia's wheat surplus: Conditions under which it is produced. I. M. Rubinow. 1906.
43. Changes in farm values, 1900-1905. George K. Holmes. 1906.
44. Local conditions as affecting farm values, 1900-1905. George K. Holmes. 1906.
45. Imports of farm and forest products, 1903-1905, by countries from which consigned. 1906.
46. Exports of farm and forest products, 1903-1905, by countries to which consigned. 1906.
47. Trade with noncontiguous possessions in farm and forest products, 1903-1905. 1906.
48. The cost of producing farm products. Willet M. Hays and Edward C. Parker. 1906.
49. Costs of hauling crops from farms to shipping points. Frank Andrews. 1907.
50. Hops in principal countries: Their supply, foreign trade, and consumption, with statistics of beer brewing. Eugene Merritt. 1907.
51. Foreign trade of the United States in forest products. 1851-1908. 1909.
52. Imports of farm and forest products, 1904-1906, by countries from which consigned. 1907.

<sup>64</sup> Known as the Division of Statistics prior to July 1, 1903; as the Bureau of Statistics July 1, 1903, to July 1, 1913; as the Bureau of Statistics and Crop Estimates July 1, 1913, to July 1, 1914; as the Bureau of Crop Estimates July 1, 1914, to July 1, 1921; as Bureau of Markets and Crop Estimates July 1, 1921, to July 1, 1922.

See also Bureau of Agricultural Economics.

53. Exports of farm and forest products, 1904-1906, by countries to which consigned. 1907.
54. Trade with noncontiguous possessions in farm and forest products, 1904-1906. 1907.
55. Meat supply and surplus, with consideration of consumption and exports. George K. Holmes. 1907.
56. Corn crops of the United States, 1866-1906. 1907.
57. Wheat crops of the United States, 1866-1906. 1907.
58. Oat crops of the United States, 1866-1906. 1907.
59. Barley crops of the United States, 1866-1906. 1907.
60. Rye crops of the United States, 1866-1906. 1908.
61. Buckwheat crops of the United States, 1866-1906. 1908.
62. Potato crops of the United States, 1866-1906. 1908.
63. Hay crops of the United States, 1866-1906. 1908.
64. Number and value of farm animals in the United States, 1867-1907. 1908.
65. Russia's wheat trade. I. M. Rubinow. 1908.
66. Russian wheat and wheat flour in European markets. I. M. Rubinow. 1908.
67. Ocean freight rates and the conditions affecting them. Frank Andrews. 1907.
68. Cereal production of Europe. Frank R. Rutter. 1908.
69. European grain trade. Frank R. Rutter. 1908.
70. Imports of farm and forest products, 1905-1907, by countries from which consigned. 1909.
71. Exports of farm and forest products, 1905-1907, by countries to which consigned. 1909.
72. Agricultural imports of the Netherlands. 1909.
73. The cost of producing Minnesota farm products, 1902-1907. Edward C. Parker and Thomas P. Cooper. 1909.
74. Imports of farm products into the United States, 1851-1908. 1910.
75. Exports of farm products from the United States, 1851-1908. 1910.
76. Imports of farm and forest products, 1906-1908, by countries from which consigned. 1909.
77. Exports of farm and forest products, 1906-1908, by countries to which consigned. 1910.
78. Agricultural graphics: United States and world crops and livestock. Middleton Smith. 1910.
79. Coffee: Production, trade, and consumption by countries. Harry C. Graham. 1912.
80. Not published.
81. Grain movement in the Great Lakes region. Frank Andrews. 1910.
82. Imports of farm and forest products, 1907-1909, by countries from which consigned. 1910.
83. Exports of farm and forest products, 1907-1909, by countries to which consigned. 1910.
84. Russian cereal crops: Area and production by governments and provinces. Edward T. Peters. 1911.
85. Seedtime and harvest: Cereals, flax, cotton, and tobacco. Dates of planting and harvesting east of the meridians 102-104, in the United States. James R. Covert. 1912.
86. Not published.
87. Not published.
88. The cost of producing Minnesota dairy products, 1904-1909. Thomas P. Cooper. 1911.
89. Marketing grain and livestock in the Pacific coast region. Frank Andrews. 1911.
90. Imports of farm and forest products, 1908-1910, by countries from which consigned. 1911.
91. Exports of farm and forest products, 1908-1910, by countries to which consigned. 1911.
92. Not published.
93. Cold-storage business features: Reports of warehouses. George K. Holmes. 1913.
94. Supply of farm labor. George K. Holmes. 1912.
95. Imports of farm and forest products, 1909-1911, by countries from which consigned. 1912.
96. Exports of farm and forest products, 1909-1911, by countries to which consigned. 1912.
97. Not published.
98. Not published.
99. Wages of farm labor: Nineteenth investigation, in 1909, continuing a series that began in 1866. George K. Holmes. 1912.
100. Railroads and farming: Some influences affecting the progress of agriculture. Frank Andrews. 1912.
101. Cold storage and prices. George K. Holmes. 1913.
102. List of agricultural fairs and exhibitions in the United States. George K. Holmes. 1913.
103. International trade in farm and forest products, 1901-1910. Revision by Eugene Merritt. 1913.

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14. Estimates of Russian crops. 1901.
15. Foreign trade in farm and forest products, 1903. 1903.
16. Foreign trade in farm and forest products, 1904. 1905.
17. Government crop reports: Their value, scope, and preparation. Chas. C. Clark. 1908. Revised, 1911; 1915.
18. Tobacco districts and types. J. P. Killebrew. 1909.
19. Foreign crops, May, 1911. Charles M. Daugherty. 1911.
20. Foreign crops, June, 1911. Charles M. Daugherty. 1911.
21. Foreign crops, July, 1911. Charles M. Daugherty. 1911.
22. Tobacco report, July 1, 1911. J. P. Killebrew. 1911.
23. Foreign crops, August, 1911. Charles M. Daugherty. 1911.
24. Foreign crops, September, 1911. Charles M. Daugherty. 1911.
25. Foreign crops, October, 1911. Charles M. Daugherty. 1911.

