edge was ground off quite sharp, and the other rounded. One of the rings was noticed to be slightly flattened on one side.

FIG. 1.

The spectacles worn by the embassy (fig. 2) were rather curious as regards form and size. They were made of transparent, colorless, and smoky quartz, and are worn more to rest the eyes than as aids to sight.

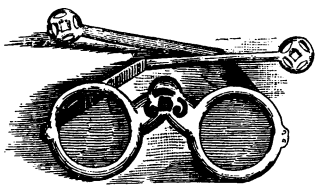

FIG. 2.

One pair, with glasses of smoky quartz, was very curiously marked, or rather streaked, showing the twinning of the crystal; and this feature was commented upon by them as a desirable one. The material of the glasses is obtained from Kyeung Ju, in the south-western part of the province, and is manufactured by thirteen spectacle-makers of note; there being also, in addition to these, a number of inferior workmen. The frames are made of horn, measuring five inches and a half in length, and two inches in width across the glasses.

The amber beads which they wear (fig. 3) are all imported from Europe, and a peculiar, long, rounded one was used as a button.

FIG. 3.

A curious button (fig. 4) is also used by them. It is worn on each side of the head, behind the ears, sewed to a velvet band; and a string attached to the hat passes under the button to hold the hat on the head. When made of gold, they denote the highest rank, and are worn only by the prince.

Every Korean woman wears two rings, always exactly similar in every respect, and as a rule perfectly plain. These are half oval in form, and are made either of gold, silver, amber, or coral. The coral, until recently, has been brought from China, and must have been cut from very large branches of this material.

FIG. 4.

They themselves say that their ladies are the best, or rather the most elaborately, dressed women in the world. In confirmation of this, the prince gave as his reason for leaving his wife at home, that her clothes would not have stood the wear of the journey.

The prince described some crystals which must be the most remarkable yet known for quartz, if there is no error in his statements. They were described as hexagonal in form, and in length six times the height of a man, while over one foot across. After being shown a sketch of stalactites, the prince made a drawing of the crystals which showed the distinct terminal planes of quartz; and he insisted that they were not the same as the stalactites. They were described as red and white in color. It is barely possible from their form, that they are crystals of trap; but from their color and terminations it would seem otherwise. They are found rising from the water at Ohoong Sokh Chung, Kong Won Do, Tsing Chun county, a province on the east coast of Korea.

GEORGE F. KUNZ.

THE HISTORY OF AMERICAN INSTITUTIONS.

Johns Hopkins university studies in historical and political science. HERBERT B. ADAMS, editor. Vol. i. Local institutions. Baltimore, *University*, 1883. [470] p. 8°.

THE first volume of the Johns Hopkins university 'Studies in historical and political science' for the year 1883 is devoted to the subject of American institutions of local self-government, — a subject which has heretofore been greatly neglected, or, at any rate, treated in only a fragmentary and irregular manner. The present is the first attempt made to investigate it comprehensively and systematically; not exhaustively, by any means, or with any pretence to completeness, even of outline. Certainly, no person would look, in a year of independent studies, for any thing more than a commencement of so large a work. As the second year's issue does not propose to continue the same line of investigation, it seems fitting to examine the results of last year's labors, and determine what they have accomplished, and what they leave to be accomplished.

The studies before us embrace a wide range and variety of subject, including no fewer states than Massachusetts, Connecticut, Pennsylvania, Maryland, South Carolina, Michigan, and Illinois, — states far enough apart, one would think, in origin and character, to include every phase of American municipal life. Notwithstanding the admirable judgment, however, with which the subjects have been selected, it will be seen at a glance that there are vital omissions. New York, which has afforded the model for municipal government for almost the entire north-west, and which has some traces of the Dutch system still left; Virginia, the ruling state of the south, and

representing the cavalier instincts of English royalists; the survivals of French institutions in Louisiana, and of Spanish farther west and in Florida, — these, at least, must come into a complete scheme; and those of New York will probably be found the most important of all, so far as the genesis of American local institutions is concerned.

