States National Museum; and "The Expenditures of Foreign Governments in Behalf of History," by Professor J. F. Jameson, Brown University. Election of officers for the ensuing year, and report of committees, followed the reading of these papers. The following were the officers elected: president, the Hon. William Wirt Henry of Richmond, Va.; vice-president, James B. Angel, president University of Michigan; second vice-president, Henry Adams of the District of Columbia; secretary, Herbert B. Adams, professor of history, Johns Hopkins University; assistant secretary and curator, A. G. Clark; treasurer, C. W. Bowen of New York.

The committee on time and place of meeting reported Washington as the proper place for the next meeting, and during the holidays as the proper time.

The annual meeting of the association was in every way a success. There was a large attendance, the papers were interesting, and the discussions that were evoked, spirited and instructive.

THE AMERICAN ECONOMIC ASSOCIATION.

THE American Economic Association held its fourth annual meeting Dec. 26–30, in Washington. The association numbers between six hundred and seven hundred members, and includes among this number all the professors of political and social science in American colleges and universities, besides many others prominent in economic studies. The next number of its publications will complete its fifth volume of economic monographs.

The present programme embraced twenty-eight papers. President Francis A. Walker of the association delivered the opening address, in which he commented on the various phases of economic activity as exhibited in the increased attention given to economic study, in the rise of nationalism, the spread of the single-tax idea, the recent silver and financial disturbance, and in the change in the character of immigrants who have arrived on our shores within recent years.

Prominent among the papers read were the reports of the different committees, — on economic theory, by Professor J. B. Clark; on transportation, by Professor E. J. James; on statistics, by Hon Carroll D. Wright; and on technical education, by President Francis A. Walker. Other papers were, "The Concepts of Utility, Value, and Cost," by Professor F. H. Giddings; "The Term 'Wealth' in Economic Science," by Dr. Charles A. Turtle; "The Ethical Principle in Industrial Relations," by Miss Marietta Kies; "A Contribution to the Theory of Railroad Rates," by Professor F. W. Taussig; "The Relative Cost of Water and Rail Transportation," by Hon. George H. Ely; "The Relation of Railroad Passenger Traffic to Freight Traffic," by Professor E. J. James; "Street-Railway Statistics," by Charles H. Cooley, Esq.; "Statistics as a Means of Correcting Corporate Abuses," by Professor Henry C. Adams; "The Incidence of Local Taxation," by Professor Edwin R. A. Seligman; "Direct Taxation as a Source of Early Federal Revenue," by Dr. Roland P. Falkner; "Crooked Taxation," by Hon. T. G. Shearman; "The Educational Value of Political Economy," by Professor Simon N. Patten; "A Syllabus of Public Economy," by Professor William W. Folwell; "Land Transfer Reform, The Torrens System of Land Registration," by Professor J. W. Jenks; "The Third, i.e., the Social, Revolution," by Professor E. P. Cheney; "The Growth and Economic Value of Building and Loan Associations," by Hon. Seymour Dexter; "The Tailoring Trade and Sweating System," by Miss Katherine Coman; and "Girls' Boarding-Houses," by Robert Stein.

The last session was held jointly with the American Forestry Association, and included papers on "The Duty of Government in Regard to Forests," by Professor E. J. James; "The Present Condition of Forests on Public Lands," by Edward D. Bowers; "Government Forestry Abroad," by Gifford Pinchot; and "The Feasibility of American Forest Administration," by B. E. Fernow.

The meeting just closed was one of the most successful in its history. The following officers were elected for the ensuing year: president, F. A. Walker; first vice-president, Professor C. F. Dunbar of Harvard; second vice-president, Professor W. W. Folwell, University of Minnesota; third vice-president, Col. C. D. Wright, Department of Labor; secretary, Richard T. Ely, Johns Hopkins University; treasurer, Frederic B. Hawley, Esq., New York City; publication committee, Professor H. C. Adams, Professor J. B. Clark, F. H. Giddings, Professor F. W. Taussig, and Professor E R. A. Seligman.