26. Foreign crops, November-December, 1911. Charles M. Daugherty. 1912.
27. Tobacco crop, 1911, by types and districts. J. P. Killebrew. 1912.
28. Foreign crops, January, 1912. Charles M. Daugherty. 1912.
29. Foreign crops summary: Area and production of cereals, 1907-1911, and of flaxseed, 1908-1910, by countries. Charles M. Daugherty. 1912.
30. Foreign crops, March, 1912 (Argentina). Charles M. Daugherty. 1912.
31. Annual and average production of and international trade in important agricultural products, by countries. Royal T. McKenna. 1912.
32. Cotton crop of the United States, 1790-1911. 1912.
33. Tobacco crop of the United States, 1612-1911. 1912.
34. Rice crop of the United States, 1712-1911. 1912.
35. Hog crop of the United States, 1790-1911. 1912.
36. Foreign crops, April, 1912 (British India). Harry C. Graham. 1912.
37. Foreign crops, May-June, 1912. Charles M. Daugherty. 1912.
38. Tobacco report, July 1, 1912. J. P. Killebrew. 1912.
39. Foreign crops, July, 1912. Charles M. Daugherty. 1912.
40. Foreign crops, August-September, 1912. Charles M. Daugherty. 1912.
41. Foreign crops, October, 1912. Charles M. Daugherty. 1912.
42. Foreign crops, November, 1912. Charles M. Daugherty. 1912.
43. Tobacco crop, 1912, by types and districts. J. P. Killebrew. 1913.
44. Foreign crops, December, 1912. 1913.
45. Foreign crops: January. Summary, by countries, of the area and production of cereals, 1908-1912, and of flaxseed, 1909-1911. Charles M. Daugherty. 1913.
46. Foreign crops, February, 1913. Charles M. Daugherty. 1913.
47. Foreign crops, March-April, 1913. Charles M. Daugherty. 1913.

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- Cotton acreage report of June 2, 1905. 1905.  
 Dates of sowing and harvesting. James R. Covert. 1911.  
 Orders governing the preparation of monthly crop reports of the Bureau of Statistics. Revised 1909; 1911.  
 Field agents handbook of agricultural statistics. 1914.

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26. Wakker's hyacinth germ, *Pseudomonas hyacinthi* (Wakker). Erwin F. Smith. 1901.
28. The cultural characters of *Pseudomonas hyacinthi*, *Ps. campestris*, *Ps. phaseoli*, and *Ps. stewarti*—Four one-flagellate yellow bacteria parasitic on plants. Irwin F. Smith. 1901.
29. Plant breeding. Willet M. Hays. 1901.

## CIRCULAR

18. A new wheat industry for the semiarid West. Mark Alfred Carleton. 1901.

## WEATHER BUREAU

## ABSTRACT OF DATA

1. Precipitation in the Panhandle region of Texas. (No date.)
2. Precipitation in western Kansas. (1907.)
3. Annual precipitation of the United States for the years 1872 to 1907. (1908.)
4. A provisional statement regarding the total amount of evaporation by months at 23 stations in the United States, 1909-1910. (No date.)

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| 1901. Willis L. Moore. | 1913. C. F. Marvin. |
| 1902. Willis L. Moore. | 1914. C. F. Marvin. |
| 1903. Willis L. Moore. | 1915. C. F. Marvin. |
| 1904. Willis L. Moore. | 1916. C. F. Marvin. |
| 1905. Willis L. Moore. | 1917. C. F. Marvin. |
| 1906. Willis L. Moore. | 1918. C. F. Marvin. |
| 1907. Willis L. Moore. | 1919. C. F. Marvin. |
| 1908. Willis L. Moore. | 1920. C. F. Marvin. |
| 1909. Willis L. Moore. | 1921. C. F. Marvin. |
| 1910. Willis L. Moore. | 1922. C. F. Marvin. |
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| 1912. Willis L. Moore. | 1924. C. F. Marvin. |

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30. Loss of life in the United States by lightning. Alfred J. Henry. 1901.
31. Proceedings of the second convention of Weather Bureau officials, Milwaukee, Wis., August 27-29, 1901.
32. Hurricanes: Especially those of Porto Rico and St. Kitts. William H. Alexander. 1902.
33. Weather folk-lore and local weather signs. Edward B. Garriott. 1903.
34. Climate: Its physical basis and controlling factors. Willis L. Moore. 1904.
35. Long-range weather forecasts. E. B. Garriott. 1904.

<sup>o</sup> Became part of Bureau of Plant Industry July 1, 1901.

36. A first report on the relations between climates and crops. Cleveland Abbe. 1905.
37. Recent practice in the erection of lightning conductors. Alfred J. Henry. 1906.
38. Mississippi River levees and their effect on river States during flood periods. Samuel C. Emery. 1910.
39. A course in meteorology and physical geography. W. N. Allen. 1911.
40. The relation between the precipitation over the watershed of the Ohio River above and the stream-flow at Cincinnati. J. Warren Smith. 1911.
41. Forecasting frost in the North Pacific States. Edward A. Beals. 1912.
42. Forecasting the weather. George S. Bliss. 1913. Second edition, 1917. Third edition, 1921. Fourth edition, 1925.
43. The rivers and floods of the Sacramento and San Joaquin watersheds. Nathaniel R. Taylor. 1913.
44. The climate of San Francisco. Alexander G. McAdie. 1913.