The principal line of investigation in this group of studies has been conducted by Prof. H. B. Adams, the editor of the series, and has been devoted to showing the organic connection between the town institutions of New England and the corresponding institutions of Old England. No less than five papers are devoted to this end, — No. 2, 'The Germanic origin of New-England towns;' No. 4, 'Saxon tithing-men in America;' No. 8, 'Norman constables in America;' and Nos. 9 and 10, 'Village communities of Cape Anne and Salem.' These five papers contain a very interesting account of the corporate features, and the most primitive magistracies of the New-England towns.

The corporate quality, the continuity of existence, the identity of organization and of magistrates, — all these points are well brought out in these papers; but the most important feature of the New-England town-system remains yet to be explained, — the town-meeting, which John Adams placed with good right as one of the four corner-stones of New-England democracy.

The New-England town-meeting is a wholly unique institution. There have been popular assemblies often in history; but the New-England town-meeting differs from all these by radical and fundamental features. Not that it possesses any attribute of real sovereignty, or even any independent original action: it is an institution of wholly subordinate character, and with derived powers, as is shown by the fact that its sphere of action is absolutely limited by the specifications of the warrant. No business can legally come before the meeting which is not definitely stated in this instrument.

A more important characteristic — that, indeed, in which it differs essentially from every other popular assembly — is what we may call the *parliamentary* character of its procedure. Just as the British parliament, representing the people of Great Britain, sits in judgment upon the king and ministers, who hold their places by its will, and subjects them to a rigid accountability, just so the people of the New-England towns, assembled in March meeting, supersede for the time the town magistrates. For that day the selectmen are private citizens. The first business of the meeting is 'to choose a moderator;' and the moderator is the officer of the meeting, wholly independent of the selectmen, just as the speaker is the officer of parliament, wholly independent of king and council. The town-meeting, like parliament, holds the strings of the purse, and not merely votes taxes, but appropriates them to definite objects of expenditure.

This is a feature peculiar to the New-England popular assembly: it is not English, it is not even Teutonic. The English court-leet and folk-mote, the Frank *mal*, as well as the Athenian *ecclesia* and the Roman *comitia*, were presided over by the magistrate who summoned them; and the same is true of the town-meetings in most other parts of the United States. It is from the effective responsibility thus exercised over the town-officers by the body of the citizens, that the peculiar vitality and democratic character of the New-England town-system, noticed by De Tocqueville and others, are derived. The origin of this remarkable feature seems the most interesting and important question in the history of New-England local institutions.

The western states have, as a rule, modelled their town-system upon that of New York rather than of New England, — a system better in many respects, but differing from it chiefly in the absence of the town-meeting. It follows, as was remarked before, that the New-York local institutions are historically the most important of all, and that the most important problem to be solved in these investigations is the cause of this divergence in institutions between two English communities in the same latitude, and separated only by an imaginary boundary-line. Maine and New Hampshire, proprietary colonies, fell spontaneously into the system that prevailed in the charter colonies south of them; perhaps, in part, for the reason that they were, one temporarily, and the other for a much longer period, annexed to Massachusetts. How did it come about that this group adopted this unique system of self-government, while New York, their nearest neighbor, developed so different a system?

This question finds a partial answer in Mr. Gould's paper (No. 3) upon local government in Pennsylvania, in which the policy of the Duke of York is briefly described. This "was a close imitation of the English system: it recognized the old municipal divisions of ridings, towns, and parishes." It is just at this point that we need further elucidation, Mr. Gould's theme confining him to the special