EDUCATIONAL PROGRESS IN JAPAN.[1]

THE new era in the history of Japan was inaugurated by the opening of a few treaty ports on the Japanese coast to foreign trade in 1854, and was further marked by the restoration of the Mikado in 1868, and the abolition of feudalism in 1871. Since then immense strides have been made towards an assimilation of the old Japanese-Chinese world to Western civilization. The progress of Western political, commercial, and industrial ideas in Japan has been astounding. There have also been some changes in social life; and in matters educational a somewhat slower, but nevertheless remarkably steady, advance must be recognized. A complete system of primary, secondary, and university instruction has been developed. Primary instruction is imparted in the elementary and higher elementary schools; secondary instruction, in the ordinary middle and in the higher middle schools. In addition to these, there are several commercial schools in different parts of the country, and a higher commercial school in Tokio. There are also agricultural, military, and naval schools and colleges, and there is in the vicinity of Tokio a veterinary college and a forestry school of high standard.

Special attention has been paid to female education. There are two higher female schools in Tokio, in which very creditable work is already done. Great care is taken to teach European methods in the making of clothing, and in other forms of female manual labor, particularly in Tokio and in Kioto. There are, furthermore, a certain number of kindergartens, and two schools for European art and music. Teachers, both men and women, are trained in normal schools. There is one higher normal school in Tokio for the training of teachers for the normal and ordinary middle schools.

Japan, a country of thirty-six millions of inhabitants, possesses but one university, with about seven hundred students, the present Imperial University of Japan, which has sprung from several originally independent establishments. It comprises five faculties or colleges, — those of law, medicine, engineering, literature, and science. The engineering college, which for some time was under the direction of foreign professors, and the medical college, rank comparatively high. In the law college much attention is paid to political economy, and in the literature college to the teaching of history, philosophy, and German literature. Through the impulse given by Dr Riess, the German professor of history, a special historical department has been established in connection with the university, in which original investigations in Japanese history are conducted by an eminent Japanese professor. The scientific instruments and apparatus used in the engineering, science, and medical colleges, are of the best manufacture, and of latest European models. Recently there has been established in

[1] Abstract of a paper read at the Travellers' Club of the Johns Hopkins University, Oct. 10, 1890, by Dr. Emil Hausknecht of Tokio.

the university the so-called University Hall, which is intended to give students who have successfully gone through the college course an opportunity for more advanced work or for original research. Connected with the university is a library, an observatory, a botanical garden, a marine zoölogical station, and several hospitals. Some of the university buildings are built of brick, and heated by steam. The students live in frame dormitories, which are lighted by electric lights. There are a few other institutions which, in their highest classes, approach or equal the standard of the Imperial University; as, for example, the German Law School at Tokio, and the Doshisha, a school at Kioto, supported by American missionaries. Recently an attempt has been made at conducting a private university with a limited number of courses.

The professors in the university are either Japanese who have been trained abroad, or foreigners (German, English, American, French, and Chinese). The Japanese professors employ the Japanese language; the foreigners, generally their own language, with the exception of some of the German professors, who teach in English. In the medical college the language used, in addition to Japanese, is German; in the engineering, science, and literature colleges, English, with the exception of the special German literature course, in which German is spoken. In the law college there are three divisions,—the English division for English law, the French division for French law, and the German division for German law. In the same manner the higher middle school in Tokio is divided into special language departments. There is a German division subdivided into the German law division and the German medical division for those scholars who, when entering the university, intend to study medicine or German law; there is an English division with a great many subdivisions for the future students of the science, literature, or engineering colleges, and for the students of English law and political economy; and there is a French division for the future students of French law. It is evident that the language in which these scholars are particularly trained somewhat affects their spirit, and gives them a special propensity in favor of some foreign nation. Thus we see the young men who in the near future will constitute the intellectual leaders of Japan brought up in three different camps.

