# Elephant pipes and inscribed tablets in the Museum of the Academy of natural sciences, Daveport, Iowa / by Charles E. Putnam.

### **Contributors**

Putnam, Charles E. 1825-1887.

## **Publication/Creation**

Davenport, Iowa: Glass & Hoover, 1885.

### **Persistent URL**

https://wellcomecollection.org/works/wd3u7vyz

### License and attribution

This work has been identified as being free of known restrictions under copyright law, including all related and neighbouring rights and is being made available under the Creative Commons, Public Domain Mark.

You can copy, modify, distribute and perform the work, even for commercial purposes, without asking permission.



Wellcome Collection
183 Euston Road
London NW1 2BE UK
T +44 (0)20 7611 8722
E library@wellcomecollection.org
https://wellcomecollection.org

# ELEPHANT PIPES

AND

INSCRIBED TABLETS

IN THE MUSEUM DE

# ACADEMY & NATURAL SCIENCES

DAVENPORT, IOWA.

BY

CHARLES E. PUTNAM,

PRESIDENT OF DAVENPORT ACADEMY OF NATURAL SCIENCES.



[Second Edition - Reprinted from Vol. IV., Proceedings Davenport Academy.]

DAVENPORT, TOWA:

£ AXTMAN, PRINTERS AND BINDERS:
1888.

(2)ZC.643

O. XVI . i . 60.



22501814409

# ELEPHANT PIPES

AND

# INSCRIBED TABLETS

IN THE MUSEUM OF THE

# ACADEMY OF NATURAL SCIENCES

DAVENPORT, IOWA.

BY

CHARLES E. PUTNAM,

PRESIDENT OF THE DAVENPORT ACADEMY OF NATURAL SCIENCES.

DAVENPORT, IOWA:

GLASS & HOOVER, PRINTERS AND BINDERS.

1885.

16294

# Wellcome Library for the History and Understanding of Medicine

# PREFATORY NOTE.

The following vindication of the authenticity of the elephant pipes and inscribed tablets in the museum of the Davenport Academy of Natural Sciences from the accusations of the Bureau of Ethnology of the Smithsonian Institution was prepared in response to an earnest feeling entertained by members of the Davenport Academy of Natural Sciences, and in its preparation the writer has had their hearty cooperation and active assistance. Especial acknowledgments are due to Mr. William H. Pratt, the Curator and Corresponding Secretary of the Academy, whose extensive researches in archæology enabled him to furnish much valuable material for incorporation in this paper; to Rev. A. M. Judy, Mr. James Thompson, and Dr. C. H. Preston, who, as a special committee on behalf of the Academy, thoroughly investigated all the circumstances connected with the transactions in question, and freely placed at the disposal of the writer the results of their investigation; and to our honored associates, Prof. D. S. Sheldon and Rev. W. H. Barris, of Griswold College, who carefully reviewed the paper and favored the writer with excellent suggestions. An expression of grateful appreciation is also due to those correspondents, in various parts of the country, who, in strong terms, have expressed their condemnation of the unjustifiable attack made upon the Academy by the United States Bureau of Ethnology; and, in entering upon the preparation of this vindication, the writer has derived great encouragement from the hearty assurances of approbation and support received from these eminent archæologists. C. E. P.

DAVENPORT, IOWA, February 9th, 1885.

(2) ZC: 643

# ELEPHANT PIPES AND INSCRIBED TABLETS.

### BY CHARLES E. PUTNAM.

In the sharp controversy now being waged among archæologists, as to the origin of the Mound-builders, the Bureau of Ethnology connected with the Smithsonian Institution has taken decided position as the champion of the theory that this mysterious race can be traced with comparative certainty to the ancestors of our American Indians. In the first annual report of the Bureau, Major Powell, its accomplished Director, thus emphatically states its position upon this question:

"With regard to the mounds so widely scattered between the two oceans, it may also be said that mound-building tribes were known in the early history of the discovery of this continent, and that vestiges of art discovered do not excel in any respect the arts of Indian tribes known to history. There is, therefore, no reason for us to search for an extralimital origin, through lost tribes, for the arts discovered in the mounds of North America. The tracing of the origin of these arts to the ancestors of known tribes, or stocks of tribes, is more legitimate." \*

At a subsequent date, Major Powell, in giving his assent to the theory "that the Mound-builders were no other than the Indian tribes found in the country in post-Columbian times, and their ancestors," makes use of this strong language:

"There has never been presented one item of evidence that the Mound-builders were a people of culture superior to that of the tribes that inhabited the valley of the Mississippi a hundred years ago. The evidence is complete that these tribes have built mounds within the historic period; and no mounds or earth-works have been discovered superior in structure or contents to those known to have been built in historic times. The theory that the country was inhabited by a people highly organized as nations, and having arts of a higher grade than those belonging to tribal society, is wild and baseless, and the fruit of that theory is nothing but exaggeration and false statement."

The theory thus boldly announced is also vigorously maintained by Prof. Cyrus Thomas, Director of the archæological explorations of the Bureau of Ethnology, who recently expressed these views:

<sup>\*</sup>First Annual Report of the Bureau of Ethnology, Washington, 1879-80, p. 74.

<sup>+</sup> Science for April 3d, 1885, p. 267.

"Excluding such remains as are due to Europeans, and are post-Columbian, I hold that all the ancient artificial works found in the Mississippi Valley and Gulf States are to be attributed to the Indians found in this country at the time of the discovery and their ancestors. By this limitation of the term 'Indians' I exclude the Toltec, Aztec, and other civilized people of Mexico and Central America."\*

The position thus assumed by Major Powell, and maintained by Prof. Thomas, finds recent and strong support in William H. Dall, an honorary Curator of the National Museum, who, in his edition of Marquis De Nadaillac's "Prehistoric America," just issued from the American press, thus states his conclusions upon this interesting question:

"In closing this chapter, what, it may be asked, are we to believe was the character of the race to which, for the purpose of clearness, we have for the time being applied the term 'Mound-builder?' The answer must be, they were no more nor less than the immediate predecessors, in blood and culture, of the Indians described by De Soto's chronicler and other early explorers—the Indians who inhabited the region of the mounds at the time of the discovery by civilized men."†

The remarkable unanimity among these gentlemen, in their expressions of opinion, clearly indicates concerted action, and a settled policy in the management of this department of the Smithsonian Institution, to force this peculiar theory upon the attention and secure its acceptance by the scientific world.

Another class of archæologists as strongly maintain the opposite theory, that the Mound-builders were more advanced in civilization than the American Indian, and hence have endeavored to trace them to a Mexican origin, or to some earlier common ancestry. The leadership on this side must be accorded to Messrs. Squier and Davis, who, in their great work upon "Ancient Monuments of the Mississippi Valley," thus state their conclusions:

"Without undertaking to point out the affinities, or to indicate the probable origin of the builders of the western monuments, and the cause of their final disappearance, we may venture to suggest that the facts so far collected point to a connection, more or less intimate, between the race of the mounds and the semicivilized nations which formerly had their seats among the sierras of Mexico and Peru, and who erected the imposing structures which, from their number, vastness, and mysterious significance, invest the central portion of the continent with an interest no less absorbing than that which attaches to the Nile. These nations alone, of all found in possession of the continent by the European discoverers, were essentially stationary and agricultural in their habits—conditions indispensable to large populations, to fixedness of institutions, and to any considerable advance in

<sup>\*</sup> American Antiquarian, March, 1885, p. 65.

<sup>†&</sup>quot; Prehistoric America," by Marquis De Nadaillac, p. 130.

the economic or ennobling arts. That the Mound-builders, although perhaps in a less degree, were also stationary and agricultural, clearly appears from a variety of facts and circumstances, most of which will no doubt recur to the mind of the reader."\*

The position thus assumed by Squier and Davis was supported by Prof. J. W. Foster, a recognized authority upon all archæological questions, who, in his valuable work, made this emphatic statement of his views with regard to the American Indian:

"He was never known voluntarily to engage in an enterprise requiring methodical labor; he dwells in temporary and movable habitations; he follows the game in their migrations; he imposes the drudgery of life upon his squaw; he takes no heed for the future. To suppose that such a race threw up the strong line of circumvallations and the symmetrical mounds which crown so many of our river terraces, is as preposterous, almost, as to suppose that they built the pyramids of Egypt." †

So, also, Lewis H. Morgan, in a series of most admirable papers, expressed the opinion that the Mound-builders were derived from the Village-Indians of New Mexico, and advanced strong reason in support of his conclusions, and, in the course of his discussion, remarked—

"From the absence of all traditionary knowledge of the Mound-builders among the tribes east of the Mississippi, an inference arises that the period of their occupation was ancient. Their withdrawal was probably gradual, and completed before the advent of the ancestors of the present tribes or simultaneously with their arrival." ‡

And in a careful and profound examination of this question from a different stand-point, Prof. Alexander Winchell arrived at this conclusion:

"After the personal comparison of Peruvian with authentic Mound-builders' skulls from Michigan and Indiana, and others from dolmens and mounds in Central Tennessee, I feel confident that the identity of the race of the Mound-builders with the race of Anahuac and Peru will become fully recognized." §

In the light of subsequent researches, a more recent statement was made by Prof. F. W. Putnam, of the Peabody Museum, at the British Association during its session at Montreal, which seems to strongly confirm the early conclusions of Squier and Davis. At this meeting Prof.

<sup>\*</sup>Smithsonian Contributions to Knowledge, Vol. I., p. 301.

<sup>†</sup> Prehistoric Races of the United States, p. 300.

<sup>‡</sup> Johnson's Cyclopedia, title, "Architecture of the American Aboriginees." "Montezuma's Dinner," North American Review, April, 1876. "Homes of the Mound-Builders," North American Review, July, 1876. Major Powell well said of Mr. Morgan that he was "the pioneer of American anthropology, and recognized throughout the world as a leader in that science." (Annual Report of the Bureau of Ethnology, 1880-81, p. 18, Introductory.)

<sup>§&</sup>quot;Pre-Adamites," by Alexander Winchell, pp. 339, 340.

Putnam gave an interesting account of discoveries made in a group of mounds in Hamilton County, Ohio, and his conclusions were subsequently reported in *Science*, as follows:

"These relics seem to show a more complex social life, more abundant and varied artistic products, and a higher status altogether, than can be deemed consistent with the views of those who hold that these Mound-builders were merely the ancestors of our present Indians, and in the same state of culture." \*

An abstract of another paper by Prof. Putnam, presented before the American Association for the Advancement of Science at its recent meeting in Philadelphia, was also published in *Science*, wherein an account is given of his explorations of a group of mounds in Madisonville, Ohio, and it is stated that, "as a result, one of the most remarkable series of objects ever discovered in America had been obtained:"

"Among the objects taken from the largest mound of the group were the following, some of them never found before in mounds: Shell-beads, disks, and rings, which were obtained in thousands; cones cut from alligator teeth; ornaments cut from plates of buffalo horn, mica, and native copper, and even gold and meteoric iron; pearls, most of them pierced and injured by heat (not less than fifty thousand were found); small stone dishes, beautifully carved to represent some animal form; and last, and perhaps most important, terra-cotta figurines of exceedingly artistic form, and strangely Egyptian in character." †

A peculiar interest attaches to these statements of Prof. Putnam, not only on account of his acknowledged ability as an archæologist, but because he formerly entertained the opinion that the Mound-builders were merely the ancestors of our present Indians, and now, through these discoveries, he has been compelled to reconsider the question, and apparently to reverse his conclusions.

The citations we have made are far from exhaustive, but are sufficiently extensive to fairly represent in clear contrast the conflicting theories entertained by these contending archæologists.

The Davenport Academy, though eagerly engaged in archæological work, has adopted no theories with reference to the Mound-builders, and takes no part in this controversy. It is considered that deductions so important should have a broader basis of fact; and hence decision upon this interesting question has been postponed while awaiting further discoveries. Its conservative position is well stated by its late Corresponding Secretary, Joseph Duncan Putnam, in a letter to Rev. Dr. Peet, of the *Antiquarian*, bearing date October 10th, 1878:

<sup>\*</sup> Science for September 26th, 1884.

<sup>+</sup> Science for October 3d, 1884.

"I am, of course, only an outsider, and look upon the workers in the field of archæology from over the fence; still I am so close that I feel like offering a suggestion occasionally, and I do wish you archæologists could introduce some scientific methods into so interesting a study, gather up the facts, arrange them systematically, and then deduce the theories. But this is an age of speculation, and even in entomology there is a strong tendency to get up a theory and then hunt for facts to support it."

And in a subsequent letter to the same gentleman, Mr. Putnam thus explicitly states the position of the Academy upon the questions raised by the discovery of its inscribed tablets:

"Whether they are modern Indian, or Mound-builder, or Mexican, or European, or post-Columbian, or ante-Columbian — whether the characters are phonetic, symbolic, hieroglyphic, or meaningless — is yet to be decided; we have no means of knowing."

And in looking over the many statements made by Mr. Gass. the principal discoverer of these relics, as published in the Proceedings of the Academy, it will be found that they contain no suggestion of a theory. On the contrary, in giving a description of some inscribed rocks in Cleona Township, Scott County, Iowa, he thus states his own position upon these mooted questions:

"But for what purpose the people selected them, by what intention they were guided, with what kind of tools the inscriptions on such hard material were made, by what nation the engraving was executed — Indian or Mound-builder — these are questions which I do not venture to answer." \*

In these utterances on behalf of the Academy will be found the language, not of the champions of a theory, but of earnest seekers after truth.

That the theory advanced by the Bureau of Ethnology as to the origin of the Mound-builders should be maintained with consummate ability, was to be expected of the able and accomplished scholars enlisted in its service. It is, however, to be regretted that, actuated by intemperate zeal to establish this theory, its promoters have sometimes abandoned scientific methods, indulged in hasty generalizations, and even violated the amenities of literature. It will be found that the second annual report of the Bureau of Ethnology, recently issued under the auspices of the Smithsonian Institution, is open to this criticism. In that report there appears a monograph by Henry W. Henshaw, entitled "Animal Carvings from Mounds in the Mississippi Valley,"† and therein an attack of no ordinary severity is made upon

<sup>\*</sup> Proceedings of Davenport Academy of Natural Sciences, Vol. II., p. 173.

<sup>†</sup>Second Annual Report of the Bureau of Ethnology, Washington, 1880-81, p. 152.

the Davenport Academy of Natural Sciences. In this bitter assault Mr. Henshaw is ably supported by the strong endorsement of Major J. W. Powell, the Director of the Bureau. The Smithsonian Institution occupies a commanding position in the world of science; and, inasmuch as it has given special attention to researches in archæology, it may properly be considered entitled to speak with authority upon these questions. Its sharp criticism, therefore, presents to our Academy a conspicuous opportunity for a careful review of the circumstances, and a plain restatement of the facts establishing, beyond reasonable doubt, the genuineness of its valuable discoveries.

In the line of archæology the Davenport Academy has attained deserved eminence. Its inscribed tablets, elephant pipes, cloth-covered copper axes, and rare collection of ancient pottery have attracted the attention of archæologists throughout the world of science. These remarkable relics, received with enthusiasm by antiquarians, are generally accepted as authentic additions to the "unwritten history" of the past. That discoveries so rare and unique should be subjected to severe scrutiny might reasonably be expected; and, when exercised in the spirit of an earnest quest of truth, it was even to be desired. coveries which are to become the foundations for important historical deductions should be securely intrenched, beyond the reach of adverse criticism, on the bed-rock of truth. These valuable contributions to the science of archæology have undoubtedly given the Davenport Academy a conspicuous position. The assumed fact, emphasized by Mr. Henshaw, that "it has fallen to the good fortune of no one else to find anything conveying the most distant suggestion of the mastodon," is found to be even embarrassing, inasmuch as it places our Academy in the range of fire between contending archæologists. It is certainly a misfortune of the Davenport Academy that the museum of the Smithsonian Institution contains neither elephant pipes nor inscribed tablets.

The discoveries in question are two elephant pipes and three inscribed tablets. Of the latter, the first two were found in what is known as Mound No. 3, on the Cook farm, adjoining the city of Davenport. The principal discoverer was Rev. Jacob Gass, a Lutheran clergyman, then settled over a congregation in Davenport. In this exploration Mr. Gass was assisted by L. H. Willrodt and H. S. Stoltzenau, with five other persons who were accidentally present during the opening of the mound. The discovery was made on January 10th, 1877. An exact and careful statement of the facts connected therewith was soon after prepared by Rev. Mr. Gass, and read at an early meeting

of the Davenport Academy. It was published, and may be found in its "Proceedings."\* Upon the announcement of the discovery, the officers and many members of the Academy were early on the ground to verify the statements made by the discoverers. The gentlemen engaged in the exploration are well known, and held in high esteem; their testimony as to all essential facts is clear and convincing, and the circumstances narrated seem to fully establish the genuineness of these relics. That their statement contains only facts, all who know them will not question; and that the mound from which the relics were obtained had not been previously disturbed, is sufficiently established by their testimony. The authenticity of this discovery must therefore be conceded by every fair-minded inquirer.

The third inscribed tablet was found on January 30th, 1878, in Mound No. 11, in the group of mounds on Cook's farm, in the suburbs of Davenport, and in close proximity to the mound wherein the other tablets were discovered. That indefatigable explorer, Rev. J. Gass, was also present during these further researches, and had for his assistants John Hume and Charles E. Harrison, both members of the Academy, and well and favorably known in this community. The circumstances of this discovery, as narrated by Mr. Harrison, are published in the Proceedings of the Academy.† No suspicions whatever attach to this discovery, and the well-attested facts connected therewith establish, beyond reasonable doubt, that, whether more or less ancient, the tablet was deposited at the making of the mound.

Of the elephant pipes in the museum of the Academy, one was discovered in March, 1880, in a mound on the farm of Mr. P. Hass, in Louisa County, Iowa, by Rev. A. Blumer, a Lutheran clergyman from a neighboring city, and was by him donated to the Academy. Rev. J. Gass, Mr. F. Hass, and a number of workmen were present, assisting in the exploration. A detailed account of the finding, prepared by Rev. Mr. Blumer, is published in the Proceedings of the Academy.‡ From the social standing and high character of the principal discoverers, no question has been, or can be, successfully raised as to the authenticity of this discovery. The other elephant pipe was not "discovered" by Rev. J. Gass, as stated by Mr. Henshaw, but was obtained by him from a farmer in Louisa County, Iowa. § This

<sup>\*</sup>Proceedings of Davenport Academy of Natural Sciences, Vol. II., p. 96.

<sup>†</sup> Proceedings of Davenport Academy of Natural Sciences, Vol. II., p. 221. Mr. Harrison is now Vice-President of the Academy.

<sup>†</sup> Proceedings of Davenport Academy of Natural Sciences, Vol. III., p. 132.

<sup>§</sup> Proceedings of Davenport Academy of Natural Sciences, Vol. II., p. 349, note,

man found it while planting corn on his farm several years prior to that date, and attached no particular value to the relic, but had sometimes used it in smoking. A brief account of its finding is given in the Proceedings of the Academy, and in substance is republished in Mr. Henshaw's paper.\* It will thus be perceived that there are no suspicious circumstances connected with either of these discoveries, but that the surrounding and well-authenticated facts seem to sufficiently establish the genuineness of these interesting relics.

The explicit statements of the explorers as to the discovery of these relics will find strong corroboration in the early inspection made by other members of the Academy, and their reports thereon. Thus, the learned and lamented Dr. R. J. Farquharson, who was guileless in character as he was eminent in science, in a paper upon the inscribed tablets, bears this most emphatic testimony to their genuineness:†

"Shortly after the report of the discovery, several gentlemen, officers of the Academy, visited the excavation, and, through our President, reported that, from the unbroken condition of the layers of shells, and from other evidence visible, they were of opinion that no disturbance of the mound had taken place since the formation of these layers. But the indisputable evidence of the authenticity of the tablets rests in the explicit statement of Rev. Mr. Gass and the gentlemen assisting him, that, after the penetration of the frozen crust of the earth, they did not leave the spot until the tablets were unearthed by the hands of the former. This forever silences the doubt in regard to the intrusion or interpolation of these tablets, for, taken in connection with the frozen state of the ground, it makes such an act simply impossible." ‡

Equally emphatic is the testimony of Mr. William H. Pratt, the Curator of the Academy, and one of its principal founders. As is well known, this gentleman has given years of gratuitous service in building up the Davenport Academy, and it is due to his exact methods and untiring industry that some scientific order has been

<sup>\*</sup>The quotation from Barber, in Mr. Henshaw's paper, correctly states the circumstances connected with the finding of the elephant pipes; and still, notwithstanding the fact that his quotation refutes his statement, in order to make his point he persists in speaking of Mr. Gass as the "discoverer" of both pipes!

<sup>†</sup>Proceedings of Davenport Academy of Natural Sciences, Vol. II., p. 107.

<sup>‡</sup> In a private letter to Prof. Short, Dr. Farquharson thus refers to the finding of one of these pipes: "The ancient mounds were very abundant in that vicinity (Louisa County) and rich in relics, which are deposited on the surface of the soil (not in excavations), as we found in exploring a number. The pipe, which is of fragile sandstone, is of the ordinary Mound-builders' type, and has every appearance of age and usage. Of its genuineness I have no doubt. Together with the 'elephant mound' of Wisconsin, the elephant head of Palenque (depicted in Lord Kingsborough's great work), our pipe completes the series of what the French would call 'documents,' proving the fact of the contemporaneous existence on this continent of man and the mastodon." ("North Americans of Antiquity," John T. Short, p. 531.)

introduced into its valuable museum. During his long and disinterested connection with our Academy, Mr. Pratt has been extensively engaged in archæological research, and is thus well qualified to pass judgment on the authenticity of these relics. In a valedictory address as its President, delivered before the Academy at its annual meeting in 1881, Mr. Pratt thus refers to these questions:

"Some doubts, of course, have been expressed regarding the genuineness of the tablets, though not to any extent by competent and candid archæologists, and we feel no uneasiness on that account. The tablets have been sent to the Smithsonian Institution for examination, and were retained there and subjected to the most thorough scrutiny for two months, during which time the National Academy held its meeting there, and the heliotype plates of them were obtained under the direction of Prof. Baird himself. They were also exhibited throughout the sessions of the meeting of the American Association for the Advancement of Science, last August. Any author or other person who cared to inform himself of the facts has always had ample opportunity to do so, and would at once see that the circumstances of the finding were such as utterly to preclude all possibility of fraud or imposition. The evidence that they are coeval with the other relics - that is, that they were inhumed with them, and before the mound was built - is ample and conclusive, and will be so considered by any unbiased man. No prehistoric relic ever , found has better evidence to establish its genuineness than these, and not one suspicious circumstance in connection with them has been pointed out, nor can there be. We shall confidently hope for and gladly welcome further discoveries, by whomsoever made, tending to throw more light upon this still obscure and intensely interesting problem of our earliest predecessors on this continent." \*

The late Joseph Duncan Putnam, who gave his young life a martyr to science, was at the date of this discovery Corresponding Secretary of the Academy, and in answer to a letter of inquiry from Prof. Spencer F. Baird, Secretary of the Smithsonian Institution, addressed to that gentleman a communication which is important as a very complete contemporary account written by an officer of the Academy a few days after the finding of the second elephant pipe, and hence is given entire:

"OFFICE OF J. D. PUTNAM, Corresponding Secretary
Davenport Academy of Natural Sciences,
DAVENPORT, IOWA, March 28th, 1880.

"PROF. S. F. BAIRD -

"Dear Sir: Your favor of the 17th inst. duly received during my absence from the city. It will give us pleasure to send you casts of the pipes referred to in my previous letters as soon as we have them made; also of the elephant pipe found last year. There is no doubt in our minds that these two pipes are intended to represent the elephant—at least it seems to require a good deal of imagination to make them look like anything else. In the finding of this last pipe there were three wit-

<sup>\*</sup> Proceedings of Davenport Academy of Natural Sciences, Vol. III., p. 155.

nesses—Rev. A. Blumer, an evangelical clergyman living in Geneseo, Illinois, Rev. J. Gass, a Lutheran clergyman residing in Davenport, Iowa, and a Mr. Hass, for many years owner of the farm on which it was found, and several others. We have never heard a word that would lead us to suspect the integrity of these men from any source whatever (except Eastern archæologists who know nothing about them). The first elephant pipe was found by a German farmer (Peter Mare, now living somewhere in Kansas), who plowed it up on his farm, in Louisa County, Iowa, some seven or eight years ago. When he moved to Kansas he gave the pipe to his brother-in-law, from whom we obtained it by barter. This man used it habitually for smoking, and valued it highly as a keepsake from his brother. He had no idea of its archæological value. The history of the finding of these two pipes shows not the slightest evidence of collusion or fraud. They each tend to confirm the genuineness of the other.

"Of the other 'finds' of Mr. Gass, and of other members of the Academy, the evidence of genuineness is equally strong whenever it is stated they were taken from the mounds by themselves—as, for example, the three inscribed tablets, the first two of which were found by Messrs. Gass and Willrodt, and the third, a year later, by Messrs. Hume, Gass, and Harrison. When the objects were obtained from third persons the evidences are, of course, not so strong; but the Academy's collection contains very few such objects.

"In explanation of the many important 'finds' made by Mr. Gass, I would say that he is a very tireless worker, and not easily discouraged. The mounds in this region are very numerous, but not one in ten contains anything of value. This causes most men to become easily discouraged, but not Mr. Gass. After opening, say, twenty or more mounds without result, he will commence the next with as much vigor as the first. His work is always thorough, and if there is anything to be found he always finds it. Having charge of a number of small congregations, and going from place to place to preach, he has many acquaintances throughout the country, whom he keeps on the lookout for any archæological relics that may turn up. He pays his own expenses, and whatever he gets he gives to the Academy. It is in this way the Academy has obtained a number of objects in its collection, the Academy being entirely without funds that can be devoted to this purpose.

