

the volcanic features associated with the more recent cinder cones and lava flows.

From here the party went to the Grand Canyon, making a three-days' trip down in the canyon with pack outfit, after which the journey eastward to the crossing of the Little Colorado and northward over the desert along the Echo and Paria cliffs, was begun. This proved to be the most strenuous part of the whole summer campaign, not so much because of lack of water—for which emergency due provision had been made—as because of the failure to secure sufficient feed for the five head of horses. From the Grand Canyon to the town of Kanab in southern Utah, a distance of more than 250 miles by the route traversed, the only grain available was a little corn at Tuba and one feed of oats at Lee's Ferry. The weather was intensely hot, the roads heavy with sand in many places, while grass fit for the horses to graze upon was only found at occasional places. As a result the horses got in poor condition, short days of travel and long rests were necessary, so that a large amount of time was consumed in this part of the journey. Kanab was reached on August 6.

From Kanab the party went north to Upper Kanab in order to visit the great terraces of the high plateaus of southern Utah. Returning to Kanab, a trip was then made to the southwest into the Toroweap Valley and the Mt. Trumbull region, for the purpose of tracing the relations of the Sevier and Toroweap faults, and the associated volcanic features. Returning as far as Pipe Spring, the party then turned westward, descending the Hurricane fault scarp west of Workman's Spring, and turning northward to the Virgin River. A delay of three or four days at this point was caused by a flood which was said to be the greatest ever known in the river's history.

Northward from the Virgin River the route passed along the margin of the Great Basin Province, at the foot of the western rim of the High Plateaus, through the towns of Toquerville, Beaver, Porowan, Holden, Nephi, etc. Good progress was made over splendid

roads, notwithstanding frequent stops for side trips into many of the canyons which made possible a study of the northward continuation of the Hurricane fault, the character of the great Tertiary series and the volcanic beds, the undoubted evidence of recent faulting and other points of geologic and physiographic interest.

The outfit was sold in the towns of Provo and American Fork, just south of Salt Lake City. From the latter point Dr. Shimer went to the Yellowstone National Park for a few days, while Professor Johnson returned east by way of Butte, Montana. Mr. Decker will spend some time in the Bingham and Park City mining districts.

A detailed statement of the studies made in connection with the expedition, including reports on several special problems, will be published in the course of the winter.

PUBLICATIONS OF THE CARNEGIE INSTITUTION OF WASHINGTON.

THE Carnegie Institution of Washington has issued a circular of its publications, which are as follows:

- Index Medicus: A monthly classified record of the current medical literature of the world. Second Series. Edited by Robert Fletcher, M.D., and Fielding H. Garrison, M.D.
- Year Book No. 1, 1902. Octavo, 351 pages.
- Year Book No. 2, 1903. Octavo, 371 pages.
- Year Book No. 3, 1904. Octavo, 305 pages, 6 plates.
- Year Book No. 4, 1905. Octavo, viii + 303 pages, 7 plates.
- No. 1. The Carnegie Institution of Washington, D. C. Octavo, 16 pages.
- No. 2. Articles of Incorporation, Deed of Trust, etc. Octavo, 15 pages.
- No. 3. Proceedings of Board of Trustees. Octavo, 15 pages. [The matter contained in Nos. 1, 2 and 3 is embodied in Year Book No. 1.]
- No. 4. The Waterlilies: A monograph of the Genus *Nymphaea*. By Henry S. Conrad. Quarto, xiii + 279 pages, 82 text figures, 30 plates, including 12 plates colored to life.
- No. 5. Catalogue of Double Stars. By S. W. Burnham. Quarto. In press.
- No. 6. Desert Botanical Laboratory of Carnegie Institution. By F. V. Coville and D. T. MacDougal. Octavo, vi + 58 pages, 29 plates.

