The paper of Professor Norton, published in this issue of *The Journal,* puts forth the economic side of the question as fully and fairly as any publication of its compass that has lately appeared. Coming from a non-medical man, it is an encouraging sign. Professor Norton shows how great a waste exists at the present time from preventable deaths, sickness and conditions of physical and mental inefficiency, due largely to the lack of a wise general governmental supervision. We have our pure food laws and our quarantine laws which go a certain way toward checking these evils, but they are, after all, only a beginning of what is needful. We have a great deal of government in regard to health matters, but it is local, unsystematized and often conflicting in different sections of the country and is distributed also, so far as it relates to national affairs, under different departments of the government, thus preventing the best results. The plea for a national department of health could be, to a certain extent, met by the consolidation under a single head of already existing bureaus without a great additional expense, but completeness and full efficiency would demand more than this.

The plan laid out by Professor Norton covers a much broader field, and, while it may not be absolutely realizable at once, the consolidation of the existing bureaus would be a great step in advance and could be enlarged on as wisdom and experience would dictate. The work done on less than a million and a half by the Public Health and Marine-Hospital Service is itself an indication of what a wise expenditure of only a moderate amount of public funds can accomplish. The protection of our southern coast from yellow fever, which it has practically accomplished, is worth annually many times the whole cost of that department, but this is a local service which principally benefits a section and not the whole country. An intelligent direction of health matters, including far more than that bureau at present has under its control, would be of still more widespread and general advantage. A considerable amount of the work done under the Agricultural Department, which is of the utmost value, including, for example, the admirable work of Dr. Wiley and that now assigned it under the pure food law, should properly be consolidated with the sanitary functions of other departments. Then a cabinet officer with expert knowledge of health matters could administer all these and other new departments to much better advantage than under the present system.—*The Journal of the American Medical Society.*

TECHNOLOGY—HARVARD GEOLOGICAL EXPEDITION.

DURING the past summer Professor Douglas Wilson Johnson, of Harvard University and the Massachusetts Institute of Technology, conducted a geological expedition through portions of New Mexico, Arizona and Utah. The expedition was supported by appropriations from both the Institute and Harvard University, together with contributions by several friends of the two institutions. Dr. H. W. Shimer, of the Institute geological department, and Mr. C. H. Decker, a graduate of the Columbia University School of Mines, were members of the party.

The first field work was done in New Mexico, where a week was spent in studying the geological relations of underground waters from the town of Belen eastward, while a week or more was devoted to a trip into the Mount Taylor volcanic district, where a somewhat extended detailed examination of the splendid volcanic necks was made.

The party then proceeded by rail to the Big Bug mining district, twenty-five miles southeast of Prescott, Arizona, where an outfit of wagons, horses and all necessary camp supplies was secured and final preparations made for an overland journey of twelve hundred miles, lasting from June 19 to September 10. Leaving Big Bug and crossing eastward to the Verde River, the ascent from the Basin Region to the Plateau Province was made near the head of Oak Creek, over what is known as the Mogollon Rim. Continuing north past Flagstaff, several days were spent in the San Francisco Mountain region, studying the glacial features in the main peak, and

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 Nymphæa. 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.