"In the same manner we have received very large collections of stone and flint implements and pottery from another of our members, Captain W. P. Hall, who spends most of his time traveling up and down the entire length of the Mississippi and some of its branches, paying his own expenses by working his way, and donating all he gets to the Academy. Many other members, and many persons not members, have done and are doing the same thing. It is this unselfish devotion that has enabled the Davenport Academy to take and to maintain the position it has, notwithstanding the financial poverty of its members. None of our members known to me have any desire either to deceive or be deceived; hence they would be greatly pleased to have the genuineness of these relics, about which some skepticism has been expressed, thoroughly examined into by disinterested archæologists. We believe this can be best done by personal examination of all the relics from each mound, and by visiting the grounds, examining the persons who assisted in the explorations and the neighbors who live in the vicinity of the mounds. All the relics under suspicion have been found within fifty miles of the city of Davenport, and several of the most important (both tablets) almost within the city limits. We

believe that such an investigation would be of considerable benefit, and feel quite certain that the result would show that, whatever other conclusions might be arrived at, the members of the Davenport Academy have been acting in good faith, a fact which seems to be doubted by some.

"Asking your pardon for the length of this letter, I am, sir, "Very respectfully yours,

"J. DUNCAN PUTNAM."

"P. S.—Regarding the interpretation to be put upon these tablets and pipes, there is room for a vast difference of opinion. They may be three hundred or they may be one thousand years old; they may have been made in the locality where found, or they may have been brought from a distance. These and many other questions will probably require many years of investigation to settle, if, indeed, they can be settled.

J. D. P."

In these contemporary accounts, made by gentlemen not unknown among men of science, and who were familiar with all the circumstances connected with these discoveries, we find striking confirmation of the explicit testimony given by the explorers as to the genuineness of these relics. Archæologists will not fail to notice that every precaution was observed and every requirement of science regarded in making these explorations, and that the question of their genuineness is embarrassed by no suspicious circumstances. Bancroft, in his great work, makes these excellent observations:

"The mounds are usually opened by injudicious explorers, or by treasure-seekers, who have paid little attention to the location of the relics found, or the condition of the surrounding soil. Museums and private collections are full of spurious relics thus obtained. It is certain in some cases, and probable in many more, that the mounds have been 'salted' with specimens with a view to their early investigation. Yet many mounds have been opened by scientific men, who have brought to light curious relics, surely the work of the Mound-builders. Such relics are found in the center of the mounds, on or near the original surface of the ground, with the surrounding material undisturbed. In the stratified mounds any disturbance in the soil is easily detected, but with difficulty in others. Reports of unusual relics should be regarded as not authentic unless accompanied by positive proof." †

The discoverers of the relics in question were neither treasureseekers nor curiosity-hunters, but disinterested and judicious explorers, without thought of pecuniary gain, and only zealous to extend the

<sup>\*</sup> If it is objected to Mr. Putnam that, as an entomologist, he was disqualified as a judge, it may also be objected to Mr. Henshaw that, as an ornithologist, he was disqualified as a critic. While it might be considered unbecoming in the writer to speak in terms of commendation of a son, it will not be thought improper to present the testimony of another as to the qualifications of this young scientist. Prof. Asa Gray, who had excellent opportunities for forming an opinion, says of him: "What struck me in my intercourse with Putnam was his sobriety of judgment and simplicity of spirit. Never have I seen a cooler and, as we say, more level, head upon young shoulders." (Proceedings of Davenport Academy of Natural Sciences, Vol. III., p. 215.)

<sup>†</sup> Bancroft's "Native Races," Vol. IV., p. 773.

domain of science. Every essential circumstance was carefully noted — the location of the relics, the condition of the surrounding soil, the evidence of undisturbed strata. The explorers were only embarrassed by the extraordinary character of their discoveries, and were fortunate in being able to furnish for these "unusual relics" that "positive proof" demanded by Mr. Bancroft's rigid rule.

This rapid review will serve, in some measure, to recall the circumstances surrounding the discoveries in question, and in a slight degree to indicate their great scientific value. If their authenticity is established, then archæologists will find in them strong corroborative evidence that man and the mastodon were contemporary on this continent, and that the Mound-builders were a race anterior to the ancestors of the present American Indians, and of higher type and more advanced civilization. As this conclusion would conflict with the theory announced by the Bureau of Ethnology, Mr. Henshaw was compelled to discredit these important discoveries.\* Before his "destructive criticism" the characters of men and the verities of science must alike be swept away to make room for a favorite theory. It was doubtless unfortunate for the Davenport Academy that its remarkable discoveries impeded the progress of this knight-errant of science;† but if its elephant pipes and inscribed tablets were authentic and genuine, then his favorite theory would seem to be at fault. He does not hesitate, therefore, to throw discredit upon these relics, to assail the honesty of the discoverer, and to impale with his scathing censure the institution that published them to the world. It is, therefore, full time for a calm and thorough review of all the circumstances surrounding these discoveries, with the view of finally disposing of all questions as to their authenticity.

That we may not in the slightest degree misrepresent the Bureau of

<sup>\*</sup>We must not be understood to condemn all "theory" as without use in scientific research. We only condemn its abuse. It must be conceded that theory is a tireless pioneer of progress, and has inspired many a great worker in science to follow its light into vast unknown seas, until, as with Columbus, a new continent has dawned upon his vision. Let archæologists therefore, if they please, weave their "theories" out of the very gossamers of thought, if so be it induce them to delve more industriously in earth-work and mound for their "facts." In the dawning light the unsubstantial theory may melt away, but the ultimate facts will remain, an imperishable possession.

<sup>†</sup> The appellation in the text is not undeserved. Mr. Henshaw presents an "illustration" of a tailless elephant which is itself a fraud; he then assumes that all the relics in question were the "finds" of "one individual," which is false. Having thus conjured through his imagination this unreal state of "facts," he then triumphantly proceeds to demolish it. For a parallel to this performance we must resort to fiction. We shall find its analogue in the memorable tilt of the valorous Knight of La Mancha with the unoffending windmills!

Ethnology, or its champion, Mr. Henshaw, we will extract from this remarkable paper a few choice specimens as illustrations of its tone and temper. Disregarding entirely the strong evidences of the authenticity of these relics which we have thus plainly presented, Mr. Henshaw proceeds to assail them with this "destructive criticism:"

"In considering the evidence afforded by these pipes of a knowledge of the mastodon on the part of the Mound-builder, it should be borne in mind that their authenticity as specimens of the Mound-builder's art has been seriously called in question. Possibly the fact that the same person was instrumental in bringing to light both of the pipes has had largely to do with this suspicion, especially when it was remembered that, although explorers had been remarkably active in the same region, it has fallen to the good fortune of no one else to find anything conveying the most distant suggestion of the mastodon.

\* \* The remarkable archæological instinct which has guided the finder of these pipes has led him to some more important discoveries. By the aid of his divining-rod he has succeeded in unearthing some of the most remarkable tablets which have thus far rewarded the diligent search of the mound explorer.

\* \* \* \* \* \* \* \*

"Archeologists must certainly deem it unfortunate that, outside of the Wisconsin mound, the only evidence of the coexistence of the Mound-builder and the mastodon should reach the scientific world through the agency of one individual. So derived, each succeeding carving of the mastodon, be it more or less accurate, instead of being accepted by archæologists as cumulative evidence tending to establish the genuineness of the sculptured testimony showing that the Mound-builder and mastodon were coeval, will be viewed with ever-increasing suspicion.

\* Bearing in mind the many attempts at archæological fraud that recent years have brought to light, archæologists have a right to demand that objects which afford a basis for such important deductions as the coeval life of the Mound-builder and mastodon should be above the slightest suspicion, not only in respect to their resemblances, but as regards the circumstances of their discovery. If they are not above suspicion, the science of archæology can better afford to wait for further and more certain evidence than to commit itself to theories which may prove stumbling-blocks to truth, until that indefinite time when further investigation shall show their illusory nature." \*

We find here an abundance of hints, innuendoes, imaginings, suspicions, without the statement of a fact to justify them. Had it been more specific, this paper would have had more force. In a grave scientific essay, controverting the authenticity of some very important discoveries, it should have been stated when, where, how, by whom, and for what reasons the genuineness of these relics had been "seriously called in question." To controvert a statement with a sneer is the peculiar achievement of the ordinary polemic, and cannot be set down among accepted scientific methods.

<sup>\*</sup>Second Annual Report Bureau of Ethnology, Washington, 1880-81, pp. 156, 157, and 158 ("Animal Carvings from Mounds in the Mississippi Valley," by H. W. Henshaw).

In entering upon his work of demolition, it was open to Mr. Henshaw to make some show of thorough investigation and fair treatment. The circumstances called for it. He occupied a conspicuous position and wielded large influence. If his criticism was well founded, it would serve a useful purpose in driving charlatans from the fold of truth. If based only on partial investigations, and without substantial foundation, his censure would tend to destroy confidence in all historical evidence, discourage original research, and poison truth at its very fountain-head. When, therefore, Mr. Henshaw was forced by the exigencies of his theory to assail these discoveries, archæologists had a right to expect that he would make thorough examination into the evidence of their genuineness; that he would visit the scenes of these explorations and take careful note of the surroundings; that he would make searching inquiry as to the character and reliability of the discoverers; that he would closely question the members of the Davenport Academy as to the existence of any suspicious circumstances; that he would make critical inspection of the relics themselves to note peculiarities which might escape an eye less thoroughly trained than his own; and that, in this just and judicious manner, he would seek to satisfy all reasonable scruples of the earnest and conscientious seeker after truth. All this was easy for Mr. Henshaw, for he had at his command unlimited resources. It will be learned with surprise that he did none of these things. This feeling will be increased to astonishment when it is ascertained that, instead of adopting these wise precautions, Mr. Henshaw seized with avidity upon a stray paper, written by a gentleman in no way connected with the Davenport Academy, imperfectly illustrated with some coarse wood-cuts, and published in an Eastern magazine, and that he made this second-hand information the poor excuse for his unscientific screed. When, in addition to all this, it is found that Mr. Henshaw never consulted the extensive correspondence concerning these relics in the possession of the Smithsonian Institution, and apparently never gave even a passing glance to the photographs of these elephant pipes in its museum, archæologists will regard with just resentment these scientific delinquencies of this eminent gentleman.

In that portion of his paper relating to "animal carvings," Mr. Henshaw makes the statement that the celebrated "elephant mound" of Wisconsin represents neither tusks nor tail, and that the sculptors of the "elephant pipes," taking that mound for a model, have even imitated these omissions! Through these similarities Mr. Henshaw suggests an argument against the authenticity of these relics! As to the absence of "tusks" in both mound and pipes, Mr. Henshaw is doubtless correct. This omission in the pipes, however, could be sufficiently accounted for from the difficulty the ancient artist would experience in representing them in the soft sandstone used for the purpose of this carving. As will be seen, Mr. Barber adopts this view:

"It is, to say the least, a singular fact that the most characteristic feature of this pachyderm, the prominent tusks, should have been omitted both in the pipe sculpture and the 'big elephant mound,' if the ancient Americans were acquainted with the model. The long, slender, curved tusks, however, would be difficult to imitate, either in the miniature stone sculptures or the embankments of earth, and might have been purposely ignored." \*

In his "Inglorious Columbus" Mr. Edward P. Vining also notices these omissions, and suggests this plausible explanation:

"There are in the possession of the Academy of Natural Sciences of Davenport, Iowa, two carved stone pipes, of which representations are given. \* \* \* They seem to be unmistakable representations of an elephant, or some closely allied quadruped, and their makers must have been acquainted with the animal. The Davenport Academy also have a tablet, found in a mound near their city, containing some thirty rude pictures of animals. Most of them can be recognized, and among them there are two that seem intended for elephants. It may be worthy of notice that in these drawings, in the pipes, and in the sculptures of Yucatan, the animal's head is uniformly represented without any trace of tusks. In that otherwise truthful representation of the mastodon, the elephant mound of Wisconsin, the artist has also totally omitted the tusks, and shortened the trunk to very moderate dimensions—surely not for want of space, for the whole animal has a length of over one hundred feet, and a proportionate height. There therefore seems some reason for believing that an animal much resembling the elephant, but destitute of tusks, existed in America up to a comparatively recent date." †

In his "Mammalia" Figuier remarks, concerning elephants' tusks, that "in the females they are sometimes very slightly elongated, and do not project beyond the lips," and that "in the Indian species they are indeed wanting in the females; so also, either one or both of them, in not a few of the males." \$\pm\$ Mr. John Gibson also makes the statement that "in the Asiatic elephant the tusks grow to a considerable size in the male, but are wanting in the female; while in the Ceylon elephant tusks are also absent in the female, and only exceptionally present in the male." \$\mathbb{T}\$ Taken in connection with the supposed Asiatic origin of the aborigines of the Pacific slope, these interesting

<sup>\*</sup> American Naturalist for April, 1882, p. 277.

<sup>†&</sup>quot;An Inglorious Columbus," pp. 609-611.

<sup>‡&</sup>quot; Mammalia," by Louis Figuier, p. 116.

<sup>§&</sup>quot;Encyclopædia Britanica," ninth edition; title, "Elephant."

facts suggest another possible explanation of these omissions in the pipes. In this connection, it may be mentioned as at least a curious coincidence that in the representation of the elephant in Johnson's Cyclopedia the artist has also omitted the tusks.

While the explanations we have presented may be somewhat conjectural, and perhaps not entirely satisfactory, it can still be claimed, with entire confidence, that the omission of the "tusks" in these carvings furnishes no basis whatever for a suspicion of "fraud." An artist possessed of sufficient skill to sculpture these pipes, and intending to deceive and defraud, would have closely followed his model, and surely would never have omitted one of its most striking features. Beyond a peradventure, an artistic knave would have given us tusks, trunk, tail, and all. The omission, therefore, of the former in these representations tends to establish the honesty of the artist and furnishes a strong argument in favor of the authenticity of these relics.

In the argument of Mr. Henshaw, based upon the absence of the "tail" in these carvings, he is peculiarly unfortunate. He has been misled, no doubt, by the faulty "illustrations," which alone he must have consulted, inasmuch as in each of these pipes the "tail" is well developed. It will also be found clearly represented in the photographs sent to the Smithsonian Institution, in the illustrations of the pipes given in the Proceedings of the Davenport Academy, and in the stamp on the cover of the volume. So, too, in the "Prehistoric America" of Nadaillac, quite recently introduced to the American public by a noted archæologist (Mr. Dall), we find an illustration of one of these identical elephant pipes, with the missing "tail" in full view! It is a noticeable circumstance, that, while Barber, Vining, and other writers commented upon the absence of "tusks," it remained for Mr. Henshaw to make the remarkable discovery that the "tail" was also missing in these carvings. The conclusion is inevitable, that Mr. Henshaw drew largely upon Mr. Barber's article for his scientific material, and that he was betrayed into the commission of this mistake by the "imperfection" of the illustrations used by Mr. Barber and copied by Mr. Henshaw without verification.

The following are correct illustrations of the two elephant pipes now in our museum. Figure 1 represents the pipe plowed up by Peter Mare in a corn-field in Louisa County, Iowa, and Figure 2 that discovered by Rev. A. Blumer in a mound in the same county:\*

<sup>\*</sup> For these illustrations we are indebted to the courtesy of Mr. Edward P. Vining, author of "An Inglorious Columbus,"

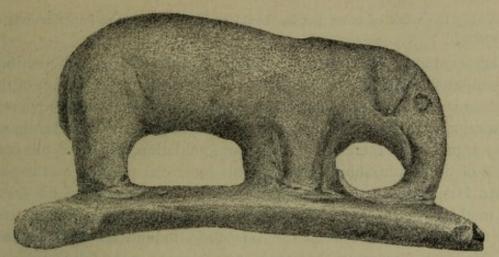


FIG. 1.- PIPE FOUND IN A CORN-FIELD, LOUISA COUNTY, IOWA,- TWO-THIRDS SIZE.



FIG. 2.—PIPE FOUND IN A MOUND, LOUISA COUNTY, IOWA, - FULL SIZE.

With these illustrations in view, archæologists will read with amusement the singular argument of Mr. Henshaw, based upon the supposed absence of the "tails" in these pipes:

"It is also remarkable that in neither of these pipes is the tail indicated, although a glance at the other sculptures will show that in the full-length figures this member is invariably shown. In respect to these omissions, the pipes from Iowa are strikingly suggestive of the elephant mound of Wisconsin, with the peculiarities of which the sculptor, whether ancient or modern, might almost be supposed to have been acquainted. It certainly must be looked upon as a curious coincidence that carvings found at a point so remote from the elephant mound, and

presumably the work of other hands, should so closely copy the imperfections of that mound." \*

The accuracy of the foregoing representations can easily be verified by comparison with the photographs of these pipes in possession of the Smithsonian Institution. As will be seen by "a glance" at the above representations, the "tail" is therein clearly "indicated," and Mr. Henshaw's flimsy argument is, therefore, left without foundation, and he stands convicted of an inexcusable blunder. This ludicrous mistake on the part of Mr. Henshaw clearly reveals the culpable carelessness of his scientific methods.† It will be found, moreover, upon careful examination, that the differences between the Wisconsin mound and the elephant pipes are more numerous than their resemblances—the full-length proboscis and the tail, ears, eyes, and mouth all being fully represented in the pipes and wanting in the mound; and hence, in the one point of similarity, from the absence of tusks, there is no sufficient basis for his argument. To enable the reader to make comparison of these elephant pipes with this Wisconsin mound, an illustration of the latter is here given.‡

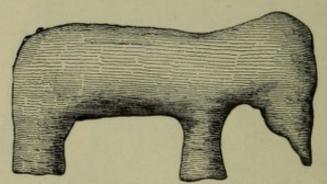


FIG. 3 .- BIG ELEPHANT MOUND IN GRANT COUNTY, WISCONSIN.

The absence of "ivory" relics in the mounds is also urged by Mr. Henshaw to strengthen his argument. A sufficient explanation of this circumstance will be found in the accepted hypothesis that at the era

<sup>\*</sup>Second Annual Report Bureau of Ethnology, 1880-81, p. 156.

<sup>†</sup> Mr. Henshaw manifests zeal in the exposure of deceptions, and yet the very representations of our elephant pipes employed by him to embellish his paper are themselves archæological "frauds" of singular enormity; and as the unfortunate citizen found with the kit of a counterfeiter in his grip-sack is required by the law to justify his possession, so Mr. Henshaw may properly be called upon to explain the origin of these "tailless" illustrations. The curious reader who will compare them with the true representations, as found in the Academy Proceedings, or even in the recent work of Nadaillac, will find himself in "serious doubt" whether Mr. Henshaw's argument was framed to fit his fancy illustrations, or the illustrations were designed to support his argument.

<sup>‡</sup> For this illustration we are indebted to the courtesy of Mr. Edward P. Vining, author of "An Inglorious Columbus."

reached the point of extinction on this continent, and hence would be infrequently seen and the article of "ivory" quite uncommon. Assuming this as a fact, it will furnish a reasonable explanation both of the absence of ivory in the mounds and of imperfect representations in the carvings. It is, moreover, quite within the range of probability that future explorations of innumerable mounds still unopened may bring to light the missing relics. Be this as it may, it is clearly obvious that the absence of "ivory" in the mounds cannot be considered a badge of fraud in our tablets. The article of ivory is abundant, and a "scientific knave" intending to deceive, with a cunning appreciation of its importance, would never have failed to "salt" the mound with a needed supply. As in the case of the omission of "tusks," the absence of "ivory" in the mounds in question must be considered rather an evidence of genuineness than fraud.\*

A singular perversion of facts on the part of Mr. Henshaw still remains to be noted. After quoting at length from a communication addressed to Mr. Barber by the President of the Davenport Academy, wherein it is clearly stated that one of the elephant pipes was found by Peter Mare, an illiterate German farmer, and the other was discovered by the Rev. Mr. Blumer, Mr. Henshaw curiously enough proceeds as follows:

"It will be seen from the above that the same gentleman was instrumental in bringing to light the two specimens constituting the present supply of elephant pipes. The remarkable archaeological instinct which has guided the finder of these pipes has led him to even more important discoveries. By the aid of his divining-rod he has succeeded in unearthing some of the most remarkable inscribed tablets which have thus far rewarded the diligent search of the mound explorer."

The unfounded and ungenerous insinuations contained in this remarkable passage will require neither commentary nor condemnation. When it is remembered that no less than six highly respected citizens were engaged in these explorations, and no less than three were present at each discovery, and when it is further noted that the person who unearthed the inscribed tablets is not "the same gentleman" who discovered the elephant pipes, and that the pipes themselves were discovered by different individuals, archæologists may well conclude that a writer so reckless in the use of his "facts" is wholly unqualified for the important work he has undertaken. Deductions so loosely made are many degrees beneath the dignity of serious scientific criticism.

<sup>\*</sup>In the American Antiquarian for March, 1880, Rev. S. D. Peet announced the discovery of one of these pipes, and expressed the opinion that it clearly represented the "elephant."

In all this "destructive criticism," which Major Powell commends as "successful," the only "fact" presented as a basis for their sweeping "suspicions" is this same fictitious statement, that the explorer was alone when he made his discoveries. It would seem, in the view of Mr. Henshaw, that explorers should go to their work with a bodyguard of affidavit-makers, or, peradventure, with some accredited representative of the Bureau of Ethnology, to verify each discovery; and that, unless so witnessed, such discovery must be discredited. As the finding of many of these relics is accidental, and often by men having little appreciation of their scientific value, the adoption of so narrow a rule would eliminate from our museums some of the most remarkable mementos. This low estimate of human nature does not correctly represent the liberal spirit of pure science. All of us can point to earnest and disinterested workers, impelled by the love of science, with no thought of gain, whose single, simple word would be received with absolute trust, when the carefully verified narratives of a crowd of professional collectors, delving for hire, would be regarded with wellfounded distrust. Had Mr. Henshaw taken the trouble to ascertain this important fact, he would have found that the principal discoverer of the inscribed tablets belonged to this select circle of voluntary workers, and that, in his own home, his word was beyond question and his character above reproach. In this connection it may properly be stated that Mr. Gass, who, as the discoverer of these unique relics, is assailed by Mr. Henshaw, is now preaching to a congregation at Postville, in Northern Iowa, where he is, as he everywhere has been, highly esteemed by his people. He is a good classical scholar, well grounded in Hebrew, but with a decided scientific bent of mind, which accounts for his perseverance and enthusiasm in these archæological explorations. It would seem that his fine abilities, extensive attainments, high social position, and spotless character should have shielded him from attack; and if, peradventure, it ever falls to the lot of his assailants to themselves encounter "destructive criticism," it will then serve them in good stead should they be able to confront it with as clean a record.

The unjustifiable attack made by Mr. Henshaw upon the scientific character of Mr. Gass is followed with the warning that in future all such explorations must cease, and enforced with the dire threat that any more such discoveries will surely encounter the "ever-increasing suspicion" of archæologists! We will repeat this unique paragraph, and bespeak for it careful attention, as a scientific curiosity:

"Archæologists must certainly deem it unfortunate that, outside of the Wisconsin mound, the only evidence of the coëxistence of the Mound-builder and the mastodon should reach the scientific world through the agency of one individual. So derived, each succeeding carving of the mastodon, be it more or less accurate, instead of being accepted by archæologists as cumulative evidence, tending to establish the genuineness of the sculptured testimony showing that the Mound-builder and mastodon were coeval, will be viewed with ever-increasing suspicion,"

As will be perceived in reading this passage, the condemnation is absolute, the prohibition complete! In the view of Mr. Henshaw, no genuine elephant pipe has been, or can be, discovered. The discovery of a new elephant pipe, he considers, would not confirm the previous discovery, but, instead, would add to the "suspicion" of its genuineness! The guilt of the explorer, in his distorted vision, increases with his success! The possibility of conscientious research is thus denied to the solitary student of science. As we turn over the pages of this writer, the air seems murky with "doubts" and "suspicions," with "frauds" and "forgeries." The mandates he issues appear to have been framed for a company of convicts! Now, if this arrogant assumption on the part of Mr. Henshaw was not utterly puerile, it would be simply "monstrous!" \* That such doctrines should have emanated from the Smithsonian Institution, "will be viewed with everincreasing" wonder. "Archæologists must certainly deem it unfortunate" that an institution established "for the increase and diffusion of knowledge" should thus endeavor to discourage research and stifle thought!

Archæologists will not fail to notice the bold, unequivocal statement made by Mr. Henshaw, that the "only evidence of the coëxistence of the Mound-builder and mastodon" is such as may be furnished by these elephant pipes and inscribed tablets. That any gentleman who had passed the alphabet of archæology could have the hardihood to confront its extensive literature with such a statement is quite unaccountable. Turning to the accepted records of archæology, among which may be cited Lubbock's "Prehistoric Times" and Foster's "Prehistoric Races in the United States," we find many other interesting discoveries, earlier in date, of like character and equal importance with these elephant pipes and inscribed tablets. We will, at this time, only call attention to some of the more important of these relics which seem to furnish valuable evidence as to "the coëxistence of the Mound-builder and mastodon." We now refer to the following:

<sup>\*</sup>This strong adjective is quoted from the private communication of a well-known archæologist, and was used by him to express his disgust with the extraordinary doctrines announced by Mr. Henshaw in the above passage.

First. We find, in the transactions of the St. Louis Academy of Sciences, in 1857, a detailed statement, by Dr. A. C. Koch, of the remains of a mastodon found in Gasconade County, Missouri, and with it, among ashes, bones, and rocks, several arrow-heads and some stone axes, which relics are preserved in the British Museum.

Second. Dr. Dickson, of Natchez, many years ago, found the pelvic bone of a man with the remains of mastodon and megalonyx, which specimens are preserved in the museum of the Philadelphia Academy of Sciences.

Third. Count Pourtales, in 1848, found in Florida some human bones in a calcareous conglomerate, estimated by Agassiz to be ten thousand years old. Pourtales will be remembered as the friend and favorite pupil of the great naturalist.