## BULLETINS (LETTERED SERIES)

- I. Eclipse meteorology and allied problems. Frank H. Bigelow. 1902.
- J. Wind velocity and fluctuations of water level on Lake Erie. Alfred J. Henry. 1902.
- K. Storms of the Great Lakes. E. B. Garriott. 1903.
- L. Climatology of California. Alexander G. McAdie. 1903.
- M. The floods of the spring of 1903 in the Mississippi watershed. H. C. Frankenfield. 1904.
- N. Periodic variation of rainfall in the arid regions. William B. Stockman. 1905.
- O. Temperature and relative humidity data. William B. Stockman. 1905.
- P. Cold waves and frost in the United States. Edward B. Garriott. 1906.
- Q. Climatology of the United States. Alfred Judson Henry. 1906.
- R. The daily normal temperature and the daily normal precipitation of the United States. Frank Hagar Bigelow. 1908.
- S. Report on the temperatures and vapor tensions of the United States reduced to a homogeneous system of 24 hourly observations for the 33-year interval, 1873-1905. Frank H. Bigelow. 1909.
- T. Frost and temperature conditions in the cranberry marshes of Wisconsin. Henry J. Cox. 1910.
- U. Temperature departures, monthly and annual, in the United States. January, 1873, to June, 1909, inclusive. 1911.
- V. Frost data of the United States, and length of the crop-growing season, as determined from the average of the latest and earliest dates of killing frost. P. C. Day. 1911.
- W. Summaries of climatological data by sections. 1912.
- X. Hurricanes of the West Indies. Oliver L. Fassig. 1913.
- Y. The Ohio and Mississippi floods of 1912. H. C. Frankenfield. 1913.
- Z. The floods of 1913 in the rivers of the Ohio and lower Mississippi Valleys. Alfred J. Henry. 1913.

## DAILY RIVER STAGES

Daily river stages at river gauge stations on the principal rivers of the United States.

- Part VII. 1900-1904. H. C. Frankenfield. 1905.
- Part VIII. 1905-1906. H. C. Frankenfield. 1909.
- Part IX. 1907-1908. H. C. Frankenfield. 1909.
- Part X. 1909-1910. H. C. Frankenfield. 1911.
- Part XI. 1911-1912. Alfred J. Henry. 1913.
- Part XII. 1913-1914. Alfred J. Henry. 1915.
- Part XIII. 1915. Alfred J. Henry. 1916.
- Part XIV. 1916. Alfred J. Henry. 1917.
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- Part XVIII. 1920. H. C. Frankenfield. 1922.
- Part XIX. 1921. H. C. Frankenfield. 1922.
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- Part XXII. 1924. H. C. Frankenfield. 1925.

## INSTRUMENT DIVISION

## CIRCULARS

- I. Instructions for erecting and using Weather Bureau nephoscope. 1920.
- J. Instructions for the installation and maintenance of Marvin water-stage registers with specifications. 1921.
- K. Instructions for aerial observers. C. F. Marvin. 1898.
- L. Instructions for the installation and operation of class "A" evaporation stations. Benjamin C. Kadel. 1915. Revised, 1919.
- M. Instructions for marine meteorological observers. Fourth edition. 1925. (Letter assigned with fourth edition.)

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- Instructions governing the corn, wheat, cotton, and sugar and rice regions service. Second edition. Second edition, 1904. Third edition, 1912. Fourth edition, 1918.
- Tables for dividing by 12, 24, 28, 29, 31, 50, 53, 60, 62, 672, 696, 720, 744, and 8,760 and percentage tables for divisors 8 to 16.5, inclusive. 1903.
- Climatic chart of the United States: Part I. Six Washington daily weather maps, for the dates February 1-3, 1903, inclusive, showing the movement of a typical storm, with full explanation of symbols, etc. Part II. Five charts, normal precipitation. Part III. Three charts, normal sunshine. Part IV. Three charts, normal barometric pressure. Part V. Three charts, normal temperature of the air at the surface of the earth. Part VI. Six charts, temperature, 1904. 1904.
- Instructions to special river and rainfall observers of the Weather Bureau. 1904. Revised 1909; 1912, by H. C. Frankenfield; 1915, by Alfred J. Henry; 1916; 1924, by H. C. Frankenfield.

