000; the library has grown from 120,000 volumes to over 300,000 volumes; the teaching force from 226 to 361; and the number of students from 1,564 to 2,560. These figures do not include either Barnard College or Teachers College.

Since removal, also, an educational deficiency of more than \$48,000 has been overcome, and the University, after this academic year, will be running within its income, after assuming the full care of its enlarged plant.

For a few years and for a few years only, the University needs help to prevent its debt from being further swelled by borrowed interest. It is not possible to take any such sum as the University needs, annually, in the immediate future, out of its educational work, without destroying its efficiency. This ought not to be be permitted : First, because the work is highly useful and is being economically and well done; second, because any curtailing of the University's educational offer would be reflected immediately in loss of earning power; and, third, because, for the credit of the city, the University must be kept where it now is, in the very front rank.

To meet this situation, appeal is made to all the friends of the higher education in New York. Friends of the University, including the President and Trustees, have already pledged \$38,000 for this purpose. For the rest, the University confidently turns to the citizens of New York who value the things for which Columbia University stands in this metropolitan city.

## REPORT ON A WESTERN BRANCH OF THE AMERICAN SOCIETY OF NATURALISTS.

As we have already announced, the American Society of Naturalists decided to meet next year at Chicago, and the Council was requested to report on the relations of the Society to the Western Branch, which has held two successful meetings in that city. Prior to this decision a committee consisting of Professors Henry Kraemer, G. D. Macloskie, E. B. Wilson, C. B. Davenport and T. H. Morgan made a report which we publish, in order that men of science may have an opportunity to consider and discuss a problem of considerable importance. The report of the committee is as follows: The Committee appointed to consider the proposition offered by some of the members of the American Society of Naturalists to form a Western Branch of this Society (See Records of A. S. N., p. 29) submit the following recommendations for the action of the Society :

1. The American Society of Naturalists appreciates the desire of some of the Western members to form a Society of the Central States and, furthermore, appreciates the motives of the members to make this new Society a branch of the American Society of Naturalists. It is doubtful, however, if it will be possible to form such a branch, and if such a society is formed, we believe it should be as a distinct organization having its own officers, control of its own finances and the publishing of its own records.

2. The original intention of the Society of Naturalists was a good one, but we believe that it was unfortunate in changing its name from 'Society of Naturalists of the Eastern United States' to 'American Society of Naturalists' and in limiting the meetings to the Eastern United States. We recommend, therefore, that the original name be readopted in place of the present name. We believe this action would tend to facilitate the formation of similar societies, if desired, in different parts of the United States, and be in accord with the inception principles of this Society.

3. It is further recommended, in order to strengthen the work of naturalists in the United States, and so add to the influence of the whole body of naturalists in this country, that, if a Society of Naturalists of the Central United States be formed, or any similar society, if possible, each society appoint delegates to represent it at the Annual Meeting of the Sister Society ; that the Executive Committee of the one cooperate with the Executive Committee of the other for united effort in contributing to the support of different objects such as the Naples and Wood's Holl Biological Stations; and that the societies extend to each other mutual privileges and courtesies such as : (a) Change in membership from one society to the other by approval of the Executive Board of both societies; (b) Admission of members of both societies to the meetings of either society, with enjoyment of certain privileges such as the reading of papers, taking part in the discussions and participation in such other matters as may be deemed advisable.

## SCIENTIFIC NOTES AND NEWS.

MR. JOSEPH WHITE SPRAGUE, of Louisville, Ky., who died recently in Switzerland, left a will that should ultimately greatly benefit the Smithsonian Institution. It gives 85 per cent. of the interest on the estate to relatives for life. On their death the entire property, increased by 15 per cent. of the income to be laid by each year, is held in trust for twenty years, and then reverts to the Smithsonian Institution. Onehalf of the annual income is then to be added to the principal each year, and the other half is to be used for the advancement of the physical sciences by prizes, lectures or original research. It is estimated that the fund now is worth \$200,000, and that it will be available in about fifty years.

A BILL has been introduced in the House of Representatives directing the general govern ment, through the Secretary of the Interior, to secure title to the cliff dwellers' region of New Mexico for park and scientific purposes, and one in the Senate appropriating \$5,000,000 for the purchase of land in the Appalachian Mountains for a national forest reserve.

THE Washington Academy of Sciences is endeavoring to secure a permanent home for the Academy and the nine local societies which are affiliated with it. A lot has been purchased on 15th Street, between L and M Streets, northwest. It is hoped that funds enough can be secured to warrant the erection of a building containing a large hall for various public meetings and small rooms for the different purposes of the various societies.

