they are, the public will look with great lenity on the donor providing himself and his co-laborers with the necessary shelter, while they are engaged upon their professional duties.

AT A MEETING of the Brookville society of natural history, Sept. 22, a committee was appointed to confer with the scientific associations, educational institutions, and with individuals throughout the state of Indiana, concerning the advisability of the formation of a state academy of science, and if thought advisable, to coöperate with such persons in favor of the formation of such an association. Free expression of opinion is called for by the committee, both as to the need of such an organization and as to the best plan for its composition. It is now the plan to hold a meeting at Indianapolis between Christmas and New Year's day. It proposed that the organization shall enable the citizens of Indiana who are engaged in scientific work to meet at certain times "for social intercourse, for the exchange of ideas, and the comparison of results of scientific studies." It would appear from the prospectus that the academy would be a state society similar to the American association.

WE ARE INFORMED by Prof. Chas. A. Bacon, director of the Beloit college observatory, that the statement made in *Science* for Sept. 4, that the observatory had been closed on account of lack of funds, is incorrect. Professor Bacon states that, on the contrary, new arrangements have been made for carrying on additional observations in meteorology, and that especial attention will be paid to solar and spectroscopic work with greater facilities than before.

IN THE *American meteorological journal* for September, Dr. Daniel Draper, director of the Central park meteorological observatory, asks the questions, What is ozone? and Can ozone produce pneumonia? and he gives, for the months of January, February, March, April and May for each year from 1878 to 1885, the death rate from pneumonia for New York City, and the figures expressing the amount of ozone and the number of days on which it was present in the atmosphere, as shown by the continuous records of his observatory. The coincidence of the curves indicated by the sets of figures—though possibly only accidental—yet seems sufficient to warrant further investigation of the matter, and would seem to call upon chemists to join now with physicists—who are making a special study of atmospheric electricity—to see if they can further clear up the doubtful relations between oxygen, ozone and electricity, and, perhaps, discover a simpler and more reliable method than the present, by which ozone tests or observations can be regularly made by meteorological observers.

THE PRESIDENT AND PROFESSOR AGASSIZ.

When it became known a few days ago that the President had invited Professor Agassiz to assume the direction of the coast survey, there was great satisfaction among those who desire that the principles of good government should be applied to the scientific bureaus as well as to the other executive offices. The independent position of Professor Agassiz, his administrative ability, and his acquaintance with the state of science in this country are so obvious, that even those who believe as we do, that a person trained in mathematical and physical science should be the head of the survey, must have seen that in the emergency Agassiz was a very felicitous choice. The announcement that he had been selected by the President for this responsible station was an assurance that the administration desired a man of unsullied name and of unquestioned ability to guide the affairs of the coast survey in the embarrassments which they have encountered. It removed the apprehensions which have been entertained that scientific work will not be encouraged by the party in power. It showed that the President and the Secretary of the treasury, in the difficulty which has arisen, are not indifferent to the survey, but are sincerely desirous of placing it under the direction of an able man, whose name and character would be the guarantee of success.

The health of Professor Agassiz precludes his acceptance, but he has another reason for refusing the office in question. In his opinion, the guidance of the coast survey requires an expert. The problems to be decided, the methods to be employed, the men to be engaged, should be determined by one who knows the business. Any other person would be in danger of failure. The culture of Agassiz is so broad and his experience has been

so varied, that he would have been an admirable man for the emergency, and even as a permanent head would have shown many admirable qualities. Nevertheless he is doubtless right in saying that four men can be named, two already in the government service, and two not so employed, who are qualified for the post by their acquaintance with the precise investigations which are prosecuted by the survey. One of these he hopes will be appointed.

From all that reaches us, we are persuaded that neither the President nor his advisers are hostile to the proper prosecution of the government work in science. If abuses have crept into any department, these abuses will doubtless be eradicated. As the corrections proceed, undue zeal may sometimes be shown by the subordinate reformers; individuals may neglect the considerations of courtesy and the deference due to those whose lives have been devoted without reproach to the service of the country; but the correspondence of Secretary Manning and Professor Agassiz is to us an assurance that science will not be retarded, and that scientific men will not be slighted by any act of President Cleveland.

BULGARIA AND BULGARIANS.

Forty-three years have come and gone since M. Cyprien Robert wrote that: "On the confines of Europe, there vegetates, enslaved and forlorn, a nation hardly known at the present day, but deserving all our sympathy. This nation is that of the Bulgarians, which has preserved, in the hardest state of slavery, its ancient manners, its lively faith, its noble character, and, after having had a glorious past, seems destined, by its geographical position, to play an important part in the future." Few political prophets have been happier in their prophecies. Since 1842 the Bulgarians, having acquired a national church and some educational facilities, have thrown off the cloak of listless barbarism which then enveloped them, have risen against the Turks, their masters, have been secured by the strong arm of Russia, with the consent of Europe, in a position of conditional independence, and now, at last, united and aroused, seem destined to free themselves entirely from the Turkish yoke, and, in time, perhaps, to become the European successor of "that multitudinous crime which we call the Ottoman government."

One must not ascribe everything to mere geographical position. National peculiarities have had much to do with this progress, but a glance at the accompanying map will serve to show not merely the commercial importance of the country inhabited by the Bulgarians, but also that, in a purely strategic point of view, the Bulgarians hold the key to Constantinople. They may be said to inhabit an immense square, bounded on the north by the Danube from Widin to Silistria, and thence, in a direct line, to the Black Sea near Varna; on the east by the Black Sea itself; on the south by the peninsula upon which Constantinople stands, and the Ægean; and on the west by Albania and Servia. The northeastern portion of this region, however, has been colonized by the Tartars, who flying from Russian rule, soon after the close of the Crimean war, settled on the grassy plain lying to the north of the Roman wall, and between the Danube and the Black Sea. This plain, known as the Dobrudsha, soon proved too small for them, and they spread thence to the south and west for a considerable distance. Neither in strictness can the Bulgarians be said to live on the coast either of the Black or Ægean seas, as in all the towns on the sea coast the Greek holds the most important position. The Balkans divide this Bulgarian square into two unequal parallelograms, the northern of which constitutes the Bulgaria of the Berlin congress, while the southern forms the larger part of the Eastern Rumelia of the same instrument. Thus it will be seen that the Bulgarian holds the line of the Danube, the outermost defence of Constantinople; that the Balkans, with their difficult passes, are entirely within his control; that Shumla, which has so often and so prominently figured in the Russian advances, is now a Bulgarian fortress, and that Adrianople, the railroad centre of the Constantinople peninsula, lies on his borders. Besides this, Salonika, the military port of the Ægean, and Varna, that of the Black Sea, are almost at the mercy of an army having possession of the roads and the sympathies of the people of this region, even though the majority of the inhabitants of the towns themselves are inimical to the Bulgarians.

The Bulgarians of to-day resemble the other Slavic races of Europe more closely than they do the Turks or the Greeks. Yet, unlike the Servians and Montenegrins, they are not of pure Slavic descent, but are a Slavonianized race. Men learned in the languages profess to find in the Bulgarian dialect certain words and phrases which point to a Finnish origin; but there is an element, too, derived from Turkish and Persian languages; while some scholars, relying more on ethnological similarities than on philological analogies, declare the Bulgarian to be of Mongol extraction. Whatever theory is the true one, the Bulgarian differs