Fourth. In an excavation in New Orleans, some charcoal and a human skeleton were discovered to which Dr. Dowler attributes an antiquity of no less than fifty thousand years. This estimate was based upon the deposits and forests found above the remains, and as connected with this question was the age of the delta of the Mississippi, it may be stated that this has been estimated by Sir Charles Lyell as probably reaching one hundred thousand years.

Fifth. In 1857, Dr. C. F. Winslow sent the Boston Natural History Society the fragment of a human cranium, found, in connection with the bones of the mastodon and elephant, one hundred and eighty feet below the surface of Table Mountain.

Sixth. Prof. Whitney deposited in the museum of the State Geological Society of California a human cranium, discovered deep down in the gold drift, and covered with five successive overflows of lava.

Seventh. T. T. Cleu contributed to the Smithsonian Institution a specimen of ancient basket-work, or "mat made of interlaced reeds," found on Petit Anse Island, some fifteen or twenty feet below the surface, and on a bed of rock-salt, and about two feet above it, were the remains of the tusks and bones of a fossil elephant. This "mat" is now in the National Museum, at Washington.\*

Eighth. In 1867, E. W. Hilgard and Dr. E. Fontaine, Secretary of the New Orleans Academy of Sciences, explored the location last above referred to, and discovered, twelve feet below the surface and immediately adjoining the rock-salt, incredible quantities of pottery mingled with fragments of the bones of the elephant.

<sup>\*</sup>Prof. Henry, late Secretary of the Smithsonian Institution, affixed to this remarkable relic in the National Museum the following interesting sketch: "Petit Anse Island is the locality of the remarkable mine of rock-salt, discovered during the civil war, and from which, for a considerable time, the Southern States derived a great part of their supply of this article. The salt is almost chemically pure, apparently inexhaustible in quantity, occurring in every part of the island (which is about five thousand acres in extent), at a depth below the surface of the soil of fifteen or twenty feet. The fragment of matting was found near the surface of the salt, and about two feet above it were remains of tusks and bones of a fossil elephant. The peculiar interest in regard to the specimen is in its occurrence in situ two feet below the elephant remains, and about fourteen feet below the surface of the soil, thus showing the existence of man on the island prior to the deposit in the soil of the fossil elephant. The material consists of the outer bark of the common southern cane (Arundinaria macrosperma), and has been preserved for so long a period both by its silicious character and the strongly saline condition of the soil." It thus appears that Prof. Henry regarded this relic as furnishing valuable evidence of the coexistence of man and the mastodon on this continent. ("The Archaeological Collection of the United States Museum, in charge of the Smithsonian Institution," by Charles Rau, "Smithsonian Contributions to Knowledge," No. 287, p. 89.)

Ninth. Dr. Holmes made a communication to the Philadelphia Academy of Sciences, several years since, in which he described the occurrence of fragments of pottery in connection with the bones of the mastodon and megatherium.

These are among the earlier discoveries, familiar to archæologists, tending to prove the coëxistence of man and mastodon on this continent. While ample for our purpose, the list might be considerably extended. The details of these discoveries can be found in any respectable work on archæology.\* While it may be claimed that the authenticity of some of the relics in the foregoing list has been "seriously called in question," it will be found impracticable, by any process of "destructive criticism," however sweeping, to entirely destroy their weight as evidence, more or less valuable, upon this important question. Until successfully controverted, they must stand as at least

```
* Foster's "Prehistoric Races in the United States," pp. 52, 78.
```

Baldwin's "Ancient America," pp. 47-56.

MacLean's "Mound-builders," p. 136.

Nott and Gliddon's "Types of Mankind," p. 352.

Dana's "Manual of Geology," pp. 577, 578.

Transactions of St. Louis Academy, Vol. I., p. 62, 1857.

Southall's "Recent Origin of Man," pp. 550-560.

Short's "North Americans of Antiquity," pp. 112-130.

Winchell's "Pre-Adamites," pp. 435, 436.

Encyclopædia Britannica, 9th ed., title "American Indians," pp. 691, 692, cites above stated discoveries to establish the great antiquity of man in America.

These are only a portion of the citations which might be made from well-known scientific writers, and yet Mr. Henshaw seems to have written his paper in profound ignorance of the existence of this extensive literature.

Lubbock's "Prehistoric Times," pp. 286-288.

<sup>&</sup>quot;Prehistoric America," by Nadaillac, pp. 33-45.

<sup>&</sup>quot;Mastodon, Mammoth, and Man," by MacLean, pp. 13-20.

<sup>&</sup>quot;Antiquity of Man," by Sir Charles Lyell, pp. 43, 203.

<sup>&</sup>quot;Smithsonian Contributions to Knowledge," No. 248, "On the Geology of Lower Louisiana, and the Salt Deposit on Petit Anse Island," by E. W. Hilgard, p. 14.

<sup>&</sup>quot;Mesozoic and Caenozoic Geology and Palaeontology," by S. A. Miller, Journal of the Cincinnati Society of Natural History, Vol. IV., p. 215.

<sup>&</sup>quot;Contributions to the Geology of Ohio," by Col. Charles Whittlesey, pp. 10-13.

<sup>&</sup>quot;Evidences of the Antiquity of Man in the United States," by Col. Charles Whittlesey, a paper read before the Association for the Advancement of Science, at Chicago, in 1868, pp. 13-15.

<sup>&</sup>quot;Antiquity of the North American Indians," by Charles C. Jones, Jr., North American Review for January, 1874. In this well-considered paper, Col. Jones, after a careful review of the evidence above given, thus clearly states his conclusions: "While we cannot at present ascertain, and perhaps never will be able to determine, the antiquity of the North American Indians, we think it may now be affirmed with considerable confidence—1st, that the primitive peoples of the Mississippi Valley and of the south-eastern portions of the North American continent were domiciled here when the mammoth, the mastodon, and other extinct animals roamed the primeval forests; 2d, that many of the grave-mounds and earth-works of the red race are fully a thousand years old, while others may well claim an antiquity far greater than this: 3d, and lastly, that the Indian occupancy in various portions of this continent was very ancient, probably dating as far back as the earliest traces of man in Western Europe."

prima facie proof of the fact, and the evidence to disprove the genuineness of these discoveries must consist of something beside misty doubts and suspicions. It thus appears that the evidence furnished by the elephant pipes is not the "only evidence," but is strongly corroborative of the prior evidence furnished by the above discoveries of the coëxistence of man and the mastodon. Still, with all this literature within easy reach, Mr. Henshaw coolly ignores its existence, and calmly informs the scientific world that the elephant pipes furnish "the only evidence" in support of that hypothesis.\*

Many of these earlier discoveries are noted and discussed in Sir John Lubbock's valuable work upon "Prehistoric Times," and in his estimate of their value to science he observes a caution as commendable as it is discriminating. Commenting upon the discovery narrated by Dr. Dowler, he expresses, with scientific precision, his hesitation about its acceptance, as follows:

"Whether, therefore, we accept Dr. Dowler's calculation or not, it is obvious that, if the statements are thoroughly trustworthy, this skeleton certainly must carry back the existence of man in America to a very early period. Yet, until further evidence is obtained, the question cannot, I think, be regarded as entirely decided; and even if on a priori grounds the idea seems probable, there does not, as yet, appear to be any conclusive proof that man coëxisted with the mammoth and mastodon." †

It must not be overlooked that Sir John Lubbock based his reasoning entirely upon the earlier discoveries we have enumerated, and we are justified in the conclusion that the subsequent finding of these elephant pipes and inscribed tablets would have furnished him with the "further evidence" required to complete and make conclusive his chain of evidence. As aptly expressed by Dr. Farquharson, "In the elephant pipes we have the key-stone of the arch of evidence which has been building for so many years." Nadaillac, in his recent work, thus states his conclusions:

"The first Americans, too, were contemporary with gigantic animals, which, like their conquerors of Europe, have passed away never to return. They had to contend with the mastodon, the megatherium, the mylodon, the megalonyx, the elephant, with a jaguar larger than that of the present day, and a bear more formidable than that of the caves. Like our forefathers, they had to attack and over-

<sup>\*</sup>Prof. Baird, in Smithsonian Report for 1882, in giving an account of the operations of the Bureau of Ethnology, thus notices the mound explorations under Prof. Cyrus Thomas: "The most important results appertain to the mounds and works themselves. The statement in the Smithsonian Report for 1872 in reference to the elephant mound is confirmed; the Seltzertown mound is proven to be a myth—at least no sign of it can be found on examination."

<sup>†</sup> Lubbock's "Prehistoric Times," p. 288.

come them with stone hatchets, obsidian knives, and all the wretched weapons the importance of which we have been so long in recognizing in America, as in Europe."\*

Neither must it be overlooked that Mr. Henshaw himself admits that the extinction of the mastodon on this continent was a very recent event - probably within five hundred years prior to its discovery - and that, inasmuch as an antiquity of at least a thousand years has been assigned to the mounds, there are, therefore, no inherent absurdities in the belief that the Mound-builders were acquainted with the mastodon. In a paper upon the "Post-tertiary Phenomenon of Michigan," Prof. Winchell remarked, concerning the peat-beds, that "These beds are the sites of ancient lakelets, slowly filled up by the accumulation of sediment. They enclose numerous remains of the mastodon and mammoth. They are sometimes found so near the surface that one could believe they have been buried within five hundred or a thousand years." + On the other hand, Mr. James Orton t joins with Sir John Lubbock in assigning to man in America an antiquity of at least three thousand years; § and Dr. Charles C. Abbott, in confirmation of these views, remarks: "It is unquestionable that many of the remains of the mastodon found in New Jersey and New York are far more recent than some of the relics of man, and it is simply impossible that even so late a comer as the Indian should not have seen living mastodons on the Atlantic seaboard of this continent." || It seems to be established, therefore, that the date of the extinction of the elephant and the date of the appearance of man in America overlapped during a long lapse of time, and that for a period of a thousand or more years man and the mastodon must have coëxisted on this continent. Yet, while this fact seems to be admitted by Mr. Henshaw, his admission is qualified with serious "doubts" as to the sufficiency of the "proof presented to substantiate it." In his eagerness to find some support for his "doubts," he approaches, if he does not overstep, the limits of legal libel, in misrepresenting the pipes by the use of false illustrations, and in charging Mr. Gass with the perpetration of a mercenary fraud, and violates all canons of propriety in branding, by implication, the members of the Davenport Academy as participants in this disgraceful deception.

<sup>\*&</sup>quot; Prehistoric America," by Nadaillac, p. 15.

<sup>†&</sup>quot;Recent Origin of Man," p. 331 (Annual of Scientific Discovery, 1871, p. 239).

<sup>‡&</sup>quot;The Andes and the Amazons," 3d ed., p. 109.

<sup>§&</sup>quot;Prehistoric Times," p. 286.

<sup>|</sup> Popular Science Monthly, July, 1885, p. 310.

In his introductory chapter, Major Powell commends Mr. Henshaw to the public as "a trained scholar, who can discern the germ of truth even in a blundering statement, and whose own knowledge is a touchstone for the detection of spurious productions." We fail to discern this wonderful "touchstone" in the deplorable want of information in Mr. Henshaw which we have been compelled to expose, and from the "blundering statements" made by him, containing not a "germ of truth," it is evident his intellectual equipment is insufficient for a successful teacher of archæology.\* As an ornithologist of acknowledged skill and ability, he was well fitted to engage in the special research properly before him, and in his important undertaking he would have found a broad and unoccupied field. The tracing of resemblances between the carvings found in the mounds and known species of birds and animals was a legitimate object, involved important deductions, and, if thoroughly and conscientiously executed, the results must have had great scientific value. Unfortunately, as it turned out, Mr. Henshaw was unwilling to be trammeled by any such limitations; and hence; most unwisely abandoning his special work, this "naturalist," with infinite complacency, takes his place among trained archæologists, revises their methods of exploration, and promulgates new canons for archæological research!

> "Now, in the names of all the gods at once, Upon what meat doth this our Cæsar feed, That he is grown so great?"

In this connection, the fact should not be overlooked that the socalled "Bureau of Ethnology" was not established for the purpose of conducting explorations in archæology, but, as its name implies, with the special object in view of prosecuting "researches among the North American Indians," and it will be found that, with a single unimportant exception, no appropriations have been made by Congress specially for archæological research. The study of American antiquities has been only incidentally included as remotely connected with the study of our native races. Neither should we overlook the further fact that formerly these ethnological researches were prosecuted in connection with the Rocky Mountain survey under Major Powell, and that upon

<sup>\*</sup>In view of this attack upon Mr. Gass, the writer recently submitted some inquiries to a noted archæologist as to the standing of Mr. Henshaw among them, and received this curious answer: "Of course the Bureau has a right to attack the authenticity of anything it wants to; but the insinuations against Mr. Gass are simply contemptible. Of all forms of libel, I think that of insinuations the meanest. Henshaw, so far as I know, has no standing among archæologists. I am free to say I have no recollection of having ever heard of him."

the consolidation of the various surveys under one management, the Department of Ethnology was nominally detached from the Geological Survey and attached to the Smithsonian Institution. Major Powell, the director of the geological survey, was, however, continued in the charge of this ethnological work, and hence the only noticeable change in practical operations was a sounding title and additional appropriations! As was to be expected, Major Powell called about him his former assistants, and thus we have the singular spectacle presented of explorations among American antiquities conducted by geologists, ornithologists, entomologists, and ethnologists, without the aid of experienced archæologists! When it is remembered how exacting are the requirements of science, and how its most minute departments have become the life-work of trained specialists, it may well be questioned whether the genius of man is capable of passing successfully from one to another of these fields of research. Be this as it may, archæologists will welcome to their ranks, from any source, all modest and earnest students; but when these new-comers in archæology set themselves up as critics, it is in order to question their authority! Official position merely does not confer it; and the venerable author of the "Ancient Monuments," in his retirement, is to-day, throughout the world of science, a higher "authority" in archæology than the entire "Bureau of Ethnology."\*

<sup>\*</sup> An examination of the personnel of the Bureau of Ethnology will make it clear that there is no exaggeration in the above statement. The scientific fame of Major Powell rests mainly upon his researches in geology. The triumphant exploration of the Grand Canon threw a glamour of romance over his career, and secured him high position among the veritable heroes of science. It certainly cannot be said of Major Powell, as was asserted of one of his predecessors, that he is a "geologist by act of Congress," for, while he has no claim to high rank as an archæologist, it is undoubtedly true that, in his special field of geology, he has attained deserved eminence throughout the world of science. Of Prof. Cyrus Thomas, who has charge of the archæological department of the Bureau, it may be said that during the maturity of his life, while ecclesiastically interested in the gathering-in of souls, he was scientifically engaged in the gathering-in of insects. Upon his ultimate abandonment of the pulpit he accepted he position of State Entomologist of Illinois, and, by skill and ability in the performance of its duties, he attained deserved eminence in his chosen field of entomology. Late in life Prof. Thomas abandoned the study of both theology and entomology, and engaged in the exploration of American antiquities. Archæologists will undoubtedly extend to this accomplished gentleman a kindly welcome, but his special achievements in archaeology are yet to be disclosed. Of Mr. Henry W. Henshaw, who is also connected with this department, it has already been sufficiently indicated that he is quite ignorant of everything pertaining to the science of archæology; and it may be added that his claim to be considered even an ornithologist seems to rest mainly upon Major Powell's recommendation. We have thus properly located among these gentlemen the geologist, entomologist, and, probably, the ornithologist, of the Bureau, and it only remains to ascertain the "ethnologist" we have conceded to this department. In doing this we have experienced some perplexity, and it may, after all, turn out that the "ethnologist" is also missing in this singular "Bureau of Ethnology." We will, however, assume that Major Powell's great ability is equal to the mastery of this other broad and interesting field of research. We must not oinit to make

In the same volume which contained Mr. Henshaw's paper, Mr. William H. Holmes has an admirable monograph upon "Art in Shell," and in describing the "Missouri Gorget" he states that it was obtained from unknown persons in South-western Missouri. Upon the question of its genuineness, Mr. Holmes remarks:

"It was chalky and crumbling from decay; the lines of the design bear equal evidence with the general surface of the shell of great age; besides this, even if it were possible to produce such a condition in a recently carved shell, there existed no motive for such an attempt. Nothing was to be made by it, no benefit could accrue to the perpetrator to reward him for his pains, and, further, there was no precedent—there was nothing extant that could serve as a model for such a work."\*

This is a fair canon of criticism, and if it is effectual to establish the genuineness of this gorget, the same rule of evidence should be extended to the elephant pipes, and it would be found equally applicable and convincing. It is a curious fact, in this connection, that these pipes condemned by Mr. Henshaw were obtained in nearly the same manner and under almost exactly similar surroundings with the "gorgets" which Mr. Holmes pronounces unquestionably genuine. Thus, of the gorgets, one was obtained from unknown persons, and the other was discovered by Dr. E. Palmer, a collector in the employ of the Bureau of Ethnology. So, of the two elephant pipes, one was obtained of a well-known and honest farmer, and the other was discovered in a mound by Rev. A. Blumer, with two assistants as witnesses. As to the inscribed tablets, no less than three well-known and highly respected citizens were present at their discovery. It will thus be perceived that there are stronger evidences to support the authenticity of the pipes and tablets than of the inscribed gorgets. Still, under the high authority of the Bureau of Ethnology, the latter are pronounced genuine, while the former are condemned. Evidently, Mr. Holmes omitted to confer with Mr. Henshaw concerning his important deductions. Had he done so, doubtless he would have been informed by that gentleman, with sententious gravity, that discoveries so important could not safely be received upon the testimony of a single individual; that the very novelty of the discovery rendered it suspicious; and that "archæology could better afford to wait for further and more certain evi-

an exception in favor of Mr. William H. Holmes, who is also engaged in this Bureau. This gentleman, who was formerly connected with the Geological Survey, is an artist of rare accomplishments, and his monograph upon "Art in Shell," which appeared in the Second Annual Report of the Bureau of Ethnology, and another upon "Ancient Pottery of the Mississippi Valley," in Vol. IV. of the Proceedings of the Davenport Academy, are of such singular merit as to fairly entitle him to rank among cultured archæologists.

<sup>\*</sup> Second Annual Report Bureau of Ethnology, 1880-81, p. 303.

dence." With the possibility of this "destructive criticism" impending over his valuable work, it was fortunate for Mr. Holmes that the Director of the Bureau introduced it to the world of science with words of high commendation. In the parallel case of Mr. Gass, it was doubtless equally unfortunate that his valuable contribution to the cause of archæology could not have been likewise announced by so imposing a herald.

Upon the question of the authenticity generally of these Moundbuilders' relics, Mr. Holmes advances the following broad and liberal views:

"By accurately ascertaining the authenticity of one of these specimens, we establish, so far as need be, the genuineness of all of the class. If one is genuine, that is sufficient—the others may or may not be so without seriously affecting the question at issue; yet the occurrence of duplicate or clearly related specimens in widely separated localities furnish confirmatory evidence of no little importance." \*

Pursuing a similar line of thought, Foster, in his "Prehistoric Races," remarks, concerning the testimony of a single witness to these archæological discoveries, that

"Those who are most apt to make discoveries in this branch of knowledge—day-laborers—are the least apt to appreciate their value. It is hardly to be expected that a competent observer will be present at the precise time when any relic of the past is disinterred. If such relics pertain to a horse or any other quadruped, we take the statement of the workman with absolute trust; but if it were to prove of human origin, we discredit it." †

In the absence of all motive to deceive, it is clear that such testimony may safely be received by the scientific inquirer as equally valuable in establishing the genuineness of either class of discoveries. It seems to be the singular thought of Mr. Henshaw that if a solitary explorer discovers anything never before discovered, it must be discredited as suspicious. The limitations he seeks to place around these archæological researches would have been effectual to discredit every such discovery made since the dawn of civilization.‡

<sup>9</sup> Second Annual Report Bureau of Ethnology, 1880-81, p. 303.

<sup>†</sup> Foster's "Prehistoric Races," p. 72.

<sup>‡</sup> Upon these questions of evidence, Schoolcraft quotes from the "Cosmos" of Humboldt the following wise observations: "Where history, so far as it is founded on certain and distinctly expressed evidence, is silent, there remains only different degrees of probability; but an absolute denial of all facts in the world's history of which the evidence is not distinct appears to me no happy application of philological and historical criticism."—Cosmos, Vol. II., p. 400 ("History of the Indian Tribes of the United States," by H. R. Schoolcraft, Vol. V., p. 27.)

The American Antiquarian Society, also, in a report upon the publications of Dr. Le Plongeon, expressed these liberal canons of criticism: "The successes of Du Chaillu, Schliemann, and of Stanley are remarkable instances of triumphant results in cases where enthusiasm had been supposed to lack the guidance of wisdom. If earnest men are willing to take the risks of

A remarkable circumstance connected with the museum of the Davenport Academy, wherein these pipes and tablets are deposited, is that it has grown up entirely by private contributions. The services of its workers have been rendered gratuitously. Its founders and builders have been solely impelled by the love of science. Its location is far removed from the centers of wealth and power. It has no endowment. It has no laborers for hire. These circumstances are favorable to the genuineness of its discoveries. As no pecuniary reward was expected by its voluntary collectors, a principal motive to the perpetration of frauds is wanting. Its poverty has been its protection, and effectually removes from its museum of relics all well-founded suspicion of deception.

The Smithsonian Institution, on the contrary, has a generous endowment. It is located in the capital of our country, and is the recipient of government aid. The Bureau of Ethnology, while under the management of the Smithsonian Institution, is a part of the United States Geological Survey, and is supported by liberal appropriations. It expends large sums in explorations and in securing additions to its collec-All these circumstances are, doubtless, favorable for advancing its scientific work; and yet, in an important sense, its good fortune may have been its misfortune. Its paid collectors, going up and down the land in quest of valuable relics, may be strongly tempted to magnify their vocations by the practice of shameless deceptions. Its wealth may invite fraud. The modern manufacturer of ancient relics may turn his back upon our mendicant Academy and offer his wares to these scientific capitalists. The circumstances certainly are such as would give rise to suspicion and provoke scrutiny. That the Smithsonian Institution and its Bureau of Ethnology have, to any considerable extent, been victimized by this mercenary spirit, we have no reason to believe, and do not claim. The considerations advanced, however, are legitimate, and will devolve upon its officers the necessity of establishing the authenticity of their own relics. The shafts of criticism so ruthlessly hurled at other gleaners in the same field may turn out to be dangerous weapons, and, after the manner of the ancient boomerang, may, peradventure, return to smite the senders.

It is well known that a large number of the specimens in the National

personal research in hazardous regions, or exercise their ingenuity and their scholarship in attempting to solve historical or archæological problems, we may accept thankfully the information they give, without first demanding in all cases unquestionable evidence or absolute demonstration." "The North Americans of Antiquity," John T. Short, p. 397.

Museum are without a record, and as to some of them, suspicions may, not without reason, be entertained as to their authenticity. In the paper of Mr. Holmes, the reader will not have failed to notice his frequent references to these unfortunate circumstances. Thus, of the shell gorget, entitled "The Bird," he remarks: "The gorget in question is, unfortunately, without a pedigree;"\* and of another, entitled "Profile of an Eagle's Head," he makes this emphatic statement: "Like so many of the National Museum specimens, it is practically without a record—a stray." It is, doubtless, because of these imperfections in its collections that its management has grown distrustful, and has come to consider the policeman as essential as the collector in making these explorations. Prof. Baird himself, in his letter of March 17th, 1880, gives pathetic expression to this forlorn state of feeling, as follows:

"I must confess to a very considerable degree of incredulity in regard to the wonderful 'finds' of Mr. Gass. It is very remarkable that so many should fall into the hands of one person. Is it not possible that somebody has interested himself in deceiving Mr. Gass, and, through him, the archæologists of the Northwest? We have detected a series of most clever forgeries in stone as perpetrated by parties living in Eastern Pennsylvania. They were entirely too good and too remarkable not to excite criticism, which has resulted, I think, in proving their falsity. We shall soon begin to suspect everything that is out of the routine average of American stone implements."

As with Major Powell and Mr. Henshaw, it will be observed that Prof. Baird gives no reason for his "incredulity," other than that it is remarkable that so many discoveries had been made by "one person." The answer of the Corresponding Secretary to this letter contained the sufficient explanation that the success of Mr. Gass was wholly due to his zeal, perseverance, and vigorous use of the spade. The fact that enterprising parties in another part of the country, with a greedy eye on appropriations, had established a manufactory of stone implements for the supply of the Smithsonian Institution, cannot be seriously advanced as an argument against the authenticity of the Davenport relics. In the latter case, no question of profit intervenes, and there is an entire absence of all motive to deceive.

In introducing to the public Mr. Henshaw's paper, and those accompanying it, Major Powell makes use of the following emphatic language: †

<sup>\*&</sup>quot;Art in Shell," Second Annual Report Bureau of Ethnology, 1880-81, pp. 282-285.

<sup>†</sup> Second Annual Report Bureau of Ethnology, 1880-81, p. xxvi., Introductory,

"Each of the papers appended to this report has its proper place in the general scheme, the scope of which they, together with the other publications before noted, seem to indicate, and each was prepared with a special purpose."

In the light of this announcement, it will be instructive to carefully read, in connection with the monograph of Mr. Henshaw, that of Mr. Holmes, to which reference has already been made. In describing their respective discoveries, they were compelled to traverse the same ground. The shells under consideration by Mr. Holmes were also relics of the Mound-builders. Among these remarkable relics recovered from ancient mounds were engraved gorgets. These shells were probably worn about the neck or on the breast. In another department they were the complements of our "inscribed tablets," and were discovered in similar tumuli in other parts of the country. On them are represented the cross, birds, spiders, serpents, and the human face and form. By a series of comparisons with Mexican and Peruvian art, Mr. Holmes traces the origin of these interesting relics to the Aztecs of ancient Mexico. The concluding thoughts of Mr. Holmes are as follows:\*

"As an ornament, this Missouri gorget is a member of a great family that is probably northern; but the design engraved upon it affiliates with the art of Mexico, and so close and striking are the resemblances that accident cannot account for them, and we are forced to the conclusion that it must be the offspring of the same beliefs and customs and the same culture as the art of Mexico."