DR. H. R. MILL will, as we learn from *Nature*, join Mr. Sowerby-Wallace in carrying on the British Rainfall Organization, in continuation of the work of the late Mr. G. J. Symons.

WE regret to learn that the *Philadelphia Medical Journal* will no longer be edited by Dr. George M. Gould. The Journal has been edited by Dr. Gould since its establishment and has been made by him one of the half-dozen valuable medical journals of the United States.

IN commenting on the election of Professor W. W. Campbell to the directorship of the Lick Observatory, the *Astrophysical Journal* says: "The wisdom of this choice will be apparent to every one familiar with the circumstances of the case. The task which falls to the successor of Professor Keeler is no easy one, a fact which the Observatory Committee fully appreciated. They accordingly deferred action until the opinions of many eminent astronomers in this country and abroad could be secured. The replies, almost without exception, named Professor Campbell as first choice. It is evident that his remarkable success as an investigator, his tireless energy and his ability to direct the works of others are widely known and appreciated. It is a pleasure to extend congratulations to the President and Regents of the University of California for the wise manner in which the appointment was made; to the Lick Observatory for its bright prospects under such leadership, and to Professor Campbell himself for the wider opportunity in the prosecution of his researches which he will now enjoy."

DR. W. WALDEYER, professor of anatomy at Berlin, has been elected a member of the Moscow Natural History Society.

It is understood that Lord Kelvin will give an address on the textile industries at the annual dinner of the governors of Yorkshire College, on February 1st.

A MARBLE bust of Friedrich Gustav Gauss is to be made and placed in the lecture room for geodesy and mathematics at the University of Berlin.

THE death is announced on December 30th of Mr. William Pole, F.R.S., formerly professor of civil engineering in University College, London, an eminent writer on engineering subjects and an active member of a number of Government commissions of inquiry. He was a man of wide interests, being a gifted musician and student of music and the author of the wellknown 'Evolution of Whist.'

WE also regret to learn of the death of Mr. Philip Crawley, fellow of the Zoological and Linnean Societies of London, and the possessor of collections of birds' eggs and butterflies, said to be among the finest in the world; of Mr. F. R. Bedford, a young English zoologist, known for his studies on the echinoderms, and of Senhor Cordeiro, Secretary of the Portuguese Geographical Society.

THE Chicago Medical Society has adopted a resolution protesting against the duty of 20 per cent. on pathological specimens. In accordance with the recommendation of Governor Odell, a bill has been introduced in the New York Assembly abolishing the present Forest Preserve Board and transferring its duties to a Forest, Fish and Game Commission. This Commission would have a president with a salary of \$5,000 and two other members appointed from the commissioners of the Land Office without extra salary.

As a part of the work of the Geological Survey in Alaska this year, an arctic party will proceed from Bergman on the Koyukuk River by the Allen Kakat River to the divide, then down some stream to the arctic coast and along the coast southward and westward. Another party will go westward from Bergman down the Kowak River to Kotzebue Sound. Another party will continue investigation of the Copper River region.

WE learn from the *Irish Naturalist* that Professor A. C. Haddon, and Messrs. H. J. Seymour, R. L. Praeger and Halbert, have been investigating the Cave of Dunmore in County Kilkenny, Ireland, both as regards its geology and its past and present fauna, and have taken a number of the small animals which render the Mitchelstown cave so interesting.

A COLLECTION of marine, fresh-water and land shells, made by the late Sir<sup>\*</sup><sub>a</sub>James Emerson Tennent, Governor of Ceylon, has been presented to the Municipal Museum of Belfast, Ireland, by the executors of the late George Horner, who had purchased it from a previous owner.

THE Hon. E. S. Converse has given \$125,000 for an endowment fund for the Malden Public Library, established by him.

THE daily papers report that the Finlay theory of the propagation of yellow fever by mosquitoes has been further confirmed by the commission now studying the subject in Cuba. Cable dispatches state that a monkey which had been bitten by an infected mosquito developed on the fourth day well-marked symptoms; that of six non-immunes bitten by mosquitoes which had previously bitten yellow fever patients, five developed yellow fever, while subjects who slept in infected clothing and bedding, but were guarded from mosquitoes, were untouched.

THE plague has broken out at Vladivostock with nineteen cases of which fifteen have been fatal.

On the afternoon of December 7, 1900, there passed over northern Colorado and southern Wyoming a magnificent fireball, which was so brilliant that some observers described it as rivaling the sun. It exploded when passing over North Park, Colorado, its detonations inspiring animals with terror and startling people. Some reports state that the earth was shaken and windows in houses broken. The Chamberlin Observatory has sent circulars broadcast over the State and has utilized the newspapers thoroughly in an endeavor to gather information. The data obtained have been placed in the hands of Miss Lela L. Stingley, of the University of Denver, for discussion and publication.