- Proceedings of the third convention of Weather Bureau officials, held at Peoria, Ill., September 20-22, 1904. 1904.
- Synopses of papers to be read and also extracts from reports pertaining to meteorology in universities and other institutions, Peoria, Ill., September 20-22, 1904.
- The Weather Bureau. 1901. Revised, 1904; 1906; 1910; 1912; 1913, Henry E. Williams; 1915, Henry E. Williams; 1916, Henry E. Williams; 1923, E. V. Calvert.
- Station regulations. 1905.
- Sunshine tables: Parts I, II, and III. C. F. Marvin. 1905.
- Instructions for voluntary observers. 1901. Second edition, (Circular B-C.) Later editions have title: "Instructions for cooperative observers."
- Instructions for cooperative observers. 1906. Third edition. (Circulars B and C, Instrument Division.) Fourth edition, 1911. Fifth edition, 1915. Sixth edition, 1919. Seventh edition, 1924.
- Weather code. 1907. (Revised.)
- The daily weather map with explanation. 1908.
- A manual for observers in climatology and evaporation. Frank Hagar Bigelow. 1909.
- Climatic charts for the United States, showing the lowest temperatures ever observed at the regular Weather Bureau and selected cooperative stations, the highest temperatures ever observed, the normal annual precipitation in the United States, 1870-1901, the annual sunshine, the normal temperature of the air at the surface of the earth. Several editions, 1901-1909.
- Instructions for installing street kiosks. C. F. Marvin. 1909. Revised, 1912.
- Brief list of meteorological textbooks and reference books. C. Fitzhugh Talman. 1909. Second edition, 1910. Third edition, 1913.
- Description of cloud forms. 1910. Succeeded by: Cloud forms, 1921.
- Instructions to the marine meteorological observers of the United States Weather Bureau. Henry L. Heiskell. 1906. Second edition, 1908. Third edition, 1910. Fourth edition, 1925.
- Circular to shipmasters. 1911.
- Classification of clouds for the guidance of observers. 1911. Revised, 1917 (?).
- Savannah-Charleston hurricane of August 27-28, 1911. Willis L. Moore. 1911.
- The normal temperature of Porto Rico, West Indies. Oliver L. Fassig. 1911.
- Instructions to storm-warning displaymen of the Weather Bureau. 1912.
- The Weather Bureau kiosk. C. F. Marvin. 1914.
- Climatic charts for the United States, showing the annual normals of temperature, the monthly normals for January and July, the highest temperatures ever observed, the lowest temperatures ever observed, the normal annual precipitation in inches, the average annual number of days with precipitation, and the mean relative humidity (percentage) at 8 a. m. and 8 p. m., seventy-fifth meridian time, for the months of January and July. 1915. Later editions have title: "Instructions for cooperative observers."
- Instructions for the care and management of storm-warning stations of the Weather Bureau. 1916.
- Tables for computing the time of moonrise and moonset. H. H. Kimball. 1916.
- Weather forecasting in the United States. Alfred J. Henry, Edward H. Bowie, Henry J. Cox, and Harry C. Frankenfield. 1916.
- Radiographic weather code for vessel weather observers. 1917. Revised, 1920; 1925.
- Weather code for West Indian and Caribbean Sea observers. 1917.
- Instructions for installation and use of telethermoscopes. 1918.
- Instructions to operators on the United States Weather Bureau telegraph and telephone lines. S. P. Minnick. 1918.
- Publications of the United States Weather Bureau available for distribution. C. V. Marvin. 1918. Revised, 1919. Robert Seyboth.
- The marine meteorological service of the United States. 1919.
- Instructions for aerological observers. W. R. Gregg, V. E. Jakl, W. S. Cloud, L. T. Samuels, and R. C. Lane. 1921.
- Distribution of weather information, forecasts, and warnings by naval radio for the benefit of marine and aviation interests on the Pacific coast (in cooperation with Office of Communications, Navy Department). 1922.
- The United States Weather Bureau: Supplementing exhibit of the United States Weather Bureau at the Brazil Centennial Exposition, Rio de Janeiro, Brazil, 1922-23. C. F. Marvin. 1922. (Also in Spanish and Portuguese.)
- Tropical storms of the eastern north Pacific Ocean. Willis Edwin Hurd. 1923.
- Weather code. (1892.) Revised, 1916; 1924.
- Cloud forms according to the international system of classification. Benjamin C. Kadel, Harry C. Frankenfield, and Franklin G. Tingley. 1924.
- Let us simplify our calendar and publish statistical data in standardized summaries. Comments at the meeting of the International Geodetic and Geophysical Union, Madrid, Spain, October, 1924. Charles F. Marvin. 1924.
- The United States Weather Bureau in the West Indies. Oliver L. Fassig. 1924.
- Explanation of the weather map. Willis L. Moore. (No date.)

## MISCELLANEOUS

## ATLAS OF AMERICAN AGRICULTURE

## ADVANCE SHEETS

1. Average annual precipitation in inches (map). 1917.
2. Part II. Climate. Weather Bureau. Section I. Frost and the growing season. William Gardner Reed. 1918.
3. Part IX. Rural population and organizations. Section I. Rural population. E. A. Goldenweiser. 1919.
4. Part V. The crops. Section A. Cotton. O. C. Stine, O. E. Baker, O. F. Cook, H. D. Smith, Hugh H. Bennett, A. G. Smith, L. C. Gray, and Fred Taylor. 1918.
5. Part II. Climate. Section A. Precipitation and humidity. J. B. Kincer. 1922.
6. Part I. The physical basis of agriculture. Section E. Natural vegetation: Grassland and desert shrub. H. L. Shantz. Forests. Raphael Zon. 1924.

## FOOD THRIFT SERIES

1. Help feed yourself. 1917.
2. Watch your kitchen waste. 1917.
3. Let nothing spoil. 1917.
4. An appeal to women. A meat substitute. Cowpeas as food. Fat in cookery. Dasheen finds favor. Salad plants. Meat in hot weather. Iceless refrigerator. Fireless cooker. Uses for honey. Food being wasted. 1917.
5. Wheatless meals. Home drying. Cottage cheese. Home-mixed flours. Reducing bread cost. How to select foods. Fruit juices for jelly. Food waste at home. Make cottage cheese. Don't let milk spoil. 1917.

## UNITED STATES DEPARTMENT OF AGRICULTURE AND UNITED STATES FOOD ADMINISTRATION COOPERATING

## UNITED STATES FOOD LEAFLETS

1. Start the day right with a good breakfast. 1917.
2. Do you know corn meal? 1917.
3. A whole dinner in one dish. 1917.
4. Choose your food wisely. 1917.
5. Make a little meat go a long way. 1917.
6. Do you know oat meal? 1917.
7. Food for your children. 1917.
8. Instead of meat. 1917.
9. Vegetables for winter. 1917.
10. Plenty of potatoes. 1917.
11. Milk. 1918.
12. Save fuel. 1918.
13. Let the fireless cooker help you cook. 1918.
14. Dried peas and beans. 1918.
15. Save sugar. 1918.
16. Fresh vegetables. 1918.
17. Use more fish. 1918.
18. Rice. 1918.
19. Hominy. 1918.
20. Wheatless breads and cakes. 1918.