These conclusions of Mr. Holmes appear in singular contrast with the labored effort of Mr. Henshaw to disprove the Mexican origin of the animal carvings found in the mounds; and, with all due deference to Major Powell, the perplexed reader will find it difficult to discover a "proper place" for these two important papers in any "general scheme." A popular scientific magazine thus refers to these conflicting deductions:†

"It seems almost aggravating that in the same volume wherein Mr. Henshaw [denies]‡ and effectually disproves the Mexican origin of many animal forms in the mound-pipes, new forms should be described, concerning which the author says that they 'must be the offspring of the same beliefs and customs and the same culture as the arts of Mexico.'" §

<sup>\*</sup>Second Annual Report Bureau of Ethnology, 1880-81, p. 305.

<sup>†</sup> American Naturalist, September, 1884.

<sup>\*</sup> Misprint.

<sup>§</sup> Major Powell himself was evidently impressed with this remarkable parallel, drawn by Mr. Holmes, between the relics from the mounds and the art of Mexico; and, in presenting this masterly monograph to the public, as if feeling the necessity of tempering it to some show of consistency with his own theories, the Director thoughtfully adds the following reservation:

In now bringing these notes to a close, it is, perhaps, no more than justice to Mr. Henshaw to state that in his attack upon the authenticity of the relics in question he does not stand alone, but is ably sustained by the Director of the Bureau. In his introductory chapter, Major Powell writes as follows:

"It will be the duty of the Bureau of Ethnology to devote careful attention to this interesting field of archæology. But those who have hitherto conducted these researches have betrayed a predetermination to find something inexplicable on the simple hypothesis of a continuous Indian population, and were swept by blind zeal into serious errors, even when they were not imposed upon by frauds and forgeries. Some of the latter, consisting of objects manufactured for sale to supply the manifested craving after the marvelous, and even inscribed tablets suggesting alphabetic or phonetic systems, have recently been exposed by the agency of this Bureau."\*

This was the first information given to the public that any such "frauds and forgeries" had "recently been exposed" by the Bureau, and we look in vain through its publications for the details of these alleged extraordinary exposures! As in the case of Mr. Henshaw, it will be noticed that these extravagant denunciations of the relics in the Davenport Academy are made by Major Powell without reference to a particle of evidence to sustain them, or even the suggestion of a suspicious circumstance in connection with them. But we have as fellow-sufferers the grand company of archæologists the world over, for the Director of the Bureau, while he discredits our relics, also condemns the work of all "who have hitherto conducted these researches." None so worthy as to escape his denunciation!

Before closing this paper, it will be instructive, in connection with this "new departure" of the Bureau of Ethnology, to recall the curious circumstance that the first publication ever made by the Smithsonian

<sup>&</sup>quot;A deduction, not made by the author, may, perhaps, be suggested by the comparison from the art and literature furnished by him, to the effect that the artistic methods of the Mound-builder are traceable among the historic tribes of North America, tending to show that, contrary to the once current belief, based exclusively on the same evidence, there is no marked racial distinction between them." Major Powell is quite right in saying that this is "a deduction not made by the author!" When, on the contrary, it is observed how directly it conflicts with the conclusions of Mr. Holmes, as stated in the above paragraph, it affords an amusing illustration of the eagerness of the accomplished Director to maintain his theory.

<sup>\*</sup>Second Annual Report Bureau of Ethnology, 1880-81, pp. xxxi.-xxxii., Introductory.

The severity of the language italicized can only be fully appreciated by reference to the paper of Mr. Henshaw, which Major Powell thus introduces and endorses. In that paper Mr. Henshaw makes direct mention of the Davenport Academy, and selects the relics in question for condemnation. Major Powell, therefore, clearly aims his shafts at these relics, and having consigned the "pipes" to a commercial hell, looks about for some lower deep for "even inscribed tablets!" If this is the standard of criticism, and these the critics, explorers may well hesitate before exposing their heads above an opened mound to be pelted with maledictions by archæologists in high places, and may deem it prudent to engage in some less perilous pursuit.

Institution was the great work of Squier and Davis, entitled "Ancient Monuments of the Mississippi Valley." In this work an exactly opposite theory from that held by Major Powell was confidently advanced and strongly supported. The reader will not have failed to notice that a considerable portion of Mr. Henshaw's paper is devoted to an attempted refutation of their important deductions. In contrasting the views of Squier and Davis as to the origin of the Mound-builders with those advanced by Major Powell, as clearly presented in the opening extracts of this paper, the reader will be struck with the extent of the divergence between the earlier and later deductions. Equally at variance are the views expressed by Squier and Davis and those of Mr. Henshaw upon the subject of ancient art. As to the degree of artistic skill possessed by the Mound-builders, the former thus state their views:\*

"Such is the general character of the sculptures found in the mounds. It is unnecessary to say more than that as works of art they are immeasurably beyond anything which the North American Indians are known to produce, even at this day, with all the suggestions of European art and the advantages afforded by steel instruments. The only fair test of the relative degree of skill possessed by the two races would be in comparison of the remains of the mounds with the productions of the Indians before the commencement of European intercourse. A comparison with the works of the latter, however, at any period, would not fail to exhibit in striking light the greatly superior skill of the ancient people."

In opposition to these conclusions of Squier and Davis, Mr. Henshaw makes this emphatic statement of his own views:+

"Eminent as is much of the authority which thus contends for an artistic ability on the part of the Mound-builders far in advance of the attainments of the present Indians in the same line, the question is one admitting of argument, and if some of the best products of artistic handicraft of the present Indians be compared with the objects of a similar nature taken from the mounds, it is more than doubtful if the artistic inferiority of the latter-day Indian can be maintained." ‡

<sup>\*</sup>Smithsonian Contributions to Knowledge, Vol. I., p. 272.

<sup>†</sup>Second Annual Report Bureau of Ethnology, 1880-81, p. 123.

<sup>‡</sup> The fact has been fairly assumed throughout this paper, based upon repeated and emphatic atterances, that Major Powell and Mr. Henshaw, in seeking for the artisans of these moundrelies, exclude the Toltec and Aztec races, and adopt the theory that these ancient sculptures are the artistic handicraft of the ancestors of the Indian tribes at present within the limits of the United States. While it is doubtless true that all the aborigines found on the American continents by the discoverers were designated as "Indians," an obvious distinction may still be made between the semi-civilized races then inhabiting Mexico, Central and South America, and the wild, wandering tribes found within the limits of the United States, and at that date frequenting the region of the mounds. In referring to this distinction, Baldwin remarks: "People of the ancient Mexican and Central American race are not found farther north than New Mexico and Arizona, where they are known as Pueblos, or Village Indians. In the old time that was a frontier region, and the Pueblos seem to represent ancient settlers who went there from the south. There was the border line between the Mexican race and the wild Indian, and the distinction between the Pueblos and the savage tribes is every way uniform and so great that it

It thus becomes quite evident, from this review, that it is a principal object of the present management of the Smithsonian Institution, through its Bureau of Ethnology, to reëxamine these early explorations of Squier and Davis, and to reconsider, and, if possible, reverse, their important deductions.

The work of Squier and Davis was issued by the Smithsonian Institution, in 1847, as the first of its "Contributions to Knowledge." As its publication was to be the inauguration of that great enterprise, unusual care and caution were observed in the examination into its scientific merits and deciding upon its acceptance for publication. The work was well received by the illustrious Joseph Henry, then Secretary of the Smithsonian Institution, and was by him referred to the American Ethnological Society, of New York, for further examination. The favorable report of that institution was subscribed with such respectable names as Albert Gallatin, John R. Bartlett, George P. Marsh, Samuel C. Morton, Edward Robinson, and W. W. Turner. The proposed publication of this important work was still further approved by the American Academy of Arts and Sciences, and is mentioned with approbation in a report made on December 7th, 1847, to Prof. Henry, by a committee embracing such notable names in American scholarship as Edward Everett, Jared Sparks, Benjamin Pierce, Henry W. Longfellow, Asa Gray, and O. W. Holmes. Thus strongly recom-

is well-nigh impossible to believe they all belonged to the same race. In fact, no people like our wild Indians of North America have ever been found in Mexico, Central America, or South America." In claiming for these "wild Indians" a degree of semi-civilization and artistic skill equal to, if not beyond, that displayed by the Mound-builder, Major Powell finds himself in good company: Schoolcraft, Lapham, Brinton, Lucien Carr, and a large number of cultured archaeologists adopt the same view. In his work upon the "Mounds of the Mississippi Valley," Mr. Carr has carefully collected, in a note on page 4, the authorities supporting this Indian theory, and Mr. Dall has incorporated this note into his recent edition of Nadaillac's "Prehistoric America," pp. 131-132. This list embraces the names of many eminent scholars and carries with it a great weight of authority. On the other hand, however, we find arrayed in support of the theory that the Mound-builders were a distinct race from the Red Indians, and of a higher grade of civilization, the great names of Squier and Davis, Morgan, Morton, Harrison, Prescott, the Bancrofts, Baldwin, Foster, Winchell, Peet, MacLean, Short, Whittlesey, Joseph Jones, Vining, with many other profound scientists in this country and Europe. It is to this great company of cultured archæologists that Major Powell refers when he says: "Those who have hitherto conducted these researches have betrayed a predetermination to find something inexplicable, on the simple hypothesis of a continuous Indian population, and were swept by blind zeal into serious errors." And because of these alleged repeated and momentous failures, Major Powell consoles the world of science with the assurance that, in future, "it will be the duty of the Bureau of Ethnology to devote special attention to this interesting field of archaeology!" While the weight of argument and authority, however, appears to be on the opposite side, and in favor of a Mexican origin for the Mound-builder, it must be conceded that the question is still an open one. ("Ancient America," by John D. Baldwin, pp. 217-218; "Mounds of the Mississippi Valley;" "Memoirs of the Kentucky Geological Survey," Vol. II., 1883; "Prehistoric America," by Marquis de Nadaillac, p. 131, note 3.

mended, the work of Squier and Davis made its appearance under the auspices of the Smithsonian Institution.\* It was everywhere well received. Since that date it has been the principal authority in American archæology, and the most considerable storehouse of ethnological information. It has given direction to a generation of scientific workers. Its important deductions have permeated the thought of the best scholars and most profound thinkers throughout our own and foreign lands.†

Under a new management, the Smithsonian Institution has undertaken to reconsider this great work of Squier and Davis, and aims to refute its important deductions. It seems to have been recently discovered that in its publication that institution has not been engaged in the "diffusion of knowledge" at all, but instead, during all these years, has been scattering error broadcast through the land. We are, therefore, called upon to retrace our steps, to unlearn the lesson we have so long conned, and to take our places at the feet of strange teachers. This is certainly discouraging to American scholarship, and the thoughtful student will wisely pause and make careful inquiry as to which, after all, is error — the earlier or the later deductions.

Still, it must be conceded, if the statements of the great work of Squier and Davis are unreliable, and its deductions without sufficient basis, these defects cannot be too early disclosed to the world of science. Such an exposure would be a benefaction to the cause of truth. The attempt to reverse the thought of an age is, however, a most notable undertaking. It needs great courage, excellent scholarship, and a commanding name. It will, of course, be taken for granted that the man called to so important a work must have been long engaged in archæological research, trained in its methods of investigation, and familiar with its literature. We recall the names of noted archæologists, and wonder who among them would have the temerity to engage in this gigantic undertaking. In response to our summons none such appear; but, instead, the Director of the Bureau steps promptly to the front and makes due announcement of "Henry

<sup>\*</sup> Eighth Annual Report Smithsonian Institution, pp. 133-147.

<sup>†</sup>It is reasonable to conclude that Professor Baird, of the Smithsonian Institution, never saw the paper of Mr. Henshaw previous to its publication. Had it been subjected to the scrutiny of this eminent and profound scholar, its careless statements and loose deductions would assuredly have met his condemnation and prevented its unfortunate publication. The Secretary of the Smithsonian Institution will doubtless find it necessary to exercise a more careful supervision over the publications of the Bureau of Ethnology, and to subject them to somewhat of that severe scrutiny employed when the valuable work of Squier and Davis was accepted for publication.

W. Henshaw" as the champion of his theory; and this is the method of his introduction:

"Mr. H. W. Henshaw, skilled as a naturalist, especially as an ornithologist, and familiar by personal experience with a large part of our national territory, was led to examine into the truth of these statements, repeated from author to author without question or criticism, and used as data in all discussions on the mounds. The result is the important paper now published. His conclusions, from the evidence adduced, seem to be incontrovertible."\*

And so the valiant gentleman appointed to displace Squier and Davis is a new-comer in archæology, but, nevertheless, is "skilled as a naturalist, especially as an ornithologist;" and, moreover, is "familiar with a large part of our national territory!" With this unique statement before us of Mr. Henshaw's qualifications for his great work, comment would be superfluous. The recommendation is itself a condemnation. The scientific world will scarcely consent to so summary a displacement of its old worthies, at the behest of a newly-fledged archæologist, even though he may be "skilled as a naturalist!" With the dethronement of Squier and Davis, it followed, as a logical necessity, that, in a more lowly sphere, our Mr. Gass must be decapitated. Each act was an essential factor in the same "general scheme." We have here the full force of Major Powell's significant announcement that Mr. Henshaw's effort was "a successful destructive criticism!" It would, perhaps, have been more prudent, before pronouncing it "successful," to have awaited the verdict of the large company of cultured archæologists throughout the world of science, who, in the last resort, must pass upon the merits of this controversy.

We cannot better take our leave of Mr. Henshaw than by quoting from the American Naturalist the following humorous account of his ludicrous production: †

"Just as in a hurdle race the crowd gathers at the wicket to see the horses make the leaps, so the archæologists will be anxious to know how Mr. Henshaw gets over some of our archæological hedges and ditches. Well, the first animal to block the way is the manatee, and all will agree that the leap is effective. The next myth attacked is that relating to the toucan, and what is left of it 'is easy of identification.' The bird is a common crow, or a raven, and is one of the most happily executed of the avian sculptures. The paroquet is treated more kindly, this species having abounded in the Mississippi Valley; but the particular paroquet of Squier and Davis is made to step aside. Passing over the remarks upon various well-known forms and the skill shown in the carving, we come to Mr. Henshaw's attack upon

<sup>\*</sup>Second Annual Report Bureau of Ethnology, 1880-81, p. xxxii., Introductory.

<sup>†</sup> American Naturalist for September, 1884.

the elephant mound, concerning which he doubts whether an effigy without ears, tail, tusks, or extended trunk can stand for a mastodon. The author throws discredit upon the authenticity of the elephant pipes."

To the Davenport Academy, however, the flippant criticism of Mr. Henshaw has more serious import, and, uncontradicted, it might inflict irreparable injury. It has been well remarked, "that not the least misfortune of a prominent falsehood is the fact that tradition is apt to repeat it for truth." Shielded under the respectable name of the Smithsonian Institution, Mr. Henshaw insinuates his slanders into the ear of the world. Not by a frank and open statement, with good reasons assigned, does this "naturalist" condemn our elephant pipes and accuse their discoverer; but, as seeking to escape responsibility, with a nod and a wink, he merely hints, as it were, in a sly whisper, "that their authenticity as specimens of the Mound-builder's art has been seriously called in question." Thereupon a prominent scientific journal, caught in the snare, innocently takes up the whispered story and reports to the vast company of its readers that Mr. Henshaw, an accredited representative of the Bureau of Ethnology, "throws discredit upon the authenticity of the elephant pipes!" and this without a word of disapproval of its base and unfounded insinuations. Nor is this all. We have before us the work upon "Prehistoric America," by the Marquis de Nadaillac, just issued from the press, and therein we find this reference to the relics in question:

"Quite recently, in Iowa, a pipe has been found, made of rather soft sandstone, which is claimed to represent an elephant. It is to be observed, however, that such identifications generally owe much to the natural desire to recognize something strange or unusual, and also to the want of a sufficient knowledge of natural history. A recently published investigation of bird-pipes and carvings, by a well-known ornithologist, has resulted in demolishing the foundation of much theorizing which has been based on the identical specimens examined. Forgeries are also too common."\*

And the distinguished author gives as his authority for these strong statements, "H. W. Henshaw, Second Annual Report Bureau of Ethnology, Washington, 1884." The mischief is now done. The "de-

<sup>\* &</sup>quot;Prehistoric America," by Nadaillac, pp. 161-162. From the fact that the above reference to the elephant pipes has no appropriate setting in the text, it may be reasonably set down as an interpolation by the American editor. It gives occasion for surprise that so excellent an archaeologist as Mr. Dall should thus have given a prominent place in scientific literature to statements of so great importance without careful verification. In an excellent review of this work, the Nation thus notices the want of harmony between its author and editor: "Availing himself of the liberty judiciously allowed him as editor, Mr. Dall has not only rewritten the chapter (X.) on the origin of man in America, but he has so 'modified and revised' other portions of the work as to lead to conclusions that were but little dreamed of in the original publication." (Nation, March 12th, 1885.)

structive" work, commended by Major Powell, seems complete. unsupported accusation is caught up with avidity, passed from writer to writer, from paper to paper, from book to book, gathering volume in its passage, until at length, having attained portentous proportions, the fiction may pass into history as fact. The fiction is thus fairly launched on its journey round the world and down the years. It has been said, though in somewhat homely phrase, "that a lie will travel from Maine to Georgia while truth is stopping to put on his boots," and though these should prove the "seven-league boots" of the nursery tale, it is doubtful whether the falsehood can ever be overtaken and wholly overcome. The history of archæology itself is replete with instances of similar wrong-doing, some of which, like that of the late Dr. Koch, of Missouri, are full of almost pathetic interest. Because of his labors for science, this enthusiastic explorer was subjected to a most "destructive criticism" until his life went out in gloom; and now, at this late day, a distinguished archæologist renders him this tardy but well-deserved justice:

"Unfortunately, Koch's want of scientific knowledge and the exaggerations with which he accompanied his story, at first threw some discredit upon the facts themselves. But the recent discoveries of Dr. Aughey, in Iowa and Nebraska, have now confirmed them. There, too, the bones of the mastodon have been found mixed with numerous stone weapons; and man, we learn to our surprise, armed with these feeble weapons, not only did not fear to attack the gigantic animal, but succeeded in vanquishing it." \*

The student in science will also recall the parallel case of M. Boucher de Perthes, in France, who, for years after his remarkable discoveries at Abbeville, saw them discredited, and found himself regarded not only as an enthusiast, but almost as a madman. But his deductions are now generally accepted; and there is no more impressive scene in the history of science than that presented when, some fourteen years after the publication of his first work, he stood on the spot of his exploit, with representatives of the French Academy and the Royal Society of England, and received their plaudits over his great discovery. It may well be questioned whether progress in science has not been greatly retarded by the unreasonable incredulity of its votaries. Not only in religion, but in the pursuits of science as well, we too often find a stolid adherence to old traditions. The religious intolerance that burned Bruno and the scientific intolerance that persecuted Koch had a common origin. With altered environments, the fanatic who saw only

<sup>\* &</sup>quot;Prehistoric America," by Nadaillac, p. 37.

"heresy" in Bruno's great thoughts, and the scientist who saw only "fraud" in Koch's great discovery, might easily have exchanged places.\*

This discussion gives prominence to another question of no ordinary importance, and that is as to the value of local organizations throughout the country in facilitating archæological research. The Bureau of Ethnology not only seems to regard them with disfavor, but makes no secret of its hostility to these independent methods of research. It is clearly contemplated that all these local organizations should be resolved into mere conduits to the Smithsonian Institution; that all explorations of mounds and earth-works should be under the direction of its Bureau of Ethnology; and that all relics obtained should be deposited for safe-keeping in the National Museum.† This certainly is a notable scheme; difficult, however, of execution, and of doubtful wisdom.

<sup>\*</sup>Lubbock's "Prehistoric Times," pp. 342, 343, 351. Concerning the great discoveries at Abbeville, this distinguished author remarks: "We cannot, therefore, wonder that the statement by Mr. Frere has been distrusted for more than half a century; that the weapon found by Mr. Conyers has lain unnoticed for more than double that time; that the discoveries by M. Boucher de Perthes have been ignored for fifteen years; that the numerous cases in which caves have contained the remains of men together with those of extinct animals have been suppressed or explained away. These facts show how deeply rooted was the conviction that men belonged altogether to a more recent order of things; and, whatever other accusation may be brought against them, geologists can at least not be said to have hastily accepted the theory of the coexistence of the human race with the now extinct pachydermata of Western Europe."

<sup>†</sup> That this statement is not overdrawn will be made evident by reading the description of the National Museum, by Ernest Ingersoll, in the Century for January. Commenting upon that article, Science remarks: "Mr. Ingersoll develops the grandeur of the scheme with a lavish hand, and it would appear as if, were the plan to be carried out in detail, the District of Columbia would not be large enough to hold the Museum." Nor does the enterprise of the gentlemen of the Smithsonian Institution stop here! Major Powell, Director of its Bureau of Ethnology, recently gave some important testimony before a joint committee of both Houses of Congress, wherein he recommended that "all the scientific institutions of the Government should be placed under one management," and expressed the opinion that "if such of the scientific bureaus as should properly have a civil organization were placed under the direction of the regents of the Smithsonian Institution, perhaps the best possible administration of the scientific work of the Government would thereby be secured." The consolidation, under the management of the Smithsonian Institution, thus recommended by Major Powell, embraces the Fish Commission, the National Museum, the Geological Survey, the Bureau of Ethnology, and about everything else, now scattered among the various departments, having any relation to science, literature, and art. It reveals a gigantic scheme, and it may be questioned whether any single management could be equal to its proper requirements. A valuable report was also submitted upon the same subject by a committee of the National Academy of Sciences, consisting of General Meigs and Professors J. P. Trowbridge, Pickering, Young, Walker, and Langley, wherein the following more moderate views were expressed: "We conceive it to be a sound principle, that Congress should not undertake any work which can be equally well done by the enterprise of individual investigators. Our leading universities are constantly increasing the means of scientific research by their professors and students, and while the Government may with propriety encourage and co-operate with them, there is no reason why it should compete with them. The scientific work of the Government ought not, therefore, to be such as can be undertaken by individuals." (Science, January 2d and 16th, 1885.)

This was not the spirit manifested by the late Joseph Henry, when in charge of that Institution. In the Smithsonian Report for 1875, Prof. Henry thus states his views:

"It has been, from the first, the policy of this Institution to encourage the establishment of such societies, on account of the great advantage they are to their members in the way of intellectual and moral improvement, as well as in the way of positive contributions to science." \*

It cannot be denied that these small organizations, scattered through the land, are doing excellent service in the cause of science. Being located in their midst, they are thus brought close to the heart and thought of the people. Their stated meetings attract persons of scientific tastes and scholarly acquirements. The wonders of the past and the worth of science are thus revealed. They inspire enthusiasm in archæological research and an unflagging zeal in its prosecution. They thus become powerful auxiliaries to scientific education. Their growing museums will first attract young eyes to admire, and then retain them to study. Mere relic-hunting soon becomes serious archæological research. Out of these practical schools of the people will come the great scientific students of the future. The work in these small societies is all the more valuable that it is entirely disinterested. Truth is its inspiration and reward. Watched by so many curious eyes, frauds are well-nigh impossible. We have thus presented important services rendered to science by these "local societies" which no gigantic institution, located at the political capital of our country, and managed by salaried officers, could, by any possibility, have so well performed. We think we may claim, without unseemly arrogance, that the history of the Davenport Academy itself reveals some contributions to science which will justify its existence.+

Scholars will ever find an absorbing interest in archæological research. There is in the mind of man an innate craving to recover the secrets of the past, and brooding in the thought of the explorer is the confident expectation that in these ancient relics will yet be found

<sup>\*</sup>Smithsonian Report for 1875, pp. 217-219.

<sup>†</sup>The conclusions stated in the text are amply justified by the facts. The Davenport Academy is not only assailed by name, but it is plainly expressed that its discoveries are under ban, and that its exploration of ancient mounds should be discontinued, inasmuch as each fresh discovery "will be received with ever-increasing suspicion." Had our critic been kindly disposed, his censure might have been more gently administered. He might have admitted the possibility of our being deceived and not deceivers. He could have easily attributed our short-comings to our benighted location on the far banks of the Mississippi, so distant from the Bureau of Ethnology! Our critic, however, is pitiless. He has studied the Indian character until he seems to have imbibed his nature! We are pelted with red-hot epithets! Nothing will satisfy his "destructive" appetite, unless our Mr. Gass puts aside his spade!

indelible traces of ancestry or undoubted remains of ancient civilizations. In the view of the Director of the Bureau, it is true, "working naturalists postulate evolution," \* and he deprecates the "search for an extra-limital origin" for the ancient races of North America. would seem, therefore, that he proposes to work out upon our own continent the problem of man's origin and existence. Those of us, however, who still hold to the orthodox belief in the unity of the race. will continue to indulge in the conjecture that sometime, somehow, somewhere, by adventurous barque of some ancient mariner, by bridge of ice at the north, or by a lost Atlantis at the south, a pathway was opened, and the original progenitors of the races found on this continent by the discoverers made their way from the great centers of populations in the far orient. Be this as it may, so far as the ancient works of art under consideration are concerned, it matters little whether they be traced to the ancestors of our present Indians, thus showing decadence in the race; or to the Toltec or Aztec of ancient Mexico, thus indicating that, with their migrations southward, they evolved a higher civilization. There is nothing in either theory, or in all of them, to require or justify the "destructive criticism" visited upon the Davenport Academy and its members. ‡

The researches of anthropologists as to the origin and antiquity of

historic descendants." ("Prehistoric America," by Nadaillac, pp. 523, 531.)

<sup>\*&</sup>quot;Origin of Man," J. W. Powell, First Annual Report Bureau of Ethnology, 1879-80, p. 77.