The higher middle school, which in the Japanese school system immediately precedes the university, and is indeed its fitting-school, is, according to the original conception, the continuation of the ordinary middle school. For practical reasons it has established preparatory classes of its own, also with several divisions, according to languages. Before entering these preparatory classes, the pupils generally lose much time in passing successively through a number of private schools. There are a great many of these private schools in Tokio, most of them without merit. In some of the worst the system of so-called "free students" prevails; that is to say, any student who pays an extra fee is at all times freed from the obligation of attending any of the courses chosen. Some of the best private schools in Tokio are conducted by teachers of the Tokio higher middle school. This school, as we have seen, is the preparatory school for the special university courses; so much so, that almost from the very beginning it subdivides into special departments.

This premature drill for some special branch is the outcome of the peculiar circumstances of Japan, which, in order to render possible and to fill the university, necessitated a too hasty mechanical training for the special university courses. It frequently involves the danger of preventing the pupils from acquiring a sufficient amount of thorough general knowledge and the all-round culture, which ought to precede the study of any special branch of knowledge. Indeed, a truly scientific standard can never be attained unless the spirit is strictly adhered to, which would found special attainments only on the basis of broad general knowledge. Moreover, the acquisition of broad general knowledge is particularly necessary for Japan in the present phase of her political development. Before the end of this year the first Japanese national parliament will have met. Will it be possible for the government to secure a sufficient number of men with wide knowledge and broad views to comprehend its enlightened and far-reaching projects of reform? A great deal of elementary work which, but for the hours taken by the special subjects, might have been accomplished in the higher middle school, has to be mixed up with more advanced studies. In the Japanese university it is particularly the lack of acquaintance with a sufficient number of the modern European languages which greatly interferes with satisfactory progress in true university work. The Japanese higher middle school system, with its premature special courses, leaves no time for entering into what is at the present time most essential for Japan; viz., the very spirit of Western civilization.

The difficulties which Japan, in introducing the Western learning into her middle schools, had to meet and to surmount were enormous. Not only the subject-matter, but also the methods of instruction, were entirely new. The greatest difficulty was to obtain teachers for the new learning. The need being so great, men who had often nothing but a glimpse of some single part of Western learning had to be employed as teachers. The fact that the new era demanded changes so numerous and so complete, that the demand for Western learning sprang up so rapidly, so unexpectedly, and so generally, had several drawbacks. The sudden desire for an adoption of the Western civilization involved a break with tradition. Tradition, being an important factor in education and social life, has always to be handled with particular delicacy and respect. The belief in a great many ideas which had before been considered sacred and venerable began to be shaken. Whereas, under the old *régime*, teachers embraced more or less the whole range of Sinico-Japanese knowledge, the teachers of the new era, as it has been impossible for them to acquire in the brief space of time a thorough knowledge of Western learning, generally know only the one subject which they have to teach, better than their pupils; while in the other subjects of Western learning the pupils are generally far ahead of them. Petitions of a whole body of pupils peremptorily asking the removal of such and such a teacher from their school, and strikes of pupils organized to enforce their will, are not unusual. Thus we see a great number of the young generation of the better classes in Japan growing up without true notions of authority and of submission. This, indeed, is a most deplorable state of affairs, both from a social and a political point of view.

However deficient the knowledge of the present generation of Japanese pupils in Western learning, there is, as has been pointed out above, a decided and steady progress to be noticed.

In a re-organized plan for the curriculum of a Japanese middle school which I was asked to prepare, I have tried to initiate the Japanese, as far as this can be done by school instruction, into the true spirit of Western thought. A translation of a passage from this plan may be here given: –

"The course of instruction is intended to bring about an amalgamation of Japanese-Chinese culture with the ideas of Western civilization, and proposes to bridge the mental abyss which still exists between Japanese and Europeans in their mode of feeling and thinking. The aim is to solve the problem of leading the pupils into the European range of thought, into the moral principles on which their law is based, and into the ethical views of life entertained by them; in short, into the spirit of Western civilization.