## UNITED STATES TREASURY DEPARTMENT AND DEPARTMENT OF AGRICULTURE

## JOINT ORDERS

1. Regulations governing the certification and disinfection of hides, fleshings, hide cuttings, parings and glue stock, sheepskins and goatskins and parts thereof, hair, wool, and other animal by-products, hay, straw, forage, or similar material offered for entry into the United States. Effective January 1, 1917. 1917.
2. Regulations governing the sanitary handling and control of hides, fleshings, hide cuttings, parings, and glue stock, sheepskins and goatskins and parts thereof, hair, wool, and other animal by-products, hay, straw, forage or similar material offered for entry into the United States. Effective January 1, 1918.
3. Regulations providing for the importation into the United States below the southern cattle-quarantine line of tick-infested cattle from Mexico, South and Central America, the islands of the Gulf of Mexico, and the Caribbean Sea. Effective on and after May 1, 1918. 1918.

## THRIFT LEAFLETS, 1919

1. Is thrift worth while, Mr. American?
2. Seven steps toward saving.
3. Wise spending saves clothing for the family.
4. Saving time and money by simple house cleaning.
5. Saving labor and materials by easier laundry methods.
6. How to remove stains.
7. Take care of your clothing.
8. Saving materials and money by special cleaning.
9. Thrift in lighting.
10. Thrift in the choice, use, and care of kitchen utensils.
11. Thrift in the use of fuel for cooking.
12. Saving fuel in heating.
13. Saving food by proper care.
14. Inexpensive ways of keeping food cool.
15. How shall we choose our food?
16. The weekly market basket.
17. Thrift on the farm.
18. Business methods for the home.
19. Teaching thrift to your children.
20. Thrift standards for boys and girls.

## UNNUMBERED PUBLICATIONS

- Official register of the Department of Agriculture. 1901. Revised, 1903; 1905.
- Instructions to applicants for appointment to the position of mere unskilled laborer in the United States Department of Agriculture at Washington, D. C. 1902. Revised, 1904.
- Regulations governing appointment to positions of mere unskilled labor, under the Department of Agriculture. Theodore Roosevelt and James Wilson. 1902.
- Report of the committee on efficiency and economy in the Department of Agriculture. 1911.
- Uncle Sam's cook book. (Contains 14 Farmers' Bulletins pertaining to cooking.) 1911.



- Relation of the United States Department of Agriculture to the agricultural colleges and experiment stations. B. T. Galloway. (An address delivered at the meeting of the Association of American Agricultural Colleges and Experiment Stations, November 4, 1913.) 1913.
- Administrative regulations of the Department of Agriculture. Effective July 1, 1914. 1914.
- Amendment No. 1. 1915.
- Revised 1918. See Advisory committee on finance and business methods, unnumbered publications.
- Atlas of United States Department of Agriculture. 16 maps. 1914.
- List of workers in subjects pertaining to agriculture and home economics in the United States Department of Agriculture and in the State agricultural colleges and experiment stations. Corrected to June 1, 1914. 1914.
- Corrected to August 1, 1915. 1915.
- Corrected to December, 1915. 1916.
- Corrected to January, 1917. 1917. Later revisions with changes of title as follows:
- List of workers in subjects pertaining to agriculture and home economics. 1917-1918. Part I. United States Department of Agriculture. Part II. State agricultural colleges and experiment stations. 1918.
- List of workers in subjects pertaining to agriculture, home economics, and marketing, 1918-19. Part I. United States Department of Agriculture. Part II. State agricultural colleges and experiment stations. 1919.
- List of workers in subjects pertaining to agriculture. 1920-21. Part I. United States Department of Agriculture. Part II. State agricultural colleges and experiment stations. 1921.
- 1921-22. 1922.
- 1922-23. Part I. Not published. Part II published as Miscellaneous Circular 4.
- 1923-24. Part I. Not published. Part II published as Miscellaneous Circular 17.
- List of workers in subjects pertaining to agriculture in State agricultural colleges and experiment stations, 1924-25. Published as Miscellaneous Circular 34.
- List of technical workers in the United States Department of Agriculture, 1924-25. Published as Miscellaneous Circular 45.
- Rules and regulations for the government of the watch force of the United States Department of Agriculture. Effective May 1, 1915. R. M. Reese. 1915.
- Proceedings of a conference to consider means for combating foot-and-mouth disease, held at Chicago, Ill., November 29 and 30, 1915. 1916.
- Back yard poultry leaflet. 1917.
- Planting zones for vegetables in the eastern half of the United States. 1917.
- Report of conferences on agricultural situation held at St. Louis, Mo., April 9-10, and at Berkeley, Calif., April 13, 1917. Program for food production and conservation. 1917.
- Explosives and fires in threshing machines can be prevented. 1918.
- It's easy to get Corn-belt eggs to market in prime condition. 1918.
- It's easy to get southern eggs to market in prime condition. 1918.
- Prevent grain dust explosions and fires. It is possible—necessary. 1918.
- Report of advisory committee of agricultural and livestock producers. 1918.
- Sirups and honey by parcel post. 1918.
- The President to the farmers of America. Woodrow Wilson. 1918.
- Memorandum: Prepared by the Agricultural Department and the Food Administration as to the wheat price guaranteed by Congress. 1919.
- Report of the agricultural commission to Europe. 1919.
- Warehousing farm products under the warehouse act. Pamphlet containing questions and answers about the storage of agricultural products in warehouses under Federal supervision as provided for in the warehouse act. 1923. Revised 1924; 1925.

Faint, illegible text, possibly bleed-through from the reverse side of the page. The text is arranged in several paragraphs, but the characters are too light and blurry to be transcribed accurately.