† The concluding chapter of Nadaillac's "Prehistoric America" is contributed by the American editor, Mr. Dall, and his conclusions, as therein stated, are among the most reasonable yet advanced. He thus states his views: "Squier, Gibbs, and numerous American ethnologists, believed in a migration from the west to South America. A northern migration is almost universally considered to have taken place. Probably the American races entered by both gates." And in the same connection he further remarks: "That America was peopled at different times, by scions of different races, is highly probable, from the physical differences to be observed between the remains of prehistoric man and the complexion and features he bequeathed to his

In concluding this vindication of the Davenport Academy from the unfounded accusations of the Bureau of Ethnology, we desire to express our high appreciation of the great ability and large acquirements of its Director, Major Powell, and of the valuable contributions he has made to the cause of science. The careless supervision of the work of subordinates, which permitted the publication of a paper so void of merit and so full of blunders as the one in question of Mr. Henshaw, as well as the endorsement of its statements and deductions without careful verification, must, no doubt, be set down as among the mistakes of an overburdened man. By the consolidation of the Government Surveys in 1879, Major Powell became the Director of this great work, and when, at the same time, the Bureau of Ethnology was established, under the charge of the Smithsonian Institution, he was also appointed the Director of that department. It will, therefore, occasion no surprise that he is left little opportunity for calm and careful supervision of the scientific work of his assistants. This fact becomes still more apparent, when it is considered that, superadded to the proper work of these departments, the executive management also devolves upon Major Powell important and absorbing political duties. The exacting nature of the duties which devolve upon the "political scientist" are graphically portrayed in the Nation for August 20th, 1885.

the American aborigines, while they leave the problem unsolved, have yet an important bearing upon the interesting questions suggested by this discussion. Learned and careful investigators, both in this country and Europe, have not hesitated to confront biblical chronology with their bold speculations, and a brief statement of some of the more important of these new theories may tend to throw light upon the subject of our inquiry:

"A vast deal has been written in support of various hypotheses of the migration of the American aborigines from the old continent, and there is hardly a country or a race which has not been assigned the honor of being its progenitor; and to complicate matters still more, there have not been wanting high authorities to suggest that the tide of emigration may have set the other way, from America to Asia. Dr. Lapham says: 'I know reasons valid enough and numerous enough to have made the notion of the new world being the eldest of the two a paradox; nevertheless I know no absolutely conclusive ones.' As the new world, so-called, is the oldest geologically, it may prove to be so ethnologically." \*

"In the classification of Blumenbach, the American Indians are treated as a distinct variety of the human race; but in the three-fold division of mankind laid down by Dr. Latham, they are ranked among the Mongolidæ. Other ethnologists also regard them as a branch of the great Mongolian family, which, at a remote period of the world's history, found its way from Asia to the American continent, and there remained for thousands of years, separate from the rest of mankind, passing meanwhile through various alternations of barbarism and civilization. Morton, however, the distinguished American ethnologist, and his disciples, Nott and Glidden, claim for them a distinct origin, one as indigenous to the continent-itself as its fauna and flora."†

"It may be asserted with some confidence that there is nothing in the physical and mental condition of the aboriginal Americans which requires us to postulate for them a foreign origin. If man was evolved originally from several centers, America assuredly included one at least; if he sprung from a single pair, then we can even conceive that pair to have been first established in the new world; and the arguments brought forward in support of an Asiatic origin of the American would not lose their point if adduced in favor of an American origin of the Asiatic peoples." ‡

"Dr. Augustus Le Plongeon is satisfied that Egyptian civilization originated on the American continent, and he is in possession of a vast number of evidences which he believes fully establish this extraordinary theory. One of these is the resemblance between the Egyptian and the Maya alphabets as derived from the monumental remains of the two systems." §

These curious speculations seem to establish the great antiquity of man in America, and thus are not unconnected with the scientific

<sup>\*</sup> New American Cyclopædia, Vol. IX., p. 488, title "Indians."

<sup>†</sup> Chambers' Cyclopædia, Vol. V., p. 554, title "Indians."

<sup>‡</sup> Encyclopædia Britannica, 9th edition, p. 822, title "American Indians."

<sup>&</sup>amp; Scientific American Supplement, January 31st, 1885.

problems suggested by the discovery of our remarkable relics. Thus, assuming the correctness of any one of them—take it as established, for instance, that the American aborigines were indigenous on this continent; let it be conceded that these aborigines were the ancestors of our Red Indians, and identical with the Mound-builders; consider them, even as Major Powell desires, hewers of wood, tillers of the soil, and skilled workmen in stone; and then let the archæologist tell us what scientific possibility or probability would be violated should we claim this ideal Indian as the artist who carved our pipes and traced our tablets? In the last analysis it will be found there is nothing anomalous in these relics. They are in harmony with the results of recent research. They are links in the chain of evidence uniting the carving in the cave of La Madeleine with our own elephant pipes and inscribed tablets. They have been long foretold by our best investigators, and their discovery only fulfills a prophesy of science.\*

We regret the occasion which has made necessary this defense of our Academy against a most unjust assault.† Many words of cheer came to our young society from the illustrious and lamented Henry, while he was in charge of the Smithsonian Institution; and we can now regard the Institution he has left behind him only with admiration, as the emanation of his broad intelligence. The great vacancy occasioned by his death has been well filled by Prof. Baird, and it is fortunate for the cause of science that so capable and scholarly a successor was found to take up and carry on the important work so auspiciously commenced. The Smithsonian Institution easily takes its

<sup>\* &</sup>quot;We know that both these great monsters—the clephant and the mastodon—continued to inhabit the interior of our continent long after the glaciers had retreated beyond the upper lakes, and when the minutest detail of surface topography were the same as now. This is proven by the fact that we not unfrequently find them imbedded in peat in marshes which are still marshes, where they have been mired and suffocated. It is even claimed that here, as on the European continent, man was a cotemporary of the mammoth, and that here, as there, he contributed largely to its final extinction. On this point, however, more and better evidence than any yet obtained is necessary before we can consider the contemporancity of man and the elephant in America as proven. The wanting proof may be obtained to-morrow, but to-day we are without it." Hayden's Geological Survey, 1871. "The Ancient Lakes of Western America," by Prof. J. S. Newberry, p. 338.

<sup>†</sup> The attack made upon the Davenport Academy by the Bureau of Ethnology was wholly unexpected. The paper of Mr. Henshaw has been written for several years, and yet, until the recent distribution of the volume containing it, the officers of the Academy had received no intimation that such an accusation was impending over it. We have been accused, convicted, and sentenced without opportunity of defense. This extraordinary proceeding occasions the greater surprise from the fact that our Academy is under great obligations to the Smithsonian Institution, both under the former and present administrations, for especial favors. Through it our foreign exchanges have been made, and we are indebted to it for large additions to our library. We therefore take this occasion to distinguish between that Institution and its "destructive" Bureau of Ethnology.

place among the great scientific organizations of the world — with the Academy of France or the Royal Society of England. It is its noble mission to encourage original research and give proper direction to the scientific thought of our country. It will best subserve this great purpose by sternly observing in its discussions the dignity and decorum of high scholarship, the serene and catholic spirit of true science.

In submitting this refutation, we have sought to avoid scientific discussion, and have carefully abstained from taking part in the war of rival theories. It has been our object to clear our unique relics from all taint of suspicion, and so to present them to the scientific world for careful study. Upon experienced archæologists will devolve the duty of tracing resemblances and deciphering inscriptions; and to them will belong the privilege of determining their age and origin, and of announcing their scientific significance and value. In themselves perhaps insufficient to become the basis for positive deductions, these relics must take their place with other discoveries until that "good time coming," when the basis of fact shall be deep and broad enough to allow the opening of another page in the "unwritten history" of our earth and race.

The purpose of this paper will have been accomplished, if we have succeeded in vindicating a generous and worthy man from foul aspersions; our young and growing Academy from the stigma of participation in a disgraceful deception, and our unique and valuable relics from all reasonable ground for suspicion.

# CORRESPONDENCE.

The foregoing paper upon "Elephant Pipes and Inscribed Tablets" was widely distributed, and elicited an extensive correspondence. Many of these letters, from well-known archæologists and other noted scientists in this country and Europe, on account of the important questions involved, possess great scientific value. Our limited space will permit us to do no more than present some selections and extracts from these valuable communications. Generally this is done with the express consent of the writers. In a few instances, views favorable to the positions assumed by our Academy have been expressed by archæologists entitled to speak with authority, who were unwilling to have their names appear in this controversy. While we regret their undue caution, we can do no otherwise than respect their wishes. In only two or three instances have unfavorable responses been received, and, in order that both sides may fairly be presented, these will be included. Our correspondents are alone responsible for the statements contained in their communications.

From Dr. EDWIN HAMILTON DAVIS, Author of "Ancient Monuments."

[In connection with the fact that the Bureau of Ethnology, in its report under review, has controverted statements and endeavored to reverse deductions made by Squier and Davis in their great work on "Ancient Monuments of the Mississippi Valley," the following communication from one of its distinguished and venerable authors will be read with peculiar interest.]

NEW YORK, May 28th, 1885.

Chas. E. Putnam, Esq.—

Dear Sir: I have read with peculiar interest your masterly vindication of the authenticity of the pipes and inscribed tablets in the Davenport Museum. I consider it a triumphant refutation of the accusations of Mr. Henshaw and the absurd theories of the Bureau of Ethnology in the Smithsonian Institution. Please accept my thanks for your good opinion and defense of the general views set forth in the "Ancient Monuments."

One would naturally suppose that such an institution as the Smithsonian would take great care to guard the reputation of such works as it stands God-father to by publishing them in its transactions; especially not to accept and publish captious, unjust, and even false criticisms of its own publications. But I am sorry to say that it has shown great indifference, and sometimes even culpable neglect, in this matter. As an instance, I would mention that, some years since, Sir John Lubbock published, in an English journal, a review of the "Ancient Monuments," in which he described all the sculptured stone pipes found in the mounds under the head of pottery. The Smithsonian Institution republished this paper, with its stupid blunder, without comment or correction, in the Report for 1862; which led Sir John, and the rest of the world, to suppose that his statement was correct. I remonstrated with Prof. Henry, who sent me an apologetic letter, offering to correct it in a future report; but nothing was done for years. In the meantime, Mr. Lubbock published his "Prehistoric Times" (1865), reproducing, verbatim et literatim, his erroneous chapter upon the mound pipes. I again called Prof. Henry's attention to it, which only resulted in the insertion of a short extract from my letter in his personal report (1866, p 48). This must have escaped Sir John's notice, as the second edition of his work appeared without the least correction, and I presume it has been continued throughout the five editions of his work and its translations into five different languages of Europe. I know that the London Anthropological Transactions, and I presume other works, have copied this silly mistake; all of which, you can readily see, has done great injustice to the skill of the Moundbuilders as sculptors in stone without the use of steel. . . . .

With many wishes for the success of your pamphlet, I remain, most

respectfully,

Your obedient servant,

EDWARD HAMILTON DAVIS.

From MARQUIS DE NADAILLAC, Author of "Prehistoric America," etc.

[In the recent edition of Nadaillac's "Prehistoric America," the editor, Mr. William H. Dall, has taken many liberties with the text, and thus has connected the name of this noted anthropologist with some peculiar theories in conflict with his well-known views. If the reader of that valuable work finds himself in doubt as to the extent of these unauthorized alterations of the text, he will do well to note the following emphatic disclaimer of this distinguished savant:]

8 Rue d'Anjou, Paris, 25 April, 1885.

Chas. E. Putnam, Esq., President Academy of Sciences, Davenport, Iowa,—

Dear Sir: I hasten to acknowledge the paper you did me the honor to forward me, on the elephant pipes of your Academy of Natural Sciences, and I may add that I have read it with the greatest

pleasure.

I am of your opinion, that there can be no doubt that man lived both in North and South America in the quaternary period, and that he lived with the mastodons and other great mammalia of those days. I have never heard an objection of any great weight against it, and the mass of evidence, even as you surmise it, not all completely proved, is undoubtedly in its favor.

My book on "Prehistoric America" has been adapted, without my sanction or knowledge, by Mr. Dall, and my views on certain points have often been altered. I have always entertained very great doubts on the ascendants of the actual red men. The Mound-builders were certainly more advanced in civilization, and, till yet, nothing shows how their actual degradation and nomadic habits came on the Indians, if they really descended from the first.

In case your Academy elects corresponding members, I shall be happy to be one of them, and to forward you all the papers I may

publish. Believe me, dear sir,

Yours very faithfully,

NADAILLAC.

From Dr. D. G. Brinton, Professor of Archaeology and Ethnology, Academy of Natural Sciences, Philadelphia; Author of "Myths of the New World," etc.

PHILADELPHIA, PA., April 4, 1885.

CHAS. E. PUTNAM, ESQ.,-

Dear Sir: Accept my thanks for a copy of your rejoinder to Mr. Henshaw's criticisms. From my first reading of his article I considered it a paper not composed in the true spirit of science, and out of place in the publications of the Bureau.

Very respectfully yours,

D. G. BRINTON.

PHILADELPHIA, June 19, 1885.

MR. C. E. PUTNAM,-

Dear Sir: I have no objection to your making use of my letter. Of course, I do not pretend to offer an opinion on the authenticity of the objects in question—the readiness to do so in others, without personal examination and investigation, being precisely what I condemn in the article published by the Bureau.

Yours truly,

D. G. Brinton.

From PROF. ALEXANDER WINCHELL, Professor of Geology and Botany, University of Michigan; Author of "Preadamites," "Sketches of Creation," etc.

Ann Arbor, Mich., April 8, 1885.

MR. CHARLES E. PUTNAM, President Davenport Academy of Natural Sciences,—

My Dear Sir: I have received your "Vindication of Elephant Pipes and Inscribed Tablets." I am very glad to get it, for I was not aware that you could make so strong a case, so complete and entire a vindication. I fear there has been some hasty dogmatizing at Washington. It looks as if the authorities had been too willing to impugn the honesty or the sagacity of your Society.

As to the subject-matter of the controversy on Mound-builders, I am

inclined to go against the new doctrine lately started up, that they were the common race of hunting Indians. This view I maintained in my "Preadamites," a work with which you do not seem to be acquainted. The *crania*, of which the defenders of the new view have nothing to say, are irreconcilably distinct from those of the hunting Indians.

Very sincerely yours,

ALEXANDER WINCHELL.

From MR. S. A. MILLER, Author of "American Palæozoic Fossils," etc.

CINCINNATI, OHIO, March 31, 1885.

MR. CHARLES E. PUTNAM,-

Dear Sir: I have the honor to acknowledge receipt of your "Elephant Pipes in the Museum of the Academy of Natural Sciences," and am pleased to say, after having glanced over the pages, that your criticism of Messrs. Henshaw and Powell meets my approval. They had no warrant for their attack, and you are justified throughout in exposing them; and you might have gone further in accumulating the evidence of ignorance that glistens upon too many pages of the ponderous volumes issued by the would-be dictators of scientific learning under patronage of the Government. Through the instrumentality of a pseudo "National Academy," very poor timber has largely been selected for Government work.

All of the geological and palæontological evidence we have bearing upon the subject says man, mammoth, and mastodon were contemporaneous on this continent. Beginning with the literature on the subject — say from Caleb Atwater, in the American Journal of Science and Arts, in 1820 — and coming down to the present time, the facts accumulated all point one way, and are as convincing to the mind of any one capable of appreciating a geological and palæontological conclusion as any other series of facts establishing a truth in science.

I think you will find some of these facts thrown together by me in Vol. IV. of the Journal of the Cincinnati Society of Natural History, pp. 183–234, which is in the library of your Academy. But I was not writing for the purpose of proving that man and mastodon were contemporaneous, for I did not suppose that any one willing to read my article had any doubt on the subject, though I believe I incidentally

referred them to the most recent, or post-pliocene, age.

The quality of the workmanship on pipes and tablets may go far to test the genuineness, in the light of the vast accumulations now in the hands of archæologists, but the statement that "the only evidence of the coëxistence of the Mound-builder and the mastodon" rests on the authenticity of these pipes, could only emanate from the ignorance which controls the Bureau of Ethnology. I do not mean to underestimate the value of the pipes as evidence, for if there was any doubt they would be conclusive, except to the mind of a Henshaw or a Powell. Thanking you for the article, I am,

Very truly yours,

S. A. MILLER.

From Mr. B. Pickman Mann, Editor of "Psyche,"

Washington, D. C., March 30, 1885.

MR. C. E. PUTNAM, Davenport, Iowa,-

Dear Sir: I have this day received and read with care your pamphlet on "Elephant Pipes in the Museum of the Academy of Natural Sciences, Davenport, Iowa." I commend the judicious tone of the criticism, and give full credence to your version of the discoveries, relying upon the intrinsic force of the argument and my faith in your character and that of your associates. Respectfully,

B. PICKMAN MANN.

From Rev. J. P. MacLean, Author of "Mastodon, Mammoth, and Man," "The Mound-Builders," etc.

[ This distinguished archæologist, a few weeks since, visited our city, and delivered a lecture upon "The Mound-builders" for the benefit of the Academy. In concluding his lecture, Prof. MacLean made reference to the fact that an obscure individual by the name of Henshaw, who in the employ of the Bureau of Ethnology, at Washington, had recently published a paper questioning the genuineness of the elephant pipes in the museum of the Davenport Academy, and making a gross and unjustifiable attack upon the good faith of the Academy and the integrity of its members. He stated that this man Henshaw was no archæologist, that his opinions had no scientific value, and that he himself had made a careful examination of the pipes, was funiliar with their history, and that, in his opinion, they were undoubtedly authentic, and must be accepted as genuine mound relics.]

Hamilton, Ohio, June 15, 1885.

CHARLES E. PUTNAM, ESQ.,—

Dear Sir: I have very carefully read your "Vindication of the Elephant Pipes." You have faithfully and thoroughly performed the work. I think no reasonable man will fail to be convinced. Personally. I never doubted the genuineness of these interesting and important relics. The first intimation that I ever had that their authenticity was questioned came in the article from Mr. Henshaw in the "Second Report of the Bureau of Ethnology."

I had supposed that the names of all American archæologists and ethnologists were familiar to me, but the name of Henshaw is entirely new. In fact, Major Powell was forced to explain to his readers that this man was a "skilled ornithologist." It matters not who he is, still his article is no credit to either himself or the Bureau that employs him. I think the American ethnologists are to be congratulated that not one of their number could be engaged to perform such odious work. The covert assault on Mr. Gass is unmanly, and one in which no true scientific man would engage.

It seems to me that the Bureau of Ethnology has overstepped its legitimate boundary in the publication of Henshaw's article. If it must engage in "criticisms" on finds which have been made, then let the criticism be open and manly, and from writers who have made

some reputation in archæological research.

To some your strictures may seem severe, but, after considering the matter carefully, I think you have been no more than just under the circumstances. You certainly have literally annihilated Henshaw, and it is to be hoped that he will at once retire into that obscurity from which Major Powell has dragged him forth, and that his like may never Yours respectfully, again be seen in the land.

J. P. MACLEAN.

From REV. HORACE EDWIN HAYDEN.

WILKESBARRE, PA., April 14, 1885.

C. E. Putnam, Esq., President Academy of Natural Sciences, Davenport, Iowa,—

Dear Sir: Please accept my thanks for your very exhaustive and thoroughly satisfactory paper on the elephant pipes. It is an outrage that a man who has left his "last" should be allowed by pure insinuation to cast doubts on treasures as well authenticated as those of your society. The Smithsonian Institution is growing to be centralizing and jealous of other societies working in the same line. As Mr. Peet says, "I should consider Mr. Henshaw's statements a 'libel.'" Our Wyoming Historical and Geological Society will be glad to have your monograph.

Yours, with esteem,

HORACE EDWIN HAYDEN.

From W. E. BARNES, Editor of the "Age of Steel."

St. Louis, Mo., April 4, 1885.

CHAS. E. PUTNAM, ESQ., Academy of Natural Sciences, Davenport, Iowa,—

Dear Sir: I wish to express to you my great satisfaction at the manner in which you have answered Mr. Henshaw, of the Bureau of Ethnology. It seems to me that your vindication is complete. I was greatly surprised, in reading the Second Annual Report of the Bureau of Ethnology, to find so remarkable a statement emanating from this source, in view of the ease with which the Bureau could have communicated with your Academy and ascertained the exact facts in the case. The publication was not only unscientific, but almost a crime. I have been deeply interested in all your publications, and look forward with interest to the publication of your Vol. IV. I shall take occasion to refer to your pamphlet in the next issue of the Age of Steel. With kindest regards,

Yours very truly,

W. E. BARNES.

From Albert G. Webber, Esq.

DECATUR, ILL., July 7, 1885.

CHARLES E. PUTNAM, Esq., President Academy of Natural Sciences, Davenport, Iowa,—

Dear Sir: As requested, a copy of your "Vindication" was duly received, for which I tender you my sincere thanks. Your ably-written paper has the effect of a thunderbolt upon the stagnant insinuations of Mr. Henshaw. It purifies the cause of ethnology. Men at the heads of our national bureaus of learning must be taught that fellow-workers upon the field of discovery are entitled to a respectable recognition at their hands.

The cause of science has no official expounders. He who states facts which reveal the truth of nature has the paramount right to be heard, no matter who he is or where he may be.

May the Davenport Academy be instrumental in advancing the noble work in which they are engaged, and always stand up boldly, as in this instance, for its honor and the truth.

Respectfully yours,

A. G. Webber.

From E. P. VINING, Author of "An Inglorious Columbus."

CHICAGO, ILL., June 24, 1885.

CHAS. E. PUTNAM, Esq., President Academy of Natural Sciences, Davenport, Iowa,—

Dear Sir: Permit me to express my sympathy with your reply to the attack upon your society contained in the last report of the Bu-

reau of Ethnology of the Smithsonian Institution.

Original investigators — those who, amid many discouragements, are willing to spend time, labor, and money in endeavoring to learn something of the past history of this continent — are not numerous, and it is but reasonable to ask that no attacks should be made upon their honesty and good faith until after careful investigation and thorough examination have clearly shown them to be called for. When those who are supported in their researches by the Government attempt to criticise the work of the few volunteers who labor without hope of reward, even a special degree of care would seem to be due, and it is therefore surprising that the attack should have been based upon grounds which a mere glance at your pipes, or at the photographs of them, which were in the possession of the Smithsonian Institution, would have shown to be erroneous.

It is unfortunate that a very small doubt, based upon the shallowest or most mistaken of grounds, is often considered to outweigh the most earnest labor and the most convincing proofs. Nevertheless, time, which tries all things, will give to each his due.

Hoping that your society will not be discouraged in the prosecution

of its good work, I remain, Yours very truly,

E. P. VINING.

From Prof. J. Henry Comstock.

ITHACA, N. Y., April 5, 1885.

MR. CHARLES E. PUTNAM, Davenport, Iowa,-

My Dear Sir: Please accept my thanks for the copy of your paper on elephant pipes which was sent me. I have read it very carefully, and fully sympathize with your views as expressed in it.

Yours sincerely,

J. HENRY COMSTOCK.

From REV. W. M. BEAUCHAMP.

BALDWINSVILLE, N. Y., April 7, 1885.

MR. C. E. PUTNAM,-

Dear Sir: I have read your paper on the elephant pipes with interest — all the more from having read Mr. Henshaw's article with like

Frauds are so much more common with pipes than with other articles, that it is no wonder men are suspicious; and, at the same time, in the genuine work of a rude age resemblances are often so doubtful as to render caution necessary. In the many spirited bird and beast pipes I have figured, I should hardly wish to be pinned down to a naturalist's exactness in identifying specimens, although a naturalist myself. So far, I felt that Mr. Henshaw's paper was likely to guard against erroneous conclusions founded on doubtful premises. But it is wrong to expect that in such work there will be complete representation of anything, any more than when we work birds and beasts with designs of a useful nature, or employ them in heraldry. There is a stone pipe here which undoubtedly was made from a reminiscence of the domestic cock - perhaps by an Onandaga of two centuries since—but the only thing to make this certain is the cock's comb; that attracted the eye, and could be represented. The tail had to be left off, and the body was more that of a woodpecker than anything else. I do not, therefore, think the absence of tusks in your elephant pipes anything of moment. It would have been quite enough had the head and trunk been there. Neither, as a clergyman, could I suppose the Rev. Mr. Gass to have countenanced any imposition - nor the eminent society with which he is connected. But I have done archæological work enough to know that some persons do not hesitate to try to impose on clergymen, and that people who know better are not above this. I have seen unblushing frauds in such unexpected quarters that I always like to have the bottom facts in any unusual find. The very best archæologists in the country are often imposed upon, and, of course, to outsiders it seemed possible that you might have been deceived by unscrupulous persons. I am glad to find you have so full and complete an answer ready.

For a great many reasons, I have had no disposition to question the genuineness of the find. Among these is my firm persuasion that the mastodon, or even the American elephant, has not been long extinct. I see no reason, from geological facts and facts of natural history, to remove him from the earth before man appeared upon it, although he doubtless lived partially before man. . . . In a sense, I believe that the Indians and Mound-builders were of one race, but it is in the same way that we are one with the French and Germans. I have not the slightest idea that the Mound-builders were ancestors of our present Indians; I simply regard them as often having the same general

origin. Our finds here show no recent connection.

be gratified to see your prompt action in this matter, for you have thus done a duty not only to yourselves and one of your active members, but to the scientific world at large at the same time. With thanks for your courtesy and best wishes for your continued prosperity, I remain Yours truly,

W. M. BEAUCHAMP.

From Prof. George Sheldon.

Deerfield, Mass., April 8, 1885.

CHARLES E. PUTNAM, Esq., President Davenport Academy,-

Dear Sir: I have this day received your pamphlet on elephant pipes, for which please accept my thanks. I have read with interest your clear statement in defense of Mr. Gass and your institution. My sympathies are entirely with you against the cruel insinuations of Henshaw. I have great respect for an honest scientific expert, and an equal contempt for those sweeping condemnations based on the necessity of maintaining a theory. I am in full accord with you in the remarks on local societies. It is here that the principal work must be done; here is the place for the great lights of science to come for facts and material for their theories. The encouragement of such institutions should be a prime object with the Smithsonian. The great universities of the land are excellent things, but in no view can we dispense with village schools. No complete and satisfactory examination of an unusual find can be had except on the spot, and as near the time as may be. . . I can as yet find no satisfactory solution to the query, "Who were the Mound-builders?"