MR. A. G. S. JOSEPHSON, of the John Crerar Library, submitted, at a recent meeting of the Bibliographical Society, of Chicago, a plan for a complete bibliography of American literature on cards, thus making it possible to issue to subscribers, during the course of its preparation, cards for either the whole work or for any part thereof. The plan provides for the organization of a Bibliographical Institute, either specially endowed or supported by contributions from scientific societies and institutions. The Society voted that a committee of three be appointed to consider ways and means for carrying out the plan, and the President, Professor Camillo von Kleuze, appointed as members of the committee Messrs. Clement W. Andrews, Frederick H. Hild and Carl B. Roden.

In the spring of last year the London *Times* published a series of articles on American engineering competition that attracted much attention. The articles are now being continued, and it is sought to explain the growing place taken by American manufactures throughout the world, including Great Britain. Apart from the natural resources, the chief factors are said to be the placing of young men in charge of important enterprises and the educational methods. The technical schools, though highly

praised, are said to be no better than those in Great Britain, but in regard to secondary education the article proceeds: "So far as I can see, the American system is more truly educational, less pedagogic; the child is made to learn, I will not say things that are useful, but things that more develop his intelligence and reasoning faculties. I think any average Englishman of middle age, whether of a public or private school, who looks back on his school days must be struck by the vast amount of time and tears he spent in acquiring knowledge which he has entirely forgot-"But the acquiring of this knowledge," ten. it is said, "has developed his reasoning powers and strengthened his memory." The latter, no doubt, is true, and no one would undervalue memory. But the memory so acquired is of a description that is the least useful in the business affairs of life. Let us take a single Perhaps the most marvelous exexample. hibition of memory is that displayed by players of blindfold chess; but who would select a man, because he was an expert in this science, to con. duct a business? In regard to the claim of development of reasoning powers, it may be that the absolute reverse is the truth, and to learn by rote things that have no meaning to the learner is possibly the surest way to stunt the intellect. The most valuable intellectual gift a man can possess-I speak with all deference, not as an educationist, but as an engineer-is the power of concentrating his mind on the problem immediately before him; and the learning of meaningless or objectless thingsthey need only be meaningless or objectless to the learner-is the surest way to cultivate a Let any one who discursive mental habit. doubts this watch an average school boy getting by rote a Greek verb or any other lesson equally empirical. The most trifling incident will distract his attention, and that not from wilfulness, for the penalty of not knowing his lesson has many real terrors. Educational methods, I know, have improved and are still improving in this country, but when all is said I attribute the greater mental alertness of Americans, especially American middle-class youths, to the lead that American schools have taken in this respect.

## UNIVERSITY AND EDUCATIONAL NEWS.

ACCORDING to press despatches, Professor E. A. Ross, lately professor of sociology at Leland Stanford Junior University, has been appointed professors in the University of Nebraska and Professors G. E. Howard (history), William H. Hudson (English literature) and G. N. Little (mathematics) have resigned their chairs at Stanford University.

THE latest benefaction of Dr. B. K. Pearons's is reported to be \$200,000 for Beloit College, conditional on the raising of \$150,000 more by June 15th.

WARREN A. WILBUR, of South Bethlehem, has given \$5,000 to Lehigh University for the equipment of a mechanical laboratory.

An anonymous gift of £50,000 has been made to the Woman's Agricultural College at Reading, England.

In order to limit the crowding of the medical profession in Germany, the Government has in troduced a bill regulating entrance to the medical profession, prolonging the period of study to five years and enlarging the subjects upon which the examinations are based.

THE Agricultural School at Berlin has been injured by fire due to an explosion of gas. The loss is estimated at \$15,000, in addition to the destruction of valuable collections.

DR. WINTHROP ELLSWORTH STONE has been elected president of Purdue University. He has been professor of chemistry in the institution since 1889, and vice-president since 1892.

It is said that Dr. George Edgar Vincent, professor of sociology at the University of Chicago, has been offered the presidency of Northwestern University.

MISS LAURA D. GILL, A.B., A.M. (Smith College), has been appointed dean of Barnard College, Columbia University.

DR. JOHN E. WEEKS has been appointed to the professorship of ophthalmology in the New York University and Bellevue Hospital Medical College made vacant by the death of Dr. Henry D. Noyes.

AUSTIN M. PATTERSON, A.B., (Princeton), Ph.D. (John Hopkins), has been appointed instructor in chemistry in Centre College, Ky.