forms of local government developed under the proprietary government of Pennsylvania. 'Towns and parishes,' — these are in English institutions, as a rule, identical; the parish being the ecclesiastical organization of the township, as the manor is its feudal form. Now, it is a significant fact, that south of Mason and Dixon's line the manor was the form adopted, in which the popular assembly was the court-leet. One of the most interesting and valuable papers of the whole series is that of Mr. Johnson (No. 7), upon old Maryland manors, with the records of a court-leet and a court-baron; which records "are the first of their kind that have been utilized by students of Maryland history." But the parish, primarily ecclesiastical, though also used for civil purposes, existed by the side of the manor, as shown by Mr. Ingle, in his paper (No. 6) on parish institutions of Maryland, and by Mr. Ramage, in his paper (No. 12) on local government in South Carolina. The parish, in the beginning regularly conterminous with the town, was also found in New England, where the Congregational Church was established by law, as the Episcopal was in Maryland and South Carolina.

Now, it is an important fact, in connection with this inquiry, that it was just in the period before the planting of the English colonies in America, probably as a result of the Reformation, that the parish became the regular organ of local self-government in England. Its vestry was an assembly of all inhabitants of the parish, not for church concerns alone, but for all matters of public interest, thus taking the place of the old court-leet, or popular court of the township. It is probably from this vestry that the New-England town-meeting was derived, with considerable modifications and enlargement of powers. It was, it must be noticed, fully as ecclesiastical in character as the vestry, none but church-members being allowed to take part in it; and, a significant fact, the name of its elected president, 'moderator,' appears to have been taken from the usage of the Scotch church assemblies. The English vestry was regularly presided over by the rector.

It appears probable, therefore, that, while the New-England 'town' was a direct descendant of the English town, its assembly, or town-meeting, was not derived directly from the court-leet, or primitive popular assembly, which had become feudalized, and brought under the authority of the lord of the manor, but from the vestry, — the form of public assembly which alone possessed vitality and a certain democratic character at the close of the sixteenth century. It may be inferred from Mr. Gould's statement, that the New-York town-system had the same origin; but for some reason its assembly never received the remarkable development of that of New England, and the town itself was reduced to comparative insignificance by the establishment of a county-system of a character intermediate between that of the south, where the county is the principal civil division, and that of New England, where it is hardly more than a group of towns.[1] The system thus created, the relation between county and town established in New-York, with the distinctive town-system which exists in connection with it, may fairly be called the American system. It has spread in the west to the exclusion of the New-England system; and, as is shown in Mr. Shaw's interesting paper (No. 3), on local government in Illinois, it is driving out the southern system, even where the latter had the start. It should be noticed, at the same time, that the Illinois town-meeting, differing from that of most of the states of the north-west, is shown by Mr. Shaw to have been modelled upon that of New England.

The admirable work done in the first series of these papers needs, therefore, to be supplemented in two directions in particular. First, the Virginia county-system, that which appears to have controlled local institutions generally in the south-west, should be described. Second, it needs to be shown how the New-York county and town system, which at present exercises a controlling influence throughout the north-west, and is successfully rivalling the Virginia system, even on its own ground, came into existence.

There remain several interesting subjects, discussed in these papers, into which we have not space to enter. It will be only necessary to mention Mr. Johnston's 'Genesis of a New-England state' (No. 11), in which the town principle is shown to have had a peculiar and remarkable career in Connecticut; Mr. Bemis, upon local government in Michigan and the north-west (No. 5); and Professor Adams's illustrations (already mentioned) of land communities in Massachusetts. This subject, it may be stated, has been examined with the aid of original documents, and with considerable fulness of detail, by Mr. Melville Egleston, in

[1] [In Rhode Island the towns have some of the functions which counties have in Massachusetts, and the power of the county becomes far less important. For instance: in Massachusetts the county lays out highways; in Rhode Island this is the function of the town, and it sometimes happens that roads on opposite sides of a town-line do not connect. — ED.]

a pamphlet entitled 'The land-system of the New-England colonies,'—a work which well supplements the series before us.

THE EXPLORING VOYAGE OF THE CHALLENGER.