Very respectfully yours,

GEORGE SHELDON.

From CHARLES H. STUBBS, M.D.

WAKEFIELD, Pa., April 30, 1885.

Secretary of Davenport Academy of Natural Sciences,-

My Dear Sir: The copy sent me of the paper by Mr. Charles E. Putnam, on "Elephant Pipes in the Museum of the Davenport Academy," was received only a few days ago. You will please accept my thanks for the same. I have read it carefully through from the beginning, and unhesitatingly say that the arguments therein presented are such as to convince any unbiased thinker as to the correctness of the points taken and the positions assumed. Mr. Henshaw, the scientific ornithologist of the Bureau of Ethnology of the Smithsonian Institution, is, as suggested, a new light recently appearing in the archæological firmament, and of little moment as ethnological authority. Why he should doubt such endorsement as your honored Academy is passing strange. Jejune writers are prone to be hypercritical, and he seems to be no exception to the general rule.

In conclusion will say that I delight to read anything bearing upon the origin of the race of Mound-builders, their habits and customs. The problem, from whence they came and who they were, seems to me as yet unsettled. Who knows but that it may yet be decided by the Davenport Academy of Sciences, or some other kindred association that relies upon the enthusiasm of its members, and not upon those who are fed upon Government pap, and able to pay parties to roam over and dig up relics in various sections of the country?

Your friend and well-wisher,

Charles H. Stubbs, M.D.

### From Dr. E. STERLING.

[We should be glad to publish Dr. Sterling's valuable letter in full, but its extreme length, and our limited space, will permit us to include only some brief extracts. The publication of this correspondence has made such unexpected demands upon our space that we shall be compelled to adopt the same course with the remaining communications. We are indebted to the courtesy of Dr. Sterling for several excellent pamphlets, by Col. Charles Whittlesey, having an important bearing upon the questions under discussion.]

CLEVELAND, OHIO, April 9, 1885.

At this late day, to mention our Indian as a descendant of the extinct "Mound-builder" is hardly worth the passing thought of any one who has carefully made this matter an honest study. As for the elephant and mastodon, there is proof enough, to any man who has eyes that will see, that both these animals lived down to a comparatively recent time, when our Indian hunted them for food with as good

success as the African does in his native jungle to-day.

Some fifteen years ago a large ditch was dug through a cranberry swamp in Lucas County, in this State, at a point where the muck of the bog was about eight feet deep on the layer of "hard-pan." The bones of a mastodon were found, most of them in a state that would not bear preservation. Those of the fore and hind legs were in a sound state, in an upright position, showing that the animal bogged in seeming solid muck, as in thin mire he would have wallowed, and in struggles these bones would not have been found in the position mentioned, proving that he was not mired in the early days of the bog.

Three miles from the city may be seen the remains of a bog which could never have extended over two acres of ground, in the widest place sixty feet, and depth seven feet. To-day it is reduced to one-half an acre. Through it runs a little spring-fed brook, never more than six feet wide. A stepping-stone used for crossing it was cut one day by the hatchet of an investigating boy. The chips seemed curious, and, on examination by others, proved to be ivory. Short work with a spade unearthed a well-preserved tusk of the *Elephas Primigenus*, and further work the next day resulted in the finding of two vertebræ, three ribs, a molar, portion of sacrum, and other bones of less consequence. When our society has the funds, further researches will be made, when it is expected to find most, if not all, the remaining bones.

This bog is on the gravel bluff on which Cleveland is built, two miles from Lake Erie, and down grade all the way. From many indications, Col. Whittlesey and other competent judges are positive that this bog is quite recent—less than five hundred years old. The bones, too, would indicate recent deposit, as they contained a marked amount of animal matter, and were better preserved than any I have ever met with. It will take much proof, and stronger evidence than I know of, to make me believe those elephants were mired in those bogs before the Indians roamed these forests, or before the Mound-builders possessed the State and constructed their wonderful works.

From C. A. HIRSCHFELDER, Esq., U. S. Consul.

TORONTO, CANADA, April 15, 1885.

The steps taken to vindicate certain unjust accusations made

against specimens belonging to your museum meet with my most hearty approval and sympathy. The assertions, in my opinion, were unjust, uncalled-for, and unscientific; they were such as to cast stigma upon all students who carry on field work. As one who has carried on field work in archæology for over ten years, I feel most sensitive over the remarks made, because it insinuates - in fact, directly states — that specimens found by outsiders which are different from any in the Smithsonian Institution are not to have any faith as to their genuineness placed in them. Now, I have found many unique relics, and it is rather hard on me if they are to be looked upon with suspicion because I myself am the only one who can assert positively that they are genuine; and yet, according to the article, my word is to go for nothing. We should expect, from an institution like the Smithsonian, that science would be encouraged, but they have taken rather strange steps in this direction. There is, however, one satisfaction, and that is the proof which the pamphlet plainly gives of the genuineness of the elephant pipes, showing, as it does, Mr. Henshaw's absolute ignorance of the subject on which he was writing.

I thank you for sending me your pamphlet, and trust that it may have the effect of in future making critics a little more cautious, and not attempt to insinuate against the genuineness of relics without good

foundation for doing so.

## From A. E. Blair, Esq.

CASTLE CREEK, N. Y., September 30, 1885.

Mr. Henshaw's position reminded me of some students who, when they have mastered the alphabet of a new language, feel as if they understood the whole thing. His attack upon the Academy was, to say the least, unprovoked and ungentlemanly. Surely, if no "find" or discovery were to be accredited except when made under the eyes of an inspector, some of our most valuable relics must be laid aside as unreliable. It is extremely unfortunate that the Smithsonian Institution should stamp its approval upon an article so full of errors as Mr. Henshaw's paper was, since to many of its readers only that one side will be presented.

#### From W. A. CHAPMAN, Esq., Assayer.

OKOLONA, ARK., September 6, 1885.

I am much pleased with the course pursued by the Academy in this controversy, and regard the authenticity of the pipes and tablets as settled beyond dispute. My pleasure can be better defined when I state that I have been an independent investigator, doing much of the labor with my own hands, and often laboring alone. Had I been so unfortunate as to have made the invaluable discoveries of Mr. Gass, I should have been obliged to face the Smithsonian batteries without his able defenders, and must have suffered complete annihilation. The defense of Mr. Gass is the defense of all private investigators.

## From GRANVILLE T. PIERCE, ESQ.

South Britain, Conn., July 15, 1885.

I have the pleasure of acknowledging the receipt of your paper relating to elephant pipes, for which I beg you to accept my thanks. I read the pamphlet with much satisfaction, mingled, however, with a rising indignation at the thought that men of science could be so unfair. I am decidedly of the opinion that you have the best of the argument, nor do I discover anything contrary to truth and reason in the facts as you have stated them.

# From J. THORBURN, Esq., of the Geological Survey.

OTTAWA, CANADA, April 24, 1885.

I have to acknowledge, with many thanks, the receipt of a copy of your pamphlet on "Elephant Pipes in the Museum of the Academy of Natural Sciences." I have read it with great interest, and, notwithstanding what has been said and written on the other side of the question, I consider you have fully vindicated your position. Unhappily, so many hoaxes have been perpetrated upon the public that one is naturally inclined to receive discoveries of the kind referred to by you with some degree of caution. The whole question is a most interesting one. Have you seen any of the work of the Haida Indians of British Columbia? They show a marked degree of artistic skill. We have a considerable number of them in our museum. Even their commonest utensils are highly ornamented.

#### From CHARLES N. LAUMAN, ESQ.

CHICAGO, ILL., April 27, 1885.

I received your pamphlet and read the article with much pleasure. It was clear and forcible, and, except that the members of the Academy are subjected to imputations on their good faith which, while baseless, cannot but wound generous characters, the Academy is to be congratulated on an attack which has afforded opportunity for such complete vindication.

#### From S. H. BINKLEY, ESQ.

ALEXANDRIA, OHIO, April 15, 1885.

Your admirable "Vindication" was received. In looking it over, I was surprised—nay, amazed—at the reckless indifference exhibited by Mr. Henshaw in his ruthless and baseless criticisms. Nor is Major Powell exempt from censure in permitting this mass of cruel insinuations to go forth as the dictum of the "Great Sanhedrim," from which there is no appeal. You have well said, "the mischief is done." Foreign scientists have "let in" a whim that the wisdom of the nation is concentrated at Washington, and (I am sorry to record it) this gross absurdity is covertly fostered by those from whom we expected better things. If my memory is not defective, the Davenport tablets were accepted by the French savants as authentic. . . . Although in

the estimation of all intelligent readers of your very able vindication, outside of that formidable "Bureau," there will be unanimous approval, yet I am apprehensive that Mr. Henshaw will be found safely intrenched behind the wing of the "Bureau," calmly contemplating your sharply serrated arrows falling harmlessly at his feet; but the time will come when your position will be fully sustained.

From Prof. Erasmus Haworth, Penn College.

OSKALOOSA, IOWA, April 4, 1885.

Your pamphlet on "Elephant Pipes" came to me to-day. I have carefully read it, and the least I can say of it is that it is very interesting. All of us who are at all interested in science are indirectly interested in it. If facts which are as well established as the authenticity of the pipes and tablets are thus to be assailed by those who should be high authority, what may we not expect in other departments? I fear this portends an unhappy condition in scientific circles.

## From A. DEAN, Esq.

HIGH BRIDGE, N. J., April 24, 1885.

I have lately received your "Vindication" of the Davenport Academy of Natural Sciences against the accusations of the Bureau of Ethnology, and thank you sincerely for your courtesy and kindness to one who must be to you a stranger. I have read your paper carefully and am delighted with it. Mr. Henshaw's attack seems to me to be uncalled for, cowardly, baseless, unscientific, ungentlemanly. I find it impossible to account for the seeming complicity of the Smithsonian in the assault. Prof. Henry was eminently candid and courteous, and until now I had supposed Prof. Baird was too large a man to be jealous of a society like that at Davenport. I am glad you have repelled the charges so meanly insinuated without a scintilla of proof, and that you have made the rejoinder so unanswerable. . . . I have long honored the Davenport society for its industry, and I trust it will not falter in its work because of Messrs. Henshaw and Powell.

## From REV. D. W. C. DURGIN.

PIKE, N. Y., April 27, 1885.

Through your kindness I have received, and with interest read, your "Vindication of the Authenticity of the Elephant Pipes." I had previously read Mr. Henshaw's views of the elephant pipes, and speaking, as I supposed, "as one having authority," I was inclined to accept his verdict as final, and to look upon the "relics" in question as a transparent fraud. It did not seem to me that the spokesman of a great national institution would treat with such seeming contempt any "find" that had the least presumption in favor of its genuineness. Your "Vindication" presents the matter in a different light, and furnishes to my mind strong probabilities that the pipes are genuine.

From J. A. LINTNER, Esq., State Entomologist, New York.

ALBANY, N. Y., April 8, 1885.

Please convey to your society my thanks for the excellent publication of Mr. Putnam upon "Elephant Pipes." It seems to be, from a part reading, an admirable refutation of the unworthy attack made upon the collections and operations of your society. I regret very much that anything of the kind should emanate from Washington, but it is obvious that a great effort toward "centralization" is being there made.

## From B. F. WALLER, Esq.

NEW PALESTINE, Mo., April 13, 1885.

Through the kindness of Mr. O. W. Collet, of St. Louis, I received your pamphlet vindicating your society from the imputations of fraud, so ungenerously accused by the Bureau of Ethnology. I regard your defense as being an able one, and of sufficient weight to carry conviction to all honest seekers after scientific truth. I have been led to suppose that your collection contained many spurious relics, but since reading your pamphlet I am now convinced otherwise.

## From OLIVER D. SCHOOK, Esq.

Hamburg, Pa., April 10, 1885.

Your pamphlet relating to "Elephant Pipes" is received. In writing this to you in thankful acknowledgment, I can only express my regret that any occasion should have arisen that would have required this vindication, which I think is complete.

#### From EDWARD L. BERTHOUD, ESQ.

GOLDEN, COL., April 25, 1885.

I have received the "Vindication," and have read it with profit, pleasure, and satisfaction. I thank you for the work, and am very much pleased at the stand you have taken in the Davenport Academy. . . . I know something of Mr. Henshaw, and I think he has "brass" enough in him in thus settling, ex cathedra, what has puzzled and foiled the repeated attempts of some of the best antiquarians in America for over half a century. I see nothing improbable in the mastodon being an animal cotemporaneous with the early inhabitants of the Ohio and Mississippi valleys, and I firmly believe it was living there since human occupation.

#### From Mr. R. P. GREG, F.R.S.

Coles, England, April 29, 1885.

I have just received your paper on "Elephant Pipes from one of the Mounds in Iowa," for which I am much obliged. I am much interested in prehistoric America, but as yet have not come to any fixed opinion as to the origin of the Mound-builders, or their connections with the old Mexicans. I may observe, however, with respect to representations of elephants, that they have been not infrequently found deposited in the ruined cities of Central America, and they seem to have an Asiatic-Indian appearance.

From MAX UHLE, President of the Royal Ethnological Museum.

Dresden, Prussia, May 7, 1885.

I have read with great interest the pamphlet you were so kind to send me, on the elephant pipes which are preserved in your important museum at Davenport. On reading your treatise, and inspecting the wood-cut of one of the pipes accompanying it, I have become inclined to believe in the genuineness of the pipes in question. In no case should objections based upon circumstances of the finding, if not accompanied by objections taken from the marks of the things themselves, suffice for the decision in such a matter, and it is to be wondered at that so eager attacks are undertaken as to the authenticity of relics without any inspection of the things themselves.

From Dr. Joseph Belluni.
(translation.)

Perugia, Italy, April 30, 1885.

I am in receipt of your defense of the authenticity of the elephant pipes in the museum of the Academy of Natural Sciences at Davenport. I thank you sincerely for sending me this paper, which I endorse fully, and which I have read with great pleasure and instruction, at the same time admiring your learned and exhaustive criticism of the counter-argument.

From Edgar Hepp, President of the Society of Science, Morals, Letters, and Art. (Translation.)

VERSAILLES, FRANCE, May 19, 1885.

I have the honor, in the name of the Society of Science, Morals, Letters, and Arts of Seine and Oise, to thank you for the obligation under which you have placed it for your monograph on "Elephant Pipes." One of the members of our Society, the learned Dr. Osnard, presented to us in the session of May 8th a complete report of the interesting discoveries which signalize your work, and which renew interest in the studies of Marquis De Nadaillac upon American antiquities. One of the members of our Society made the remark that the use of the pipes, so general among Americans when they assemble themselves, serves to preserve their national traditions among all the village Indians, where the calumet is still held in honor.

Whatsoever may be the worth of this consideration, your communication has in a lively manner interested the Society, which expresses but one regret, which is that knowledge of the English language is a privilege enjoyed by only a small number of the members, and that our Society is therefore only able at this time to associate itself in an unsatisfactory manner with the spirit of scientific investigation in your Academy.

## From OSCAR W. COLLET, ESQ.

[The Davenport Academy was indebted to the thoughtful courtesy of Mr. Collet for the first information received of the accusations made by Mr. Henshaw against the authenticity of its relics and the integrity of its members, and it was largely due to the emphatic opinions expressed by this emment scholar as to the damaging effects of these charges that induced prompt action on the part of the Academy to repel this unjustifiable attack. As will be seen, Mr. Collet does not approve the methods adopted for this purpose, and considers that, inasmuch as we did not follow his kindly counsel, therefore the publication of his original letter would only do us injury. As indicating, however, the unscientific methods adopted by Mr. Henshaw, as well as the disastrous effects of his accusations if allowed to pass uncontradicted, these views of a profound and disinterested investigator possess great scientific value; and hence we cheerfully avail ourselves of an implied assent, and now place these important communications before the scientific public.]

St. Louis, Mo., October 8, 1885.

Dear Sir: I have been ill for a long while, and am scarcely restored to health as yet. I received a letter from Mr. Putnam, but do not know whether I answered it, or was able to answer it, when it came to hand.

What I wrote at first expressed my sentiments; they remain the same. But what I reprobated was the attack itself, and its manner. I do not go into the scientific value of the finds. I believed, and still believe, the parties at Davenport were strictly honest — not scoundrels, as represented by the Ethnographical Bureau—and that what they gave to the world were facts. As to whether they have themselves been deceived, the importance of the finds, Mound-builders theories, contemporariness of man and the hairy elephant in Iowa, and all such matters, they are entirely beyond the question, for they are points for legitimate criticism, whereas personal honesty is not. What excited my indignation was not that supposed errors were pointed out, supposed mistakes criticised, the scientific value of finds attacked, but that the personal honesty, integrity, and truthfulness of men should have been wantonly assailed, their characters vilified, and, outside the special objects under consideration, their entire work deteriorated and damaged with a recklessness unjustifiable and uncalled-for. In this I speak only as an ordinary educated gentleman, and, as such, competent to form an opinion in the premises. Farther than this I do not go, as I do not feel that I possess sufficient knowledge to enter into a discussion of archæological questions with those who have made such matters a special study.

Therefore, as the answer you have deemed it advisable to publish has gone beyond the occasion, and taken up the discussion of debatable questions, the use of my name, so far from helping your cause, would damage it.

Yours truly,

PROF. PRATT, Davenport, Iowa.

OSCAR W. COLLET.

St. Louis, Mo., July 6, 1884.

PROF. W. H. PRATT, Davenport, Iowa,-

Dear Mr. Pratt: In the 1880-81 Annual Report of the Bureau of Ethnology of the Smithsonian Institution, in a paper by Mr. Henshaw, there is an attack upon the Davenport Academy of Sciences and Mr. Gass, which not only affects them as scientists, but their personal honesty and integrity of character. The question is not simply one of

opinion, of judgment, or of error, but they are charged by very direct implication with being perpetrators of frauds. The most favorable view that can be taken is that they are either great simpletons or accomplished knaves. If the parties thus arraigned before the world for so grave an offense keep quiet, and suffer the imputation of dishonesty to remain, their honor and reputation is forever overclouded, an irreparable damage done their entire work, the whole collection placed under the ban of permanent suspicion and doubt, and its value dimin-

ished to the very lowest point.

Under these circumstances no mere protest, however strong, will meet the case or remove the stain. I presume, from what I have read and heard, that it can be established that the finds called in question and alluded to are genuine finds, and established judicially, and that none of the parties thus so seriously implicated have been guilty of any knavery in the premises, and that none of them, to this day, have any reason to believe they have been made the victims of deceitful proceedings of any kind. If one and all, as I take to be the case, they are conscious of their own integrity and freedom from guile in any and every matter touching these finds, I do not well see how they can avoid instituting a libel suit and bringing out the evidence, and thus vindicating their own integrity, a matter of more importance than any archæological questions.

I think, moreover, you owe this to others as well as yourselves. There are many who, without passing opinion on the finds in question, from the best helps they could get, have insisted strongly that whatever might be the value of the specimens to archæology, the persons themselves were honest, and that their acts could be depended upon. I do not see what other course is open, for the writer, not satisfied with his most damaging imputations, goes on to poison the wells, to forestall any vindication through the discovery of other objects; for, on page 157, he goes on to say that each succeeding carving of the mastodon, be it more or less accurate, instead of being accepted as cumulative evidence, will be received with ever-increasing suspicion. Monstrous!

I write very plainly, because I feel that the gentleman in question has gone outside the record to attack the reputation of others in a manner which nothing but the most sure evidence in his possession of their fraudulent acts could for an instant justify.

I beg to be remembered to your associates whose acquaintance I casually formed, and to Mrs. Putnam in particular.

Very truly yours, OSCAR W. COLLET.

From Dr. J. B. Holder, of the American Museum of Natural History, Central Park, New York City.

[We have been favored by Dr. Holder with the perusal, in advance of its publication, of a valuable paper upon "Some Æsthetic Features of Prehistoric Art," and now avail ourselves of his kind permission to include herein its opening paragraph.]

American archæological science seems to be, in a sense, homeless, notwithstanding it is large and growing. There are, to be sure, excellent institutions holding with jealous care objects of great worth. The

American Antiquarian Society, at Worcester, beginning the category with the oldest in point of time; the Smithsonian Institution; the Peabody Museum of American Ethnology, in Cambridge; the American Museum of Natural History, Central Park; and the well-known Davenport Academy of Sciences — all prominent, with great devotion to this branch of science.

Though these institutions are presided over by able scholars, yet there is certainly a great lack of uniformity of methods. Also, there seems to be desirable a purer spirit of science exercised in the disposition of material, and a more wholesome comity of intercourse between

individuals and institutions devoted to this subject.

Though our notes more largely appertain to other features, yet we are constrained to regret the attitude of some archæologists towards the proceedings of the Davenport Academy. The reputation of this institution is too well established to be lightly arraigned, even if it be a monotreme, or a toothed bird, or a loxolophodon that its council offers for consideration in the shape of a carved stone pipe. By all the amenities are we not bound to give respectful attention? As Falstaff says:

"But, then, think what a man is."

Are not the members of the Davenport Academy gentlemen and scholars? Should not the title of their published transactions be an unquestioned guaranty of high motives, the contents always, of course, subject to clear scrutiny and fair revision, as in all other like instances?

#### DR. WILLIS DE HASS, Washington, D. C.

[In a communication bearing date March 31, 1885, Dr. De Hass thus refers to the attack of Mr. Henshaw upon the Davenport Academy and its published 'Vindication': "! will here say that the unjust criticism of which you complain can do no injury to the tablets and pipes. Criticism, to have weight, must be made by competent authority. The persons of whom you complain are not archæologists, and their opinions on such subjects are not regarded as possessing weight by competent archæologists." During the past winter Dr. De Hass favored the Academy with a lecture upon "Prehistoric Archæology — Progress of Discovery," in which he referred at some length to the relics in question. Coming from so competent and distinguished an archæologist, his investigations and conclusions must carry with them great weight, and hence we have extracted this portion of his lecture.]

Having said thus much in commendation of the Academy and its excellent work, it may be expected that I shall say something of the charges so industriously circulated, affecting the value of certain discoveries. I can add but little to the masterly "Vindication" made by President Putnam. His admirable rejoinder is full, thorough, lucid, and convincing. The charges and insinuations made by captious critics are unjust and unfounded. I have carefully examined the relics specially objected to, and have no hesitation in pronouncing them equally entitled to credit given to the collection generally. The elephant pipes, which have elicited so much criticism, I consider as genuine as the most undoubted specimens in the museum. Subjected to the sharpest tests, they pass successfully. The principal objection to the pipes is that they are anomalous—that no similar forms occur in other collections, and that the mastodon did not exist contemporaneously with man. I could present abundant evidence in contradiction

of the assumption, had I time. At the Montreal meeting of the American Association for the Advancement of Science I read a paper on the "Antiquity of Man in North America," in which a strong array of facts was presented in support of the contemporaneous presence of man and mastodon on the continent. I need not, however, detain you, as these facts have been well stated by Mr. Putnam—suffice it, the evidence is clear and conclusive to any unprejudiced person. It may be important, perhaps, to state here that the Grant County (Wisconsin) "Elephant Mound," which has been questioned, actually exists, and can be seen by any visitor. Anxious to get all the facts bearing on this disputed point, I addressed a letter to the County Surveyor of Grant County, and here is his answer:

PATCH GRASS, GRANT COUNTY, WIS., July 29, 1885.

DR. W. DE HASS, Chicago, Ill.,-

Dear Sir: Your favor of the 23d inst., inquiring about the elephant mound, at hand. Some time between 1871 and 1875, at the request of Mr. Jared Warner, I made a measurement of the mound, also a rough sketch. The measurement and sketch Mr. Warner sent to the Smithsonian Institution. It has since appeared in one of the reports of that institution. The mound is located on the Mississippi River bottom; soil is sandy, with fine gravel. Head to the south, back to the west. My recollection of the measurement is, 66 feet from back to feet, 132 feet from head to tail, and about 7 feet elevation along middle of side. At the time I made the measurement the ground had been cultivated three or four years, consequently the tail and trunk, which were formerly quite distinct, were rather obscure. At present the mound is rather indistinct, the ground being cultivated every year since it was first broken. In the immediate vicinity there are quite a number of other mounds.

Very respectfully yours,
J. C. Scott, Surveyor.

But this is not the only "elephant mound" in Wisconsin. Since coming west my attention has been called to another work near the shore of Green Lake, Wisconsin, and I sent directions to the County Surveyor of Green Lake County to visit and measure the mound referred to. In reply to my note he wrote as follows: "There is an elephant mound on the old Danty farm, at the west end of Green Lake. It is one of a large number of mounds." I have not yet succeeded in getting an accurate description and measurement of this mound, but expect to do so very soon. I may further add that a correspondent in Minnesota communicated the fact that he had found another elephant mound near Red Wing; and in this connection I may refer to the announcement, made a day or two since, of the discovery, in this mound, of the remains of a mastodon.

Of the tablets, which are also distrusted, I may add that, soon after their discovery, the late Professor Foreman, of the Smithsonian, and myself made a careful investigation and study of them. We could not determine their real character, but we did not doubt their genuineness.

The point is made against these several discoveries that they are anomalous, therefore not genuine; that, in the case of the pipes, there is no evidence that man and the mastodon existed contemporaneously. I have shown how fallacious is this argument as referred to in my paper before the American Association at Montreal. In the case of

the tablets, the further objection, readily presented by all novices and quibblers, that the Mound-builders did not possess the means of recording data, or perpetuating ideas, is urged. Scores of sculptured stones, of unquestioned genuineness, have been rescued from mounds, or other ancient depositories. Rock-sculpture was extensively prac-

ticed by prehistoric nations.