- No. 7. New Method of Determining Compressibility. By T. W. Richards and W. N. Stull. Octavo, 45 pages, 5 text figures.
- No. 8. Bibliographic Index of North American Fungi. By W. G. Farlow. Octavo. Vol. 1, part 1, xxxv + 312 pages.
- No. 9. The Collected Mathematical Works of G. W. Hill. Quarto, 4 vols. Vol. 1, xviii + 363 pages; Vol. 2, vii + 339 pages; Vol. 3, 577 pages. Vol. 4 in press.
- No. 10. Contributions to Stellar Statistics. On the Position of the Galactic and Other Planes Toward Which the Stars Tend to Crowd. By Simon Newcomb. Quarto, 30 pages.
- No. 11. Production of Sex in Human Offspring. By Simon Newcomb. Octavo, 34 pages.
- No. 12. The Action of Snake Venom upon Cold-blooded Animals. By Hideyo Noguchi. Octavo, 16 pages.
- No. 13. Influence of Grenville on Pitt's Foreign Policy, 1787-1798. By E. D. Adams. Octavo, 79 pages.
- No. 14. Guide to Archives of the Government at Washington. By C. H. Van Tyne and W. G. Leland. Octavo, xiii + 215 pages.
- No. 15. Fecundation in Plants. By D. M. Motier. Octavo, viii + 187 pages, 75 text figures.
- No. 16. Contributions to the Study of the Behavior of the Lower Organisms. By H. S. Jennings. Octavo, 256 pages, 81 text figures.
- No. 17. Traditions of the Arikara. By G. A. Dorsey. Octavo, 202 pages.
- No. 18. Researches on North American Acridiidae. By Albert P. Morse. Octavo, 56 pages, 8 plates.
- No. 19. Coloration in Polistes. By Wilhelmine M. Enteman. Octavo, 88 pages, 6 colored plates, 26 text figures.
- No. 20. The Coral *Siderastrea* radians. By J. E. Duerden. Quarto, v + 134 pages, 11 plates, 13 text figures.
- No. 21. Mythology of the Wichita. By G. A. Dorsey. Octavo, viii + 351 pages.
- No. 22. Report on the Diplomatic Archives of the Department of State, 1789-1840. By A. C. McLaughlin. Octavo, 73 pages.
- No. 22. Revised edition.
- No. 23. Heredity of Coat Characters in Guinea Pigs and Rabbits. (Paper No. 1, Station for Experimental Evolution.) By W. E. Castle. Octavo, 78 pages, 6 plates, 8 text figures.
- No. 24. Mutants and Hybrids of the *Oenotheras*. (Paper No. 2, Station for Experimental Evolution.) By D. T. MacDougal, assisted by A. M. Vail, G. H. Shull and J. K. Small. Octavo, 7 pages, 22 plates.
- No. 25. Evolution, Racial and Habitudinal. By J. T. Gulick. Octavo, xii + 269 pages, 5 plates.
- No. 26. Exploration in Turkestan. By Raphael Pumpelly, W. M. Davis, R. W. Pumpelly and Ellsworth Huntington. Quarto, xii + 324 pages, 6 plates, 174 text cuts.
- No. 27. Bacteria in Relation to Plant Diseases. By Erwin F. Smith. Quarto, xii + 285 pages, 31 plates, 146 text cuts.
- No. 28. A Revision of the Atomic Weights of Sodium and Chlorine. By T. W. Richards and R. C. Wells. Octavo, 70 pages.
- No. 29. The Color Sensitivity of the Peripheral Retina. By J. W. Baird. Octavo, 80 pages.
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- No. 32. Chimaeroid Fishes and their Development. By Bashford Dean. Quarto. In press.
- No. 33. Researches in Stellar Photometry. By J. A. Parkhurst. Quarto. In press.
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- No. 45. Catalogue of Stars within two degrees of the North Pole, deduced from Photographic Measures. By Caroline E. Furness. Octavo, 85 pages.
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INSANITY IN ENGLAND AND WALES.¹

ACCORDING to the Sixtieth Report of the Commissioners in Lunacy for England and Wales, recently issued, the number of certified insane persons under care on January 1, 1906, in England and Wales was 121,979, of whom 9,802 were private patients, 111,256 pauper patients and 921 criminal lunatics. Of the total number, 89,342 were maintained in county and borough asylums, 17,742 in work-houses and metropolitan district asylums, 7,973 in registered hospitals, licensed houses and in naval and military hospitals, 776 were in the criminal lunatic asylum at Broadmoor, 528 were private single patients and there were 5,618 outdoor pauper lunatics.

The report shows a total increase in the number of the certified insane of 2,150 over the numbers of the previous year. This increase compares favorably with the increments of the three previous years, which were 2,630 for 1904, 3,235 for 1903 and 3,251 for 1902. Further, it is less by 404 than the annual average increase for the decennium ending December 31, 1905, namely, 2,554, and less by 657 than the average increase for the latter half of this decennium, namely, 2,807. Compared with 1904 the private patients have increased by 162, the criminal lunatics by 9 and the pauper patients by 1,979, the increase in the private patients being greater by 79, but the increase of the criminal lunatics being less by 26 and that of the pauper patients by

¹ From the *British Medical Journal*.