## PERIODICALS

### DEPARTMENT

#### AGRICULTURAL OUTLOOK

Succeeds the Crop Reporter hereinafter described. Occasional pamphlets listed as farmers' bulletins. (First issue was Farmers' Bulletin 558, September, 1913.) Weather conditions during the past month with relation to crops; the condition of cereal crops; the outlook for such staples as potatoes, tobacco, apples, etc.; the meat situation and the outlook for its production, marketing and future supply, and various statistical tables. Succeeded by Monthly Crop Report, 1915, hereinafter described.

#### WEATHER, CROPS, AND MARKETS

Vol. 1, No. 1, to vol. 4, No. 26. January 7, 1922, to December 29, 1923. Weekly

Presents nearly the same kinds of material heretofore published in the Market Reporter, the National Weather and Crop Bulletin, and the Monthly Crop Reporter. Weekly and monthly reviews and statistical information relative to the principal markets for farm products, complete and detailed reports of the crop estimating service, and weekly summaries of weather and crop conditions. Also articles of general economic and statistical interest concerning leading agricultural products. Succeeded by—

#### CROPS AND MARKETS

Vol. 1, No. 1, to vol. 2, No. 26. January 5, 1924, to December 26, 1925. Weekly

Monthly Supplement. Vol. 1, No. 1, to vol. 2, No. 12. January, 1924, to December, 1925. Monthly

Statistics of crops and livestock and market information. Reports on supplies, stocks, commercial movements, condition and prices of agricultural products covered in the work of marketing and crop estimating, and studies of prices and demand, both foreign and domestic.

Monthly crop reports and other monthly statistical summaries published in the monthly statistical supplement.

#### DEPARTMENTAL CIRCULAR

Vol. 1, Nos. 1-8. May 10, 1915, to December 10, 1915. Monthly

A convenient means of intercommunication of official information among the personnel of the department. Published exclusively for the use of the personnel. Discontinued 1915. Information of similar nature later contained in the Official Record, hereinafter described.

#### JOURNAL OF AGRICULTURAL RESEARCH

Vol. 1, No. 1, to vol. 31, No. 12, October, 1913, to December 15, 1925

Vol. 1, No. 1, to vol. 4, No. 6. October, 1913, to September 15, 1915. Monthly.

Vol. 5, No. 1, to vol. 16, No. 12. October 4, 1915, to March 24, 1919. Weekly.

Vol. 17, Nos. 1 to 6. April 15, 1919, to September 15, 1919. Monthly.

Vol. 18, No. 1, to vol. 21, No. 11. October 1, 1919, to September 1, 1921. Semimonthly.

Vol. 22, Nos. 1 to 10. October 1, 1921, to December 3, 1921. Weekly.

Publication was temporarily suspended with vol. 22, No. 10, and no parts were issued for 1922.

Vol. 23, No. 1, to vol. 28, No. 12. January 6, 1923, to June 21, 1924. Weekly.

Vol. 29, No. 1, to vol. 31, No. 12. July 1, 1924, to December 15, 1925. Semimonthly.

Articles based on technical research carried on by the United States Department of Agriculture and the State agricultural experiment stations, or both cooperatively.

WEEKLY NEWS LETTER TO CROP CORRESPONDENTS

Vol. 1, No. 1, to vol. 2, No. 35. August 13, 1913, to April 7, 1915. Weekly

News of the important current activities of the department and practical directions for the improvement of farm practice. Information for reprinting in newspapers and agricultural journals. Succeeded by—

WEEKLY NEWS LETTER

Vol. 2, No. 36, to vol. 9, No. 19. April 14, 1915, to December 7, 1921. Weekly

Slight change in character. Chronicle of the major aims and activities of the department. Matter relative to general policy, program, and progress of work on projects. Announcements of important changes in policy or organization. Succeeded by—

THE OFFICIAL RECORD

Vol. 1, No. 1, to vol. 4, No. 52. January 4, 1922, to December 30, 1925. Weekly

A means of communicating to workers and cooperators of the department official statements and other information necessary to the performance of their duties.

BUREAUS

CROP ESTIMATES

MONTHLY CROP REPORT

Vol. 1, No. 1, to vol. 5, No. 1. May 10, 1915, to January, 1919

Succeeds Agricultural Outlook hereinbefore described. Data relating to agriculture, including estimates of acreage, condition, yield, production, prices, and value of crops and livestock, in the form of tabular statements, and such text summaries and comments as are necessary to interpret the same. Succeeded by—

MONTHLY CROP REPORTER

Vol. 5, No. 2, to vol. 7, No. 12. February, 1919, to December, 1921

No change in character. Succeeded by Weather, Crops, and Markets hereinbefore described.

EXPERIMENT STATIONS

EXPERIMENT STATION RECORD

Vol. 13, No. 1, to vol. 53, No. 9. 1901-1925  
 General Index, vols. 1-12. 1889-1901. 1903  
 General Index, vols. 13-25. 1901-1911. 1913

Vols. 13 to 20, 12 numbers each. No. 12 contains index. 1901 to June, 1909. One volume a year.

Vols. 21 to 24, 8 numbers each, and index. July, 1909, to June, 1911. Two volumes a year.

Vols. 25 to 53, 9 numbers each, and index. July 1911, to December, 1925. Two volumes a year.

Abstracts and reviews of the world's scientific literature pertaining to agriculture. Each volume contains about 3,500 abstracts of current research in the various fields of agriculture, together with brief notes on the progress of agricultural education and research and monthly editorials dealing with some phase of its advancement.

FOREST SERVICE

FIELD PROGRAM

August, 1904 to July, 1920

August, 1904, to June, 1910. Monthly.  
 (None issued January to June, 1905.)  
 July, 1910, to July, 1920. Quarterly.