(*Third notice.*)[1]

ONE of the most important of all the outcomes of the expedition is undoubtedly Alexander Agassiz's memoir upon the Echinoidea (vol. iii., 321 p., 45 pl.) which occupies fully two-thirds of one of the massive volumes of the report. Mr. Agassiz's personal acquaintance with all known types of Echinoidea, recent and fossil, gives him an advantage as an authority over all his contemporaries; and, without some such special training, it would have been a matter at least of extreme difficulty to decipher the complex relations of the multitude of singular forms intermediate between the faunas of ancient and modern times, which have been brought to light by the Challenger expedition. The value of these collections may best be shown by a bit of statistics. When the author's 'Revision of the Echini' was publishing (1872–74), there were enumerated 207 species, distributed in 89 genera, including 2 deep-sea species discovered by the Porcupine, and 13 by Count Pourtalès. In the general list which accompanies this report, there are 297 species and 107 genera enumerated, making, in all, 90 species and 25 genera added to the former list, in spite of the reduction in number by the cancelling of nominal species. This shows that 80 species of deep-sea echinoids have been discovered since those of Mr. Pourtalès, and that fully one-third of the whole number of known species of Echinoidea have been discovered since the days of deep-sea dredgings. It would seem absurd to attempt, in a review so limited as this, even to call attention to the main points of interest in a memoir of such extent as this. The most instructive chapters for biologists in general, however, are those upon the "character of systematic affinity of allied groups of Echinoidea" (p. 18), upon the "relations of the Jurassic Echinoidea to the echinid faunas of the present day" (p. 19), upon the "connection between the cretaceous and recent echinid faunas" (p. 25), and upon the "geographical range of the continental and abyssal species" (p. 246); in which latter, especially, is pursued a line of thought of great importance to all those who are considering the problems of the origin of marine faunas. Roetter's lithographic delineations are especially worthy of admiration.

Another paper, especially satisfactory by reason of its extent and completeness, is Col. Theodore Lyman's report on the Ophiuroidea (vol. v., 387 p., 48 pl.). This is a monograph of all the known species (500 in number), and is illustrated by about 750 beautiful lithographic figures, drawn by L. Trouvelot. Mr. Lyman's introductory remarks, with his diatribes against genealogical tables and theories of phylogeny, will delight even those whom he intends to criticise, so genial and keen is the humor with which his views are expressed; and there is something refreshing, too, in the curt, sharp-cut phrases in which his general conclusions are formulated. Exceedingly interesting, too, is the manner in which the writer has succeeded in framing his diagnoses of species, genera, and families, in simple words, half of them of one syllable, and Anglo-Saxon in origin at that. He surely has fulfilled his intention "not to add to the jargon in which zoölogy is now smothering,"—a jargon, he declares, "such as Molière would scarcely have ventured to put in the mouth of the medical faculty in his Malade imaginaire." The number of new species added by the Challenger was 170, with 21 new genera. The tables of distribution, geographical, bathymetrical, and thermal, with the 'brief reflections on their indications,' are suggestive in many directions, and we regret that the reflections may not here be quoted at length. In general terms, it may be said "that a very large proportion of the species live exclusively on the littoral zone, and that therein are included species both of cold and of hot water, though the number of the latter is much the larger. Then there is a large fauna of 50 species, which live exclusively below 1,000 fathoms, and which have to endure a degree of cold near to freezing, an enormous water-pressure, and an entire absence of sunlight. Between these extremes there are large groups whose favorite, or even necessary, habitat is restricted to given depths." Sixteen genera do not go lower than 30 fathoms; and they, without exception, inhabit warm seas. "This proves that certain groups demand a high temperature, and cannot accommodate themselves to a lower one. Should any of them, therefore, be found fossil, it would be reasonable to infer that the horizon was a shallow covered by warm water. Nine genera have not yet been found above 1,000 fathoms:" their occurrence, therefore, as fossils, might denote a geological bottom of great

[1] For previous notices see Nos. 66, 79.