In concluding, I may remark that it is always unfortunate when doubts and quibbles occur about scientific discoveries. All important discoveries in archæology are liable to misconception, distrust, and malicious quibbles. This is one of the penalties incurred by all whose names are associated with important discoveries. The skepticism of man is as remarkable as his credulity. The discovery of the Rosetta Stone was questioned, but the Cardiff Giant was swallowed whole, even by scientists! Those who are interested in the success of the Academy must not lose courage or faith, but maintain the integrity of the institution and the objects which enrich it.

We must here conclude these selections. The letters and extracts given have been taken somewhat at random, but fairly represent the tone and spirit of the entire correspondence. To the larger number of those whose valuable communications have not been specially mentioned, it should be stated, in explanation, that it is only because of our limited space, and that in its defense against the ruthless assaults of the Bureau of Ethnology the Davenport Academy has been greatly encouraged by their very general and hearty expressions of approbation and support. It only remains to present to our readers the few communications received which are unfavorable to the positions we have assumed or the methods we have adopted in making our defense. As we have no pet theories to maintain, and only desire to ascertain and establish the truth, it affords us pleasure to thus give both sides a fair hearing.

# From Dr. J. F. SNYDER.

[The communication of Dr. Snyder is unique, in that it is the only one we have received that controverts the contemporariness of man and the mastodon, and therefore, by implication, leaves our ancient artist without a model for his carving of the elephant. At the same time, it furnishes to Mr. Henshaw a "model" of an argument, without an accusation of "fraud." Dr. Snyder has the courage of his convictions, and bravely confronts all the recent discoveries in archæology with the now generally abandoned theory, that the elephant had disappeared from the American continent before the advent of man. It must be conceded he has constructed an ingenious argument, and, notwithstanding its extreme length, we are gratified to place it before our readers.]

VIRGINIA, ILL., March 22, 1885.

CHARLES E. PUTNAM, Esq., Davenport, Iowa,-

Sir: If the chief object of your well-written pamphlet is to vindicate the veracity and honesty of purpose of Rev. Mr. Gass, I think you have succeeded well in your purpose. I can see no good reason

for doubting his integrity and truthfulness, and I accept his statements without question. I believe the elephant pipes and inscribed tablets were discovered exactly as represented in the published accounts of their finding by the Davenport Academy of Sciences; and I have no disposition, at present, to inquire into the possibility of fraud having been practiced by other designing persons. Mound-building, I know, was practiced by some of our Indians down to a comparatively recent date; and, in many instances, articles of modern manufacture have been found interred in the mounds, together with ancient stone imple-Consequently, while I believe Rev. Mr. Gass to be innocent of practicing deception, I yet cannot give my assent to the inference that the pipes and tablets are the work of a pre-Columbian people; nor do I see any reason to ascribe to them a higher antiquity than the date of the advent of Europeans into this valley.

The elephant pipes are presented to the scientific world as new and valuable corroborative evidence of the coeval existence of man and the great proboscidians on this continent. If this high claim could be established by irrefragible proof of their prehistoric origin, their evidence would be startling indeed. Owing, perhaps, to inherent perverse dullness, or ignorance, I must frankly confess that I am yet skeptical as to the contemporaneous existence of man and the mammoth anywhere Obviously, in the brief limits of a letter, I cannot state much more than my convictions. To cite and discuss facts and authorities at length, and to elaborate the reasoning by which I have been compelled to reject the apparently well-founded conclusions of men far abler than myself, would require the space of a considerable

volume.

Admitting the well-known fact that the bones of man and the products of his arts are often found intimately associated with the remains of the mammoth and other extinct animals, in the drift-gravels of England, of Nebraska, of the valley of the Somme, at Neanderthal, on the Pomme de Terre, and elsewhere, does it prove more than the operation of the process that may at this day be going on at the Mer de Glace and other great glaciers, where the bones of the perished hunter and his weapons and accourrements, on the surface, may ultimately be rolled away and buried in the moraine, together with the remains of the mammoth long before entombed beneath the sea of ice? I think the agency of local glaciers fully explains many of the splendid discoveries of MM. Boucher de Perthes and Lartet, and others, in the valleys of Southern France. But we are told that we have the testimony of witnesses, written on tablets of ivory, who actually saw the great hairy mammoth stalking about on the eastern slopes of the Pyrenees and in the valleys of old Gascony. Among the relics of early man exhumed at Les Eyzies and La Madelaine were fragments of ivory, on some of which were rudely scratched the unmistakable outlines of the huge monster, with its curiously curved tusks and long, shaggy hair. Of these clumsy etchings of the great beast, Sir Charles Lyell says: "If the representation had been merely that of an elephant, we might have conjectured that some African tribe, migrating to the south of France, had

brought with them a drawing of the animal as it still survives in that country. But the characteristic wavy lines of the long hair of the mammoth allow no escape from the conclusion that the cave men saw this animal in life, and that they were sufficiently advanced to make a tolerably faithful sketch of it." If the sketch, or sketches, in question had represented the elephant, or mastodon, whose remains are found there, as well as in almost all parts of the world, the presumption of coeval existence of artist and animal would be well-nigh conclusive. But the sketches represent the *hairy* mammoth, that is not known to have ever lived within a thousand miles of that locality. So far as I have ever been able to learn, no remains of this identical species of pachyderm have ever been found in France; and no other fragments of ivory, or other representations of elephant or mammoth, have yet

been discovered there, except in that one locality.

These "cave men," among whose remains those wonderful inscribed fragments of ivory were found, it must be borne in mind, belonged to the "reindeer period" of human civilization, and were, beyond doubt, exotics of far northern or north-eastern origin. They were essentially hunters, who had, for some reason, migrated from a distant region to the more genial valleys of France and Switzerland, and brought with them their arts and their reindeer herds. Though troglodytes, and perhaps cannibals, they had advanced, in no mean degree, in some of the arts, as is seen in their implements of stone and horn and in their neat carvings. Compared with their clear and expressive representations of the reindeer, fish, horse, etc., sculptured on horn, the pictures of the hairy mammoth on the ivory fragments are the merest scratches. These and other considerations have convinced me that those curious pieces of ivory, with the amazing records they bear, were brought by the reindeer men in their exodus from their former homes, and were the highly prized trophies of some daring party that had penetrated to the frigid north, and there saw, frozen in the ice, the carcass of the great animal they essayed to portray on bits of its own ivory, in order to bring to their tribe tangible proof of what they had seen; just as the Tungusian hunter who, at the beginning of this century, discovered, frozen in the ice of the Lena delta, the body of one of the same great hairy mammoths - now in part preserved at St. Petersburg - and cut off its tusks and carried them home to verify his marvelous find.

The late Col. J. W. Foster, LL.D., stated that bones of the mastodon had been found, in the Mississippi Valley, so recently dead, and containing yet so great an amount of animal matter, that a nourishing soup could be made of them! What nonsense! With all the knowledge we have of the existence of the elephants on this continent, is there a geologist of reputation who will assert that we have *positive* proof that even a single individual of them survived the latest glacial, or drift, period? The very freshest of their remains would yield no more "soup" than would a chunk of granite or hematite.

With all the evidence of man's early occupancy of this continent before us, including the many instances of association of his remains and vestiges of his arts with the remains of gigantic extinct animalsnot overlooking the equivocal palæolithic stone implements of the New Jersey river-gravels, or the so-called elephant mound and elephant pipes — is there an archæologist who will contend that we have positive assurance of man's appearance on this continent prior to the latest drift period? I believe that anthropologists are agreed that the American Indian is an exotic, not an autochthon; but what period of time elapsed, after the recession of the great ice-fields, before he was introduced here, we have no means of knowing. Nor have we reliable data to serve as a basis for any satisfactory conjecture as to the mental development of these people when they came. The relics of their arts, falling in the classification of neolithic, gives color to the assumption that they were already mound-builders on their arrival, and flourished here for some centuries, and were found by De Soto in the decadence of their ancient practices.

To meet the insuperable negative argument of Mr. Henshaw, that no relics of the Indian's use or knowledge of ivory have yet been found here, you say: "At the era of the Mound-builders [who are presumed to have made the elephant pipes] the elephant and mastodon must have nearly reached the point of extinction on this continent, and hence would be infrequently seen, and the article of 'ivory' quite uncommon." Yet you marshal an array of many instances, and profess to be able to produce many more, of the remains of man and the elephant found together, in proof that the two must have been coeval here for a great length of time. Perhaps you would have us understand that the human remains found with the mastodon's were not those of the cultured (?) Mound-builder, but of a race of wild Indians who were here prior to the coming of the Mound-builder? position granted, I would ask why it is that this primitive race, dominant here for ages, when elephants and mastodons were plentiful, did not learn to use ivory, or leave us some record of their acquaintance with the great beasts? We have learned that, in Central Africa, the most degraded and beast-like cannibal tribes, who are the least removed from mere simian intelligence, work ivory into beautiful ornaments and weapons. The Root-diggers of thirty years ago, admittedly the lowest known people of our continent, went naked, and subsisted on roots, acorns, and vermin - like animals; yet they manufactured beautiful weapons and ornaments of sea-shells, stone, bone, etc. we are expected to believe that the Mound-builders, who wrought the most refractory stones into surprising shapes of elegance and artistic beauty; who traveled hundreds of miles for mica and sea-shells, and made all materials, from rushes to hematite and copper, tributes to their arts,—and yet failed to utilize the ivory (that finest of all substances for their purposes) of the few mastodons they occasionally killed or found dead! We are expected to believe that the Indians who — according to Dr. Albert Koch — killed the great mastodon they found mired in the Bourbeuse bottom with fire and with flint weapons, feasted on his flesh, but left his immense ivory tusks untouched. it not reasonable to believe that the very scarcity of mastodons would, when one was seen by the cultured (?) Mound-builders, inspire them

with such wonder and awe as to cause them to make some memorial of it, as they did of the mythical Piasa? or by imitation of it in pottery? or by their common method of sculptured foot-prints? Surely, a people of such imagination and superstition as was characteristic of the mound-building Indians, would have perpetuated the appearance of these huge monsters in other forms than these two pipes of soft sandstone, defective in the most prominent feature of the animal—its tusks.

In conclusion, I need scarcely state that I fully agree with Sir John Lubbock, that "there does not, as yet, appear any satisfactory proof that man coëxisted in America with the mammoth and mastodon." ("Prehistoric Times," first edition, page 236.) The author of your two elephant pipes may have seen a living female elephant, or a crude school-book engraving of it, perhaps at Honfleur, or Dieppe, or Paris, or elsewhere. Their antiquity, in my opinion, can in no event exceed — more probably falls short of — the early amalgamation with the trans-Mississippi Indians of the coureurs de bois, whom neither the power of Cartier or Champlain, nor the authority of the Church, could control.

I have not seen your inscribed tablets; but assuming the faithfulness of their representation in the second volume of Proceedings of the Davenport Academy, I would, without hesitation, relegate them to the class of so-called relics to which the Grave Creek tablet and the Lenape stone belong.

J. F. SNYDER, M.D.

From Prof. W. J. McGee, U. S. Geological Survey, Washington, D. C.

[As a citizen of our State and a member of our Academy, Professor McGee is held in high esteem, and with all his associates here his utterances will always have respectful consideration. While, in this instance, we have been compelled to disregard his counsel, we have no reason to doubt his entire sincerity. With Professor McGee's permission, we now present our readers with his correspondence having reference to the questions under discussion. The fact that it was not intended for publication renders it no less valuable.]

DEPARTMENT OF THE INTERIOR.

UNITED STATES GEOLOGICAL SURVEY,
WASHINGTON, D. C., April 8, 1885.

JUDGE CHARLES E. PUTNAM, Woodlawn, Davenport, Iowa,-

My Dear Sir: I have great pleasure in acknowledging the receipt of your "Vindication of the Authenticity of the Elephant Pipes and Inscribed Tablets" in the Davenport Academy, together with the copy of the Daily Democrat containing an editorial relating thereto. I have read both with great interest, but, I must confess, a good deal of pain.

Certainly the Academy has nothing to gain from controversy with the Smithsonian Institution, with the Bureau of Ethnology, with Major Powell, or with Mr. Henshaw; and it appears to me that the tone of

your vindication is controversial rather than judicial.

The Bureau of Ethnology is endowed with money and brains, and, by virtue of its connection with the Smithsonian Institution, as well as the eminence of its Director, must be regarded as one of the leading, if not the leading anthropologic institution in this country. Its friendship and coöperation are therefore valuable to all other such institu-

tions throughout the country, while its enmity will prove doubly disadvantageous in consequence of the high esteem in which it is deservedly held abroad. Thus far the history of the Davenport Academy has been one of successes. It has encountered obstacles, but these have been successfully surmounted; and it has made for itself a reputation for energy, industry, and thoroughly scientific merit—such a reputation as is not easily tarnished. I am therefore sorry that it was not deemed best by the members of the Academy to either ignore the mistakes and supposed personal thrusts contained in the Second Ethnologic Annual, or, at most, to respond to them through the columns of some scientific journal in a judicial, dispassionate rejoinder of a page or two.

Please understand that in thus expressing my feelings I express the sentiments of a firm friend of the Academy and a citizen of the State. My feelings are also, perhaps, determined, to some extent, by my principles in regard to the ethics of science. I maintain that in scientific work the ego should be forgotten, that scientific credit is an idle figment, and that individual names should appear only as a means of fixing responsibility. I realize that identical views were probably presented by some of your members in the discussions relating to the matter, and that your course was decided upon by consense among members and friends of the Academy; and I do not criticise your course, but rather, as I have already intimated, express the feelings of one of the members of the Academy.

Now that the pamphlet has been published, and it is proposed by the Academy to distribute it as widely as possible, I am quite willing to do my share. I should like, therefore, to have you forward me two or three additional copies. At least two gentlemen who are interested in the matter, knowing that I have some connection with the Davenport Academy, have applied to me for copies. I should like to be able to

meet such requests in the future.

Please convey my kindest regards to your family, particularly Mrs. Putnam, to whom I am deeply indebted. My debt to her shall, however, be partly repaid within a few days.

With best wishes for the Academy, I beg to remain

Sincerely yours, W. J. McGee, Geologist.

DAVENPORT, IOWA, April 11, 1885.

W. J. McGee, Geologist, Department of the Interior, United States Geological Survey, Washington, D. C.,—

My Dear Sir: Your valued favor of the 8th instant was received this morning. From your emphatic condemnation, during your last visit here, of the "careless statements" of Mr. Henshaw, we relied upon your support, and hence the tone of your letter was quite a surprise. However, we all feel that it would, after all, be quite unreasonable in us to expect more in view of your present environments.

We note with entire good nature your strictures upon the style and manner of our vindication. Our action, however, was well considered, and the manner in which it has been received by archæologists assures us of the wisdom of our decision. Throughout the extensive correspondence now before me, our "Vindication" is strongly commended as exceedingly temperate and satisfactory. It was certainly "judicial," in that it gave both parties in this archæological war a fair hearing; and in this connection, my dear sir, you must permit me to say that to characterize as "controversial" an exposure of error and falsehood was

scarcely judicious on your part.

We notice with curious interest your use of the terms "friendship" and "enmity" as applied to the Bureau of Ethnology. Was not this an inadvertence? The present management may entertain these merely human feelings, but the Bureau itself, as the embodiment of pure science, should be above such weaknesses. "In scientific work," you know, "the ego should be forgotten!" While you warn us of the danger of incurring the enmity of the Bureau, you also admit that in the volume under discussion it made "mistakes;" and we feel that, inasmuch as we have truth on our side, the Bureau cannot fail, in the end, to do us justice.

Moreover, it may be added, in conclusion, if the Henshaw paper is a product of the *friendship* of the Bureau, the Davenport Academy has little to dread from its *enmity*. A more insidious and malignant attack

could not have been made by its worst enemy.

We are much gratified at the interest your friends are taking in our "Vindication," and I have handed your letter to Mr. Pratt with the request that he should forward the copies you desire. Thanking you for the friendly interest you have taken in our affairs, I remain

Very sincerely yours,

Prof. W. J. McGee.

CHARLES E. PUTNAM.

DEPARTMENT OF THE INTERIOR.
UNITED STATES GEOLOGICAL SURVEY,
WASHINGTON, D. C., April 14, 1885.

My Dear Sir: Your valued favor of the 11th instant is this moment at hand. I learn from it with regret that the tone of my letter of the 8th instant cannot have fairly represented my feelings. As I intimated in that letter, if I had taken part in the counsels of the Academy, I should have advocated the publication of a briefer and more impersonal vindication; but, as my remarks during my last delightful visit to Davenport expressed, and as I intended that the tone of my letter should imply, I regarded, and still regard, some vindication as urgently demanded. From my acquaintance with those who have taken part in the vindication, I am convinced that your action was "well considered;" and I do not doubt that, had I been present during the discussions in relation to the subject, I should have acquiesced in the general judgment and freely borne my share of the onus of the defense. Indeed, I have orally defended the Academy in this matter, as well as your vindication, in much stronger terms than my last letter may have indi-

cated; and I deeply regret your inference that you cannot rely upon

my support in this as in other matters.

Under existing social conditions no human institution can be absolutely divorced from its founders and leaders; and accordingly, though personally I hold the ego to be of subordinate importance, it seems to me to be admissible to speak of "friendship," "enmity," and other human sentiments in connection with such institutions. So the cooperation that has existed between the Bureau of Ethnology and your Academy may be regarded as an expression of the "friendship" existing between these institutions. However, it is not worth while to discuss an immaterial point. Certainly we are agreed in this—that some vindication was so urgently demanded that the matter could not be ignored by the Academy.

It was only the personal element that enters into your vindication that I thought of characterizing as controversial. The entire document is judicial in the sense in which you use the term, for it unquestionably contains so full a statement of the questions at issue as to afford the public generally the means of deciding independently upon

the merits of the case.

I am pleased to learn that the course of the Academy has received so general commendation from archæologists, and trust the effect of the episode will be to augment the high esteem in which the Academy is already justly held at home and abroad.

I have pleasure in acknowledging receipt of three additional copies

of the "Vindication." I will see that they are well placed.

Believe me to remain, my dear sir,

Very truly yours,

W. J. McGEE, Geologist.

JUDGE C. E. PUTNAM,

Woodlawn, Davenport, Iowa.

From Prof. Spencer F. Baird, Secretary of the Smithsonian Institution, Washington, D. C.

[With the understanding that the Bureau of Ethnology was under the control of the Smithsonian Institution, and entertaining a very high opinion of the exact scholarship and profound scientific attainments of its distinguished Secretary, we sought to ascertain how it happened that so faulty and unscientific a paper as that of Mr. Henshaw's should have been included in a Government publication. The results of our investigations, as disclosed in the following correspondence, will be read with interest.]

DAVENPORT, IOWA, May 31, 1885.

PROF. SPENCER F. BAIRD, Secretary of the Smithsonian Institution, Washington, D. C.,—

Dear Sir: During the past summer an eminent archæologist directed our attention to an attack made upon our Academy by Henry W. Henshaw in the Second Annual Report of the Bureau of Ethnology, and kindly forwarded us a copy of the publication which he had received from the Bureau, for our inspection. In expressing his condemnation of this paper, this gentleman strongly advised us to have the matter presented as a proper subject for Congressional inquiry. After careful consideration, however, we decided upon a different course,

and the result is the little pamphlet I send you herewith. As one has before this been forwarded to your address, it has perhaps already fallen under your observation, but I send you another copy in connection with this communication, as it will render unnecessary any further statement of facts, and will present with sufficient clearness our special

grievances.

The force of this attack was very greatly augmented by the connection of the Bureau of Ethnology with the Smithsonian Institution, and I therefore take the liberty of writing to ascertain whether this paper of Mr. Henshaw's is approved and endorsed by your Institution, or by yourself. In making these inquiries, perhaps I ought to say we have in view a revision of our pamphlet for another edition, which will probably be required in the near future, and awaiting with interest your answer to these inquiries, I remain,

Very respectfully yours,

CHAS. E. PUTNAM.

SMITHSONIAN INSTITUTION, WASHINGTON, D. C., June 4, 1885.

Dear Sir: I am in receipt of your letter of May 31st, announcing the transmission of a pamphlet in reply to an article by Mr. Henshaw, and which I had previously read with much interest. I have sent a copy of your letter to Major Powell for his consideration.

Respectfully,

SPENCER F. BAIRD.

C. E. PUTNAM, ESQ., Davenport, Iowa.

DAVENPORT, IOWA, August 26, 1885.

PROF. SPENCER F. BAIRD, Secretary Smithsonian Institution, Washington, D. C.,—

My Dear Sir: On the 31st of May last I took the liberty of calling your attention to an article entitled "Animal Carvings from Mounds in the Mississippi Valley," by Henry W. Henshaw, and appearing in the Second Annual Report of the Bureau of Ethnology. As this paper assailed the authenticity of relics in our museum, and the honesty of members of our Academy, I was thereby impelled to submit for your careful consideration the following inquiry: "The force of this attack was very greatly augmented by the connection of the Bureau of Ethnology with the Smithsonian Institution, and I therefore take the liberty of writing to ascertain whether this paper of Mr. Henshaw's is approved and endorsed by your Institution, or by yourself."

This inquiry, I am sure, was entirely proper. You occupy a high official position in the administration of a great educational trust, and it is considered that every citizen who is engaged in scientific work is entitled to share in its advantages. It was therefore with surprise I received and read the following laconic reply to my inquiry:

"I am in receipt of your letter of May 31st, announcing the transmission of a pamphlet in reply to an article by Mr. Henshaw, and which I had previously read with interest. I have sent a copy of your letter to Major Powell for his consideration."

Inasmuch as Major Powell was implicated with Mr. Henshaw in the commission of the wrong of which we complain, this reference of the matter back to him was, to say the least, a singular disposition of my inquiry. I have, however, been awaiting with curious interest the result. As no report thereon from Major Powell has been communicated to me, it is reasonable to conclude he has no answer to make. Now, my dear sir, you must pardon me the observation that, in a matter of so much importance, we were entitled to a full and frank answer to our inquiry.

Here was a Bureau working under your supervision, and here was its official report ushered into the world of science with your apparent endorsement; and, either by mistake or design, this publication contained a paper in no sense an original scientific investigation, but made up of newspaper and magazine gossip, and showing a deplorable ignorance of all essential facts. Mr. Henshaw never saw the objects he undertook to criticise, was wholly unacquainted with the discoverers and with the members of our Academy, never made an inquiry of either, and yet, with amazing audacity, he pronounces the relics in question to be forgeries, charges the explorers with the practice of jugglery in making their pretended discoveries, and, in his endeavor to fasten the stigma of fraud upon our Academy, he has the seeming support of the Smithsonian Institution!

Entertaining for the great Institution under your charge a most sincere admiration, and for yourself, personally, the highest respect, and anxious to do no injustice to any of the parties involved, I decided to ascertain whether there could be any satisfactory explanation of this singular publication, and hence my inquiry. Now, if Mr. Henshaw's work is thoroughly scientific, and is entitled to publication at public expense, then clearly he should receive your open endorsement - and certainly he needs it! If, on the contrary, his work is found to be unscientific, its publication an oversight, and that thereby a great wrong has been done to honest investigators, then simple justice would seem to demand that this blunder should be promptly disavowed, and the injury amply retrieved. The Smithsonian Institution, great as it is, cannot afford to shield either wrong-doer or wrong-doing. If Mr. Henshaw has perpetrated a libel under cover of a Government publication, then clearly we are entitled to have his retraction given to the world in the same imposing manner.

The questions involved, you will perceive, are of vital importance to all persons engaged in scientific research. In, therefore, asking of you a careful reconsideration of the inquiry I have submitted, I trust you will not consider me intrusive.

We have received a large number of communications from archæologists in this country and Europe concerning this Henshaw paper, and, as they have great scientific value, we have it in contemplation to publish the more important of them in connection with the fourth volume of our Proceedings, now in press. We shall, of course, expect to include this correspondence; and now, awaiting with interest your further reply to my inquiry, I remain,

Very respectfully yours,

CHAS. E. PUTNAM.

SMITHSONIAN INSTITUTION, WASHINGTON, D. C., Sept. 16, 1885.

CHARLES E. PUTNAM, Esq., President of the Davenport Academy of Natural Sciences, Davenport, Iowa,—

Dear Sir: I have before me your communication of August 26, and

take pleasure in answering the inquiries which it contains.

The Smithsonian Institution, like other institutions and societies of a similar character, assumes no responsibility whatever for the accuracy of papers published under its auspices. Still less does it undertake to endorse or to defend the conclusions and theories advanced by their authors. The fact that a paper has been published in a volume which bears upon its title-page the name of the Institution does not therefore imply that it has the endorsement or approval of the Institution, nor does it, in my judgment, "augment the force" of any criticisms which it may contain. Such papers must stand or fall upon their own merits, exactly as if published in the proceedings of a society or in one of our scientific journals.

The Smithsonian Institution, in its most formal series of publications—"The Smithsonian Contributions to Knowledge"—expressly and officially disclaims responsibility for the contents of each separate paper, notwithstanding the fact that every one of these papers has been submitted for approval to a committee of three competent specialists.

The Report of the Bureau of Ethnology is prepared under the supervision of its Director, Major J. W. Powell, and although it is, as a matter of official form, addressed to the Secretary of the Smithsonian Institution, he has nothing whatever to do with its preparation, nor has he any supervision of its contents.

You will readily understand, then, why I cannot undertake to express any opinion concerning the publications of the Bureau of Ethnology, when the direct publications of the Institution are understood to stand so completely upon their own merits. The Director of the Bureau of Ethnology, as I have previously informed you, is the person to whom all requests for such information should be addressed.

Having answered your inquiry as to the official connection of the Smithsonian Institution with the publications in question, I may further say that I am not prepared to express an intelligent personal opinion as to the antiquity of the objects under discussion, since I have not had time nor opportunity to investigate the subject. The results of further mound exploration will probably, within a few years, give evidence of great weight for or against the authenticity of the Davenport pipes.