Schedule of field work and assignments in the Forest Service. Information concerning changes of projects and addresses of personnel. Name changed to—

SERVICE DIRECTORY

October, 1920, to April, 1922. Semiannual

No change in character. Name changed to—

FOREST SERVICE DIRECTORY

October, 1922, to April, 1924. Semiannual

No change in character. Name changed to—

DIRECTORY

October, 1924, to October, 1925. Semiannual

## FOREST SERVICE—continued

## WHOLESALE PRICES OF LUMBER

May, 1908, to September, 1908. Monthly

Price lists of hard and soft woods. Name changed to—

RECORD OF WHOLESALE PRICES OF LUMBER (PER M. FT., B. M.) BASED ON ACTUAL SALES MADE  
F. O. B. EACH MARKET

October, 1908, to September, 1912

October, 1908, to September, 1909. Lists A and B. Monthly.

October, 1909, to September, 1912. List A only. Quarterly.

Change in size from large sheets to cards.

## LIBRARY

## MONTHLY BULLETIN

Vol. 1, No. 1, to vol. 4, No. 6. January, 1910, to June, 1913. Monthly

Contains the list of accessions to the library formerly issued quarterly in its series of bulletins.

## MARKETS

## FOOD SURVEYS

Vol. 1, No. 1, to vol. 2, No. 27. April 29, 1918, to June 27, 1919. Monthly and special issues

Results of surveys made under the food surveys project. Such information concerning food and food materials as seemed necessary or desirable for the guidance of governmental agencies and the public in making plans for increasing production, for promoting efficient distribution, and for directing conservation and utilization of foods. Discontinued in 1919. In 1920 merged with Food Surveys to form—

## MARKET REPORTER

Vol. 1, No. 1, to vol. 4, No. 27. January 3, 1920, to December 31, 1921. Weekly

A merger of Seed Reporter and Food Surveys and information previously issued in mimeographed form. Marketing information of general interest and of permanent value on livestock, dairy products, cotton, grains, fruits, vegetables and other important agricultural products, both staple and perishable. Leading articles, comprehensive weekly and monthly summaries of movement, marketing, and prices of specified commodities, and tabulated statistics with interpretative text. Succeeded by Weather, Crops, and Markets hereinbefore described.

## PLANT INDUSTRY

## SEED REPORTER

Vol. 1, No. 1, to vol. 3, No. 4. November, 1917, to October 11, 1919. Monthly

Vol. 1, No. 1-9. November, 1917, to June 8, 1918.

Vol. 2, No. 1-12. July 6, 1918, to June 7, 1919.

Vol. 3, No. 1-4. July 12, 1919, to October 11, 1919.

Official organ of the seed-reporting service, which was a war emergency service, conducted under the food production act. Such information concerning seeds as was necessary or desirable for the guidance of governmental agencies and the public in making plans for increasing production, for promoting efficient distribution, and for directing conservation and utilization. Discontinued in 1919. In 1920 merged with Food Surveys to form the Market Reporter, hereinbefore described.

## PUBLIC ROADS

## PUBLIC ROADS (MAGAZINE)

Vol. 1, No. 1, to vol. 4, No. 8. May, 1918, to December, 1921. Monthly

(None issued 1922 and 1923.)

Vol. 5, No. 1, to vol. 6, No. 10. March, 1924, to December, 1925. Monthly

Results of investigations relating to the physical and economic problems of highway research and road building conducted by the Bureau of Public Roads and contributors outside of the bureau, together with other data of general interest in road engineering and construction.

## PUBLICATIONS

## MONTHLY LIST OF PUBLICATIONS

July, 1901, to October, 1923. Monthly

Descriptive list of new publications of the department, including periodicals and other serials, available for purchase and for free distribution. Succeeded by—

## PUBLICATIONS ISSUED

(Postal cards)

November, 1923, to March, 1924. Monthly.

Changes in character were omission of serials and description of bulletins. Succeeded by unnumbered cards—no title.

April, 1924, to September, 1925. Monthly

Only 11 of these cards were issued. Succeeded by—

## NEW PUBLICATIONS

Nos. 12 to 14. October, 1925, to December, 1925. Monthly

## STATISTICS

## CROP REPORTER

Vol. 3, No. 3, to vol. 15, No. 6. July, 1901, to June, 1913. Monthly

Directions for crop correspondents. Information concerning acreage, growing conditions, production and quality expressed in percentages, weather and crop conditions, and estimates of the crops on hand. Special articles on agricultural products, both foreign and domestic. Succeeded by Agricultural Outlook hereinbefore described.

## WEATHER BUREAU

## CIRCULAR

January 2, 1901, to December 1, 1909. Monthly

Information relative to changes in personnel. Lists employees, stations where on duty and data concerning appointments, promotions, reductions, transfers, and other personnel information. Name changed to—

## MONTHLY LIST OF CHANGES IN PERSONNEL

January 3, 1910, to June, 1915. Monthly

No change in character. Succeeded by—

## WEATHER BUREAU TOPICS AND PERSONNEL

July, 1915, to December, 1925. Monthly

A combination of Monthly List of Changes in Personnel and Roster hereinafter described. Slight change in character with addition of notices, announcements, and information for use of employees.

## CLIMATE AND CROP BULLETIN

1901, No. 1, to 1904, No. 23. February 1, 1901, to August 23, 1904

1901, No. 1, to 1903, No. 3. February 1, 1901, to April 1, 1903. Monthly.  
1903, No. 4, to 1904, No. 23. April 8, 1903, to August 23, 1904. Weekly.