"The Western or European civilization is mainly a Romance-Germanic civilization, which may be divided into three groups: (*a*) the French branch of culture, (*b*) the German branch of culture, (*c*) the English branch of culture.

"The best introduction into the true spirit of these three forms of culture is by means of learning the respective languages. . . . Each one of these three groups forming the Romance-Germanic civilization comprises four elements: (*α*) the characteristic-popular element, (*β*) the Jewish-Oriental element, (*γ*) the old classic (Greek-Roman) element, (*δ*) the Christian element.

"The principal object of the course of instruction is to lead the pupil into the spirit of the first three of the above-named four elements of French, German, and English culture, by the following means:—

"Partly by instruction in history, partly through the reading-matter laid before the pupil in the study of the foreign languages, and partly through lessons in universal literature, in the introduction to the history of art, and in drawing.

"To the fourth element, Christianity, attention is given not only by way of historical instruction, but especially in the course of ethics, in such a measure that the pupil obtains an insight into the historic importance and the civilizing effects of Christianity, to the influence of which all the civilized Western nations owe their mental superiority over the other people of the globe."

To raise the standard of the university, I aimed at an elimination of the elementary studies which until now impeded true university work. These elementary studies were placed on the curriculum of the middle school, which was at the same time relieved from premature specialization. The former threefold division (English, German, French) was made to yield to one uniform course for every student. The endless variety of preparatory schools was reduced to two; viz., the elementary school and the new lyceum. The latter provides for an organically constructed course of studies extending over ten years. The student will now come to the university not only better prepared than formerly, and with a sufficient knowledge of three European languages, but also at a considerably earlier age.

Thus we see education in a steady progress in Japan. The many deficiencies and drawbacks which the hasty introduction of Western learning has brought about are the natural outgrowth of the circumstances. However deficient, the system of Western leaning employed until now has done good work, but it has outgrown itself with the advanced state of Western learning which the Japanese have now acquired. The fact that not only is the government aware both of the importance of education and of the deficiencies of the present system, but that so illustrious a body as the Gakushu Kwai in, that imitation of the Académie Française in Tokio, has given its attention to the educational question, justifies the hope that the steady progress made hitherto will be continued in the future.

DANGER FROM HEAVY SEAS.

THE following reports received by the United States Hydrographic Office illustrate the danger to vessels from the terrific seas that may be encountered during the winter storms in the North Atlantic. It may well be remembered that by heaving-to in time and riding out the worst of the storm, using oil to prevent seas from breaking on board, very serious damage may be prevented.

Second Officer Paterson of the British steamship "Vancouver" (Capt. Williams) furnishes the following additional details relative to the disaster that happened to that vessel on Nov. 7, eastward of the Strait of Belle Isle: "Toward midnight of the 6th the wind hauled west-north-west, bringing a tremendous sea along with it, which, with the head sea still running, caused a very treacherous cross-sea. We kept shipping heavy bodies of water, but without damage, the ship rising to the sea very nicely until 6 A.M., when two tremendous seas seemed to meet close aboard, and, the ship not rising to them in time, passed right over her, causing fearful havoc. The starboard breakwater on the forecastle-head, of heavy pitch pine, was torn out of the deck. The iron rails on the forecastle-head went also, and the light-tower was badly damaged. A large square iron companion on the main deck was bulged in, and an iron bulkhead crushed. The two iron doors of the alley-way were torn down, and the mass of water rushed through the alley and burst in the saloon-door, flooding the cabin. But the worst damage was caused on top of the saloon deck: the chart-house, wheel-house, and bridge were swept clear over the side, leaving only a portion of the weather side of the bridge, with the third officer, who was saved. The captain, who was in his room, and the quartermaster at the wheel, were both carried away with the wreckage. Another quartermaster was in the wheelhouse, and he was found lying across the brass pedestal of the steering-gear, very badly cut up. The lookout on the lee side of the bridge was jammed among the wreckage, and badly hurt; and two stewards, who were in the alley-way, were injured. The whole affair was over in a minute, so quickly that the captain and quartermaster had no time, probably, to realize what had happened."

Capt. Leask of the British steamship "Venetian" sailed from Liverpool on his westward trip Nov. 24. On Nov. 30, at 7.30 A.M. (about latitude 47° north, longitude 41° west), a mountainous sea came tumbling on board over the bows, rushing down the deck with tremendous force. It stove a hole in one of the bow plates above the main deck (breaking four angle-irons inside the plates), badly damaged three life-boats, carried away six ventilators, and stove in the engine-room skylight. One of the iron turrets, which protects No. 4 hatch, was torn from its fastenings and somewhat damaged.

The British steamship "Maryland" was in latitude 39° north, longitude 65° west, at noon, Greenwich mean time, Nov. 30. The wind increased from south-east during the day and night, and on the morning of Dec. 1 it was blowing with hurricane force. At 7 A.M. an enormous sea was shipped that ran as high as the fore-yard, carrying away the bridge, chart house, steering-gear, and all boats but one. Capt. Luckhurst was killed, together with the boatswain and cook; Chief Officer Lloyd was seriously injured; some 350 head of cattle were killed; and all nautical instruments, compasses, etc., were swept away. The only chart left after this terrible disaster was a copy of the "Pilot Chart," which was utilized in navigating the ship back to Delaware Breakwater.

LETTERS TO THE EDITOR.

*** Correspondents are requested to be as brief as possible. The writer's name is in all cases required as proof of good faith.*

The editor will be glad to publish any queries consonant with the character of the journal.

On request, twenty copies of the number containing his communication will be furnished free to any correspondent.

Copper Implements.

WHILE most of the implements made of native copper by the aborigines have probably found their way to the melting-pot, when discovered in recent years, a moderate number have escaped. Could full notes be secured of those found in the State of New York, it would possibly appear that they form a large proportion of all those known. Besides those of which I have merely heard, I have figured about thirty-five articles, two-thirds of them from this vicinity. Since I drew some of these for Dr. Abbott's "Primitive Industries," I have met with several well worthy of notice.

The largest of these is a long chisel, found near Oxford, Chenango County, N.Y., in 1856. Like most others, it is flattened on one side and ridged on the other, and of nearly uniform width throughout. It measures 14⅞ inches in length by 1¾ in breadth, and weighs 5½ pounds. This is the exact counterpart of a smaller one found here some years since. The latter is 11½ inches long by 1⅝ broad, and is 2 pounds 14 ounces in weight. Both are very fine examples.

I have seen several copper chisels with expanded edges, a number of spear-heads, knives, gouges, tubes, and nondescript articles. In no case here have I met with an implement perforated for attachment to a handle, and very few with a socket. A figure of one with both these has been sent me, the implement having been found at Cold Spring, on the Hudson River, and closely resembling some from the West. The most remarkable one with a socket, of which I know, recently came to light here. It is a massive implement, and the raised and angularly inclined edges seem intended to receive a handle, resembling some of the figures in Foster's "Prehistoric Races," but more No. 4 of Fig. 87 in Squier's "Ancient Monuments." That was one of a number from Brockville, on the St. Lawrence River. The raised edges are at the broad end, extending about one-third of the length on either side. Between these the general surface is depressed, rising by an abrupt shoulder 3¼ inches from the broad end. This shoulder is a little over a quarter of an inch high, but is sufficient to prevent the handle from slipping through the socket towards the narrower end. I am inclined to think the handle was sometimes removed, and the broad end used as a gouge, the ends being about equally sharp before they were hammered by some later hand. It is 10¼ inches long, 2¾ broad at the wide end, and 1⅝ at the narrower, weighing 3 pounds 2 ounces.

There is a class of recent copper articles found in New York which may have interest for some. Under this, for convenience,