I am glad, however, of this opportunity to say that I have never had other than the utmost confidence in the good faith and integrity of those members of your Academy who have been engaged in the study of the relics in question. I deeply regret that the discussion of a scientific problem should have become embarrassed by considerations of a personal nature. I assure you that you could not fall into a graver error than to suppose that any "endeavor to fasten the stigma of fraud upon the Academy" could have the sympathy or "seeming support of the Smithsonian Institution." I am, sir,

Yours very respectfully,

SPENCER F. BAIRD, Secretary.

DAVENPORT, IOWA, October 23, 1885.

PROF. SPENCER F. BAIRD, Secretary Smithsonian Institution, Washington, D. C.,—

Dear Sir: In the view I have taken of the connection between the so-called "Bureau of Ethnology" and the Smithsonian Institution, I feel confident I have fallen into no error, but, when confronted with the positive denial in your communication of September 16th last, I delayed replying until I could find leisure to make a careful reëxamination of the records.

I now find that in the year 1879 Congress passed a law consolidating the separate Surveys under one management; that previous to that date ethnological investigation had been conducted principally in connection with the Rocky Mountain explorations; that under this law all collections thus made were turned over to the Smithsonian Institution, and that by provision of subsequent acts these explorations were to be continued under its supervision. Thus, the act of March 3d, 1879, provided: "That all the archives, records, and material relating to the Indians of North America, collected by the Geographical and Geological Survey of the Rocky Mountain region, shall be turned over to the Smithsonian Institution, that the work may be completed and prepared for publication under its direction."

The various appropriation acts subsequently passed by Congress contained provisions substantially like the following, taken from the act of August 7th, 1882:

"For North American Ethnology, Smithsonian Institution: For the purpose of continuing ethnological researches among the North American Indians, under the direction of the Secretary of the Smithsonian Institution, including salaries and compensation of all necessary employés, thirty-five thousand dollars."

And in the Smithsonian Report for the same year (1882) your own views concerning this department are thus clearly stated:

"As in previous years, I propose to include in the present report, in addition to matters pertaining strictly to the Institution, a brief account of the operations of the National Museum, and of the Bureau of Ethnology, which may be considered as part of the Smithsonian Institution."

In the "Introductory" to the First Annual Report of the Bureau of Ethnology, Major Powell himself explains the origin of this so-called "bureau," and there states that "the Secretary of the Smithsonian Institution intrusted its management to the former director of the survey of the Rocky Mountain region." It thus plainly appears that Major Powell, in his own estimation, occupies his present position at the head of that department, by appointment of the Secretary of the Smithsonian Institution. It further as plainly appears that the Bureau of Ethnology has no legal existence except as a department of the Smithsonian Institution.

Inasmuch as the appropriations are also made by Congress upon the express condition that this work is to be performed under your "direction," the statement you now make concerning one of its official reports that "the Secretary of the Smithsonian Institution has nothing whatever to do with its preparation, nor has he any supervision of its contents," will occasion surprise, and may serve to disclose an unperformed duty.

My previous assumption, therefore, that "the force of this attack was very greatly augmented by the connection of the Bureau of Ethnology with the Smithsonian Institution," seems after all to be well founded. Mr. Henshaw was an employé in this department, receiving a stated salary, and presumed in his utterance to represent the views of his superiors. Thus, going forth stamped with the name of your institution, the statements in his paper would pass unchallenged into the world of science. Mr. Henshaw derived importance from his evironments. "Strip him of his plumage and you fix him to the earth." If, as the law clearly contemplates, Mr. Henshaw is working under your "direction," then must his paper have derived importance from your name and fame.

The American Congress in taking these ethnological researches away from the Geological Survey, and placing them under the direct supervision of one of the foremost scholars of our country, acted with wise forethought. To a gentleman like yourself, accustomed to precision in the use of language, it will not be necessary to discuss the force and significance of the expression used by our law-makers in enacting that in future these ethnological researches should be conducted under the "direction" of the Secretary of our great scientific institution. It was never contemplated, I am sure, that the connection thus established could be regarded by any one, and above all, by yourself, as an airy nothing, a mere legal fiction.

In your communication you disclaim all responsibility for the accuracy of papers published by or under the auspices of the Smithsonian Institution itself, and disavow any obligation to either indorse or defend the conclusions and theories of the writers. This position is so evidently correct it scarcely required restatement. It will readily be conceded that all its scientific papers accepted for publication "must stand or fall upon their own merits." There is, however, a limit to your freedom from responsibility, which, as stated in your own rules, involves the precise question I have raised in this correspondence.

This regulation concerning your publications is thus stated:

"It is impossible in most cases to verify the statements of an anthor, and therefore neither the Commission nor the Institution can be responsi-

ble for more than the general character of a memoir."

Your Institution therefore accepts responsibility for the "general character" of its publications, and this, you will concede, would require the exclusion of all libelous, scurrilous, and unscientific papers. Now, therefore, should there appear among your publications an article assailing a scientific society without reason, charging fraud upon its members without proof, made up of second-hand information without scientific merit, the American public would be justified in holding your Institution derelict in duty. That such was the "general character" of Mr. Henshaw's paper must be evident when so excellent an archæologist as Professor Peet, of the American Antiquarian, says of it: "We should have considered it a libel if it was said of us." And again: "There is scarcely a truthful or convincing paragraph in the whole article, and many of the remarks are as careless and groundless as they can well be." And when so exact and careful a writer as Dr. D. G. Brinton thus condemns it: "A would-be critical article on 'Animal Carvings from Mounds in the Mississippi Valley' is inserted from the pen of Henry W. Henshaw. It would have been of more weight had the writer known more of his topic from personal observation, and depended less on second-hand statements. The Bureau should confine its writers to what they know of their own knowledge." And again: "From my first reading of his article I concluded it a paper not composed in the true spirit of science, and out of place in the publications of the Bureau." And when so eminent an authority in anthropology as Prof. Otis T. Mason, of the National Museum, hurls at it this stinging anathema: "The last word that should fall from the lips of a brother naturalist is 'fraud!'" These few citations, from the vast number at hand, will justify me in assuming that, without the aid of a "Commission," the Secretary of the Smithsonian Institution, on account of its faulty "general character," must have promptly condemned this paper as wholly unworthy of publication.

In your closing paragraph you fail to distinguish between the "antiquity" and the "authenticity" of the relics in question. This distinction has been carefully observed in the statements we have made, and, so far as our Academy is concerned, the "authenticity" of our relics is the only question under discussion. Among experienced archæologists the "antiquity" of all mound relics is yet an open question, upon which widely conflicting views are entertained. The "authenticity" of the relics in question we consider fully established; but, reversing your own expression, we cheerfully concede that the results of further mound explorations will probably within a few years give evidence of great weight for or against the "antiquity" of the Davenport pipes. Their "authenticity" established, they certainly bear strong internal evidence of great antiquity, and should it be established by other discoveries that man and the mastodon were contemporary on this continent, scientific skeptics will then have no further occasion to question either

their authenticity or antiquity.

I heartily join with you in the expression of a regret that the discussion of these interesting scientific problems should have become embarrassed by considerations of a *personal* nature, and doubtless you would join with me in the further statement that by the introduction of ordinary billingsgate into a serious scientific publication, Mr. Henshaw had fairly exposed himself to the just censure and condemnation of all earnest students of science.

I read with pleasure and gratification your endorsement of our Academy, and your expressions of confidence in the good faith and integrity of its members, and as this of itself is a condemnation of Mr. Henshaw's methods, it renders any further answer to my inquiries unnecessary.

Thanking you for your courteous attentions, and craving pardon

for these tedious intrusions upon your valuable time, I remain

Very respectfully yours,

CHAS. E. PUTNAM.

PROF. SPENCER F. BAIRD.

As no answer was received, this correspondence closed with the above letter. The silence of the distinguished Secretary, it must be acknowledged, is sufficiently significant; and, no doubt, it was unreasonable in us, under the circumstances, to expect a more specific response to our inquiry. It is, however, becoming uncomfortably evident to the many friends and admirers of the Smithsonian Institution that its connection with the so-called Bureau of Ethnology is a source of embarrassment and a drag upon its progress; and, among its other reforms, the present American Congress could do no better work than by promptly severing this entangling alliance, forced upon the Smithsonian Institution by a former administration. By so doing it would save to the National Treasury an annual expenditure of \$40,000.00; it would protect from taint and injury our great scientific institution; it would give greater freedom to archæological research; it would purify the cause of science.

# CRITICISMS OF SCIENTIFIC JOURNALS.

The controversy forced upon the Davenport Academy by the accusations of the Bureau of Ethnology has attracted very general attention and been made the subject of frequent newspaper comment. It is not, however, our intention to include herein the many kindly notices we have received from the popular press, and we shall now strictly limit ourselves to a brief presentation of the views and statements of the more conservative scientific journals:

## The American Antiquarian.

"We next read the article by Mr. Henry W. Henshaw, 'Animal Carvings from the Mounds of the Mississippi Valley.' We recognize the cuts, which have become so familiar, and agree with the writer in many of his conclusions, but prefer to leave some questions open. He is certainly insinuating a great deal when the writer says that the discoverer of the elephant pipes and inscribed tablets at Davenport had a remarkable 'archæologic instinct and the aid of his divining-rod' when making his discoveries, as if he was guilty of an intentional fraud. We should consider it a libel if it was said of us."—Rev. Stephen D. Peet, March, 1885.

"MR. HENSHAW AND MOUND-BUILDERS' PIPES. - The pamphlet on Mound-builders' pipes, by Mr. C. E. Putnam, has awakened very much interest among archæologists of this country and Europe. The attack upon the society by Mr. Henshaw, which was published in the second report of the Ethnological Bureau, seems to have aroused indignation in many different quarters. The letters which have been received by Mr. Putnam, congratulating him on the boldness of his defense, are not only numerous, but from the very best sources. The more we read Mr. Henshaw's article, the more pretentious and groundless do the positions of the writer seem. There is scarcely a truthful or convincing paragraph in the whole article, and many of the remarks are as careless and groundless as they can well be. Mr. Henshaw would better have confined his attention to his own department of ornithology, or else have been a little more modest in entering upon the department of archæology. The arrogance which he has exhibited is certainly not a good introduction for him in the new field. The wonder is that Major Powell, the chief of the Bureau, should not have seen the carelessness of his statements and noticed the supercilious air with which he has treated archæologists generally. Written by assistant and endorsed by

the chief, the article is destined to produce mischief and arouse prejudice against the Bureau. Mr. Henshaw evidently owes an apology to the Davenport society."—Rev. Stephen D. Peet, *July*, 1885.

## Pacific Science Monthly.

"From Charles E. Putnam, President of the Davenport Academy of Sciences, we have received a pamphlet of forty pages relating to elephant pipes found in that vicinity. The Bureau of Ethnology, Washington, made an attack upon these finds, calling in question their genuineness, to which Mr. Putnam replies in an incisive way that will doubtless cause the Washington relic sharps to look a 'leedle out.' The first of these pipes is said to have been plowed up in a corn-field in Louisa County, Iowa, in 1873, by Peter Mare, a German farmer. The other was discovered in March, 1880, in a mound, in the same county, by Rev. A. Blumer, a Lutheran clergyman. Rev. J. Gass, a Mr. Hass, and several workmen were present. These gentlemen are said to be irreproachable in character, and Mr. Gass is a member of the Academy. The men who made these discoveries, and the circumstances connected therewith, warrant the conclusion that they are genuine finds, and that no deception whatever has been practiced in the matter. Mr. Putnam has certainly made out his case, and it seems to us that he removes every reasonable doubt as to their being genuine. Antiquarians generally seem to overlook the fact that the mastodon existed upon this continent in comparatively recent times. A skeleton was found in excavating the bed of a canal a few miles north of Covington, Fountain County, Indiana, bedded in wet peat, the larger bones containing the marrow, which was used by the workmen to 'grease' their boots. Chunks of adipocere, 21/2 x3 inches, occupied the place of the kidney fat of the monster. But five years ago the remains of a mastodon were found in Iroquois County, Illinois, between the ribs of which was found a mass of herbs and grasses similar to those which still grow in that vicinity. In the same bed of clay was found land and fresh-water shells such as still exist in that locality to the present time. Evidences of this kind can be furnished from many places; hence it is not improbable that man and the mastodon have existed together upon this continent within the past five thousand years. We are aware that these views will be pooh-poohed and waved aside by some who, in their selfsufficiency, believe that archæological wisdom will be a thing of the past when they die; nevertheless, our position is tenable and fully susceptible of proof, we think. The savants of Washington have doubtless been hasty in their condemnation of the finds we have been considering."—Stephen Bowers, Ph.D., May, 1885.

## The Young Mineralogist and Antiquarian.

"We believe an article in the Second Annual Report of the Bureau of Ethnology to be open to severe criticism. The Bureau, under the management of Major J. W. Powell, has recently taken the decided position that the Mound-builders were nothing more nor less than the

ancestors of the various tribes of aborigines who were found inhabiting this continent by Columbus. Whether or not the Bureau is justified. by the possession of undeniable and sufficient evidence, in taking this decided stand, is left to the reader's judgment. In our opinion, based on careful perusal of the evidence cited by the capable members of the Bureau, they are not. The question of the Mound-builders' identity is yet an open one, and may remain so for some time to come; and although every archæologist has a theory based on certain indications, no matter how learned, no one has proven his theory in a manner satisfactory to all. The theories of to-day are all liable to be overthrown by the discoveries of to-morrow, as history shows. The Davenport Academy of Sciences has recently brought to light some very interesting and remarkable relics in the shape of two elephant pipes and three inscribed tablets. The discovery of these was made at various times by gentlemen who donated the relics to this Academy. Two of the inscribed tablets were found near the city of Davenport, Iowa, on January 10th, 1877, by Rev. J. Gass. An exact and careful statement of the facts connected with the discovery may be found in 'Proceedings Davenport Academy of Natural Sciences,' Vol. II., p. 96. The statements made by the discoverer were fully verified by members of the Academy, who personally examined the surroundings, etc. The testimony of the genuineness of the pipe is clear and convincing Of the elephant pipes, one was discovered in March, 1880, in a mound on the farm of Mr. P. Hass, in Louisa County, Iowa, by Rev. A. Blumer, and was by him announced to the Academy. The other was obtained from a farmer in Louisa County, Iowa. From what we are able to learn of the relics, there are no suspicious circumstances connected with the finding of them. And this is not the only authentic discovery of elephant pipes; other discoveries have been made, showing that the Mound-builders were contemporary with the mastodon: for example, the much-written-about 'elephant mound' in Wisconsin. But the Bureau had all along saw fit to discredit the authenticity of these relics; therefore (and here we come to the point), when the last discovery was made, the Bureau considered it necessary to at once attack their authenticity. For this purpose a gentleman named H. W. Henshaw was introduced to archæologists, by Major Powell, as 'skilled as a naturalist, but especially as an ornithologist,' and strongly endorsed by Major Powell as being capable of subjecting the methods and discoveries of the Davenport Academy of Sciences to 'destructive criticism.' We do not see this destructive criticism. Mr. Henshaw does not seem to have taken very great pains to inform himself of the facts in the case, but confines himself to such arguments as that 'the explorer was alone when he made the discovery.' This is no argument at all, and, more than that, the facts clearly show that no less than six highly respected persons were engaged in these explorations, and no less than three were present at each discovery. If every relic discovered by persons who were alone when they made the discovery should be thrown out as unauthentic, many of the most remarkable relics in our museums would have to be thrown out. We give a characteristic passage from Mr. Henshaw's article: 'Archæologists must certainly deem it unfortunate that, outside of the Wisconsin mound, the only evidence of the coëxistence of the Mound-builder and the mastodon should reach the scientific world through the agency of one individual. So derived, each succeeding carving of the mastodon, be it more or less accurate, instead of being accepted by archæologists as cumulative evidence tending to establish the genuineness of the sculptured testimony showing that the Mound-builders and the mastodon were coeval, will be viewed with ever-increasing suspicion.' If we are not mistaken, these are sentiments decidedly new to the scientific world. They have the strong endorsement of the Director of the Bureau of Ethnology."—T. H. Wise, April, 1885.

#### Iowa Historical Record.

"We have received a copy of a neat pamphlet of thirty-eight pages, illustrated, entitled 'Elephant Pipes in the Museum of the Academy of Natural Sciences, Davenport, Iowa,' by Charles E. Putnam, which is a vindication of the authenticity of the elephant pipes and inscribed tablets in the museum of the Davenport Academy of Natural Sciences from the accusations of the Bureau of Ethnology of the Smithsonian Institution. The author, who is President of the Davenport Academy, presents in a clear and caustic manner a mass of testimony to prove the genuineness of those unique specimens, which have been called in question. from the high standing of the individual members of the Davenport Academy, their work is one which is pursued for the love of it alone, and it would seem impossible to assign a motive for their practicing a willful deception. Iowa, some years ago, produced the Cardiff Giant, an ingenious hoax having its origin in cupidity, and it is only quite lately that some fiction dealer deceived many people by a description of a monster animal alleged to have been discovered invading a farmer's premises and despoiling him of his fattest hogs. These impostures are akin to the hoax perpetrated on the astronomers years ago by a New England sham, who claimed to have detected living animals on the surface of the moon, and we hope have not in any way prejudiced the Davenport Academy in the eyes of the Smithsonian Institution. The latter we hope will find ample warrant in reversing their judgment when they read the able pamphlet from the pen of Mr. Putnam."-April, 1885.

#### The Pennsylvania Magazine.

"Second Annual Report of the Bureau of Ethnology, 1880-81. By J. W. Powell, Director. Washington, 1883. Large 8vo, pp. 477.

"It may appear somewhat late to notice a book which professes to have been issued in 1883; but this date is one of the mysteries which surround the work of the Government printing-office. In point of fact, it is only within the last few months that this report of 1880 has been accessible to the public. Its merits, however, make amends for its tardiness. There are several articles in it which stand in the first rank of importance in American archæology and ethnology.

"As first in value we mention the excellent paper on 'Art in Shell of the Ancient Americans,' by William H. Holmes. His resolution of the peculiar and obscure artistic designs which he figures is as ingenious as it is convincing. The analogy of the decoration and drawings on shells from Missouri and Georgia to the art-work of the Mayas of Yucatan is altogether too positive to be attributable to chance or to parallelism of art evolution. Its explanation demands a historic unity of culture.

"The aptitude for artistic work in the native race is further illustrated by the article of Dr. Washington Matthews on 'Navajo Silversmiths.' He shows that they have not only technical dexterity, but original dec-

orative conceptions as well.

"Mr. Frank H. Cushing contributes one of his studies of Zuñi life, in this instance on the Zuñi philosophy and their fetiches. It is a very curious illustration of the course of native thought directed toward the

problems of religion.

"Similar to it in its subject is Mrs. Erminnie A. Smith's paper on the 'Myths of the Iroquois.' With due deference we must say, however, that the illustrations of this article, borrowed without credit from Cusick's well-known book (which has already appeared in a Government publication), are out of place in a report of the Bureau of Ethnology. Nor does Mrs. Smith improve on the quaint narrative of Cusick by dressing it up in modern English.

"A would-be critical article on 'Animal Carvings from the Mounds of the Mississippi Valley' is inserted from the pen of Henry W. Henshaw. It would have been of more weight had the writer known more of his topic from personal observation, and depended less on secondhand statements. The Bureau should confine its writers to what they

know of their own knowledge.

"Two illustrated catalogues of collections from New Mexico, by James Stevenson, close the volume."— D. G. B., April, 1885.

#### The American Naturalist.

"Under the title 'Elephant Pipes in the Museum of the Academy of Natural Sciences. Davenport, Iowa,' Mr. Charles E. Putnam enters a vigorous and well-written protest against the criticisms and insinuations which have been made against the character of the discoverer and the authenticity of the elephant pipes in the museum of the Davenport Academy. The article is racy reading, and incidentally gives strong arguments against the desire for centralization in science shown in certain quarters. It will be found impossible to concentrate all science in any one clique or city. Our local societies and scattered observers need not feel that their efforts are not as valuable in their way as the labors of Government officials and closet or office naturalists."—July, 1885.

"THE DAVENPORT ELEPHANT PIPES.—Mr. Charles E. Putnam, of Davenport, Iowa, has published a pamphlet of thirty-eight pages as a vindication of the authenticity of the elephant pipes and inscribed tablets in the museum of the Davenport Academy of Natural Sciences

from the accusations of the Bureau of Ethnology of the Smithsonian Institution. Those who have known the history of the Davenport Academy, its struggles and triumphs for the love of pure science, and the extreme caution of its leading members, regretted that anything should appear in a Government publication reflecting upon their veracity or honesty. Tablets are common enough, being made of slate and other material, and worn to-day by the present Indians of British Columbia and Alaska. So long as they do not contain outlandish and unclassifiable inscriptions, there is nothing mysterious about them. On the contrary, the elephant pipes are mysteries. When I try to put the cast which we possess at the museum with something else, there is nothing to put with it. Professor Henry once said to one of his assistants who discovered an unclassifiable specimen: 'That seems to stand out so unsociably that we must call it an "outstanding phenomenon," and wait patiently until something else turns up to go with it.' The last word that should fall from the lips of a brother naturalist is 'fraud.'

"On the other hand, barring this indiscretion, Henshaw is just what Major Powell says about him. He is a very careful and skillful naturalist. We should hail with delight the accession of all such men to the ranks of archæology, because they bring light from every side to bear upon our mysteries. It should not make a particle of difference to any of us whether a pipe is the figure of a crow or of a toucan, so long as we know just what it represents. We may rest assured that for a long time every mystery solved will be accompanied by two quite as inexplicable.

"But, really, too much account is being made of the matter. Squier and Davis are not overthrown. Their manatee, toucan, and paroquet may be shot down by the ornithologist, but these practical gentlemen did not care a fig about such creatures. They made the greatest archæological survey and collections ever attempted in America, and their volume will indeed be a 'monument' to their memory and to the glory of its authors for all time.

"The Davenport Academy is not annihilated. Even if our theory should turn out true and the elephant pipe should prove a tapir pipe, and we should learn that tapirs once lived in the Mississippi Valley, this grand association would survive."—Prof. Otis T. Mason, August, 1885.

## The American Journal of Science.

"ELEPHANT PIPES IN THE MUSEUM OF NATURAL SCIENCES, DAVEN-PORT, IOWA, BY CHARLES E. PUTNAM.—This address, by the President of the Davenport Academy of Natural Sciences, was called forth especially by expressions of disbelief with regard to accounts of the discovery of 'elephant pipes' of soft sandstone and 'inscribed tablets' in Indian mounds of Iowa, published in the Proceedings of the Academy. Mr. Putnam makes the following statements with regard to the finding of these objects:

"The discoveries in question are two elephant pipes and three inscribed tablets. Of the latter the first two were found in what is known

as Mound No. 3, on the Cook farm, adjoining the city of Davenport. The principal discoverer was Rev. Jacob Gass, a Lutheran clergyman, then settled over a congregation in Davenport. In this exploration Mr. Gass was assisted by L. H. Willrodt and H. S. Stoltzenau, with five other persons who were accidentally present during the opening of the mound. The discovery was made on January 10th, 1877. exact and careful statement of the facts connected therewith was soon after prepared by Rev. Mr. Gass, and read at an early meeting of the Davenport Academy. It was published, and may be found in its 'Proceedings.' Upon the announcement of the discovery, the officers and members of the Academy were early on the ground to verify the statements made by the discoverers. The gentlemen engaged in the exploration are well known and held in high esteem; their testimony as to all essential facts is clear and convincing, and the circumstances narrated seem to fully establish the genuineness of these relics. That their statement contains only facts all who know them will not question, and that the mound from which the relics were obtained had not been previously disturbed is sufficiently established by their testimony. The authenticity of this discovery must therefore be conceded by every fair-minded inquirer.

"The third inscribed tablet was found on January 30th, 1878, in Mound No. 11, in the group of mounds on Cook's farm, in the suburbs of Davenport, and in close proximity to the mound wherein the other tablets were discovered. That indefatigable explorer, Rev. J. Gass, was also present during these further researches, and had for his assistants John Hume and Charles E. Harrison, both members of the Academy, and well and favorably known in this community. The circumstances of this discovery, as narrated by Mr. Harrison, are published in the Proceedings of the Academy. No suspicions whatever attach to this discovery, and the well-attested facts connected therewith establish beyond reasonable doubt that, whether more or less ancient, the

tablet was deposited at the making of the mound.

"Of the elephant pipes in the museum of the Academy, one was discovered in March, 1880, in a mound on the farm of Mr. P. Hass, in Louisa County, Iowa, by Rev. A. Blumer, a Lutheran clergyman from a neighboring city, and was by him donated to the Academy. Rev. I. Gass, Mr. F. Hass, and a number of workmen were present, assisting in the exploration. A detailed account of the finding, prepared by Rev. Mr. Blumer, is published in the Proceedings of the Academy. From the social standing and high character of the principal discoverers, no question has been, or can be, successfully raised as to the authenticity of this discovery. The other elephant pipe was not 'discovered' by Rev. J. Gass, but was obtained by him from a farmer in Louisa County, Iowa. This man found it while planting corn on his farm several years prior to that date, and attached no particular value to the relic, but had sometimes used it in smoking. A brief account of its finding is given in the Proceedings of the Academy. It will thus be perceived that there are no suspicious circumstances connected with either of these discoveries, but that the surrounding and wellauthenticated facts seem to sufficiently establish the genuineness of these interesting relics.

"Mr. Putnam observes that, 'their authenticity established, archæologists will find in them strong corroborative testimony that man and

the mastodon were contemporary on this continent.'

"The pamphlet closes with an appendix in which a figure is given of one of the elephant pipes. The form of the elephant, and the large ears and trunk, are unmistakable, but the tusks are wanting."— May, 1885.

## Nature, London, England.

"The most recent contribution to the much-discussed question of the origin of the Mound-builders of the United States is a pamphlet by Mr. C. E. Putnam, issued by the Academy of Natural Sciences of Davenport, Iowa. The Bureau of Ethnology connected with the Smithsonian