Maximum and minimum temperatures, normal temperature and precipitation, with departures therefrom, expressed in tables and maps, and explained by text. Succeeded by—

## WEATHER CROP BULLETIN

1904, No. 24, to 1906, No. 1. August 29, 1904, to February 1, 1906

April to October, weekly; November to March, monthly

No change in character. Succeeded by—

## NATIONAL WEATHER BULLETIN

1906, No. 2, to 1914, No. 15. February 8, 1906, to June 29, 1914

April to October, weekly; November to March, monthly

No change in character. Succeeded by—

## WEATHER BUREAU—continued

## NATIONAL WEATHER AND CROP BULLETIN

1914, No. 16, to 1921, No. 49. July 6, 1914, to December, 1921

April to October, weekly; November to March, monthly

In 1919, No. 37, the Snow and Ice Bulletin was combined with this and during winter months the title reads: National Weather and Crop and Snow and Ice Bulletin (hereinafter referred to). Beginning with 1922, this publication combined with Market Reporter and Crop Reporter to form—Weather, Crops, and Markets hereinbefore described. This, in turn, was succeeded by—

## WEEKLY WEATHER AND CROP BULLETIN

1924, No. 1, to 1925, No. 52. January, 1924, to December 29, 1925. Weekly

Detailed weather conditions of the preceding week and their effect on the development of crops and farm operations; the variation of temperature and rainfall from a normal week, the total rainfall for the season in comparison with the normal, also the amount of sunshine and cloudiness.

## CLIMATE AND CROP SERVICE

January, 1901, to December, 1905. Monthly

General summary of the weather by months and complete weather statistics from 42 separate sections corresponding, as a rule, to a State. Tables show killing frosts, precipitation, sunshine, relative humidity, and average hourly wind velocity. Succeeded by—

## CLIMATOLOGICAL SERVICE REPORT

January, 1906, to June, 1909. Monthly

No change in character. No reports published July, 1909, to December, 1913. Information contained in Monthly Weather Review for those dates and also reprinted in report of the district concerned. Ceased publication June, 1909. Later succeeded by—

## CLIMATOLOGICAL DATA

January, 1914, to December, 1925. Monthly

No change in character from earlier climatological reports.

## COTTON REGION CLIMATE AND CROP BULLETIN

April, 1902, to October, 1904. Weekly

Information on weather conditions and summary of weather and crop conditions in the cotton region, issued during the cotton planting and crop season, April through October. Published at New Orleans, La. Name changed to—

## COTTON REGION WEATHER—CROP BULLETIN

May, 1905, to October, 1905. Weekly

No change in character. Name changed to—

## WEEKLY COTTON REGION WEATHER BULLETIN

April, 1906, to October, 1916. Weekly

No change in character. Name changed to—

## WEEKLY COTTON REGION BULLETIN

April, 1917, to October, 1925. Weekly

## FORECAST FOR THE WEEK BEGINNING . . .

December 7, 1913, to October 11, 1914; April 15, 1915, to October 26, 1915;  
March 18, 1916, to September 20, 1921. Weekly

Brief, general forecast of temperature and rain conditions covering a week, for each of eight main sections into which the United States is divided. Name changed to—

## WEATHER OUTLOOK

September 27, 1921, to December 19, 1925. Weekly

No change in character.

## WEATHER BUREAU—continued

## METEOROLOGICAL CHART OF THE GREAT LAKES

1901, No. 1, to 1907, No. 1. Semiannual

Two numbers a year, the second one being a summary for the season. Publication suspended until—

January, 1911, to September, 1913. Monthly

Average conditions of wind and weather over the Great Lakes during the month, Addresses of branch Weather Bureau offices on the Lakes, character of weather, storm tracks, and interpretation of symbols used. Ceased publication September, 1913.

## MONTHLY WEATHER REVIEW

Vol. 29, No. 7, to vol. 53, No. 12. July, 1901, to December, 1925. Monthly

Contributions from the research staff of the Weather Bureau and special contributions of a general character on meteorology and climatology; also climatological data for Weather Bureau stations.

## MOUNT WEATHER OBSERVATORY BULLETIN

Vol. 1, pt. 1, to vol. 6, pt. 5. 1908-1914. Quarterly

Detailed accounts of researches into the fundamental principles that underlie meteorological science, conducted at Mount Weather, Va. Discontinued 1914. Later contributions from members of the staff of the observatory are published in the Monthly Weather Review and in supplements to it.

## SNOW AND ICE BULLETIN

December 2, 1901, to March 25, 1919. Weekly, December to April

A synopsis of snow fall and of ice formation in the United States, showing areas covered by snow, depth of snow, thickness of ice in rivers and harbors, etc. Succeeded by—

## NATIONAL WEATHER AND CROP AND SNOW AND ICE BULLETIN

December, 1919, to December, 1921. Monthly

A combination of Snow and Ice Bulletin and National Weather and Crop Bulletin, hereinbefore described.

## ROSTER OF STATION OFFICIALS AND EMPLOYEES OF THE WEATHER BUREAU

July 1, 1901, to July, 1910. Monthly

Ceased publication in 1910. Information of similar nature later contained in Weather Bureau Topics and Personnel, hereinbefore described.

## WEATHER MAPS (FIRST EDITION)

1901 to 1925. Daily except Sunday

Isobaric and isothermic conditions of the previous day based on reports from 65 stations throughout the country. Published at these stations and at Washington, D. C. Description of the weather conditions of the previous day and a general forecast. Specific forecast until 8 p. m. the following day for the districts in each section covered by a map.

## WEATHER MAPS (SECOND EDITION)

1901 to 1925. Daily

Isobaric and isothermic conditions of the previous day and general forecasts for all parts of the country. Published only at Washington, D. C.

## WEEKLY CORN AND WHEAT REGION BULLETIN

1920, No. 1, to 1925, No. 22. April 13, 1920, to September 15, 1925. Weekly, April to October

Weather conditions, general summary of weather and crop conditions (issued from Washington, D. C.) and special telegraphic reports. Maps show departure of mean temperature from the normal for the past week, and the amount of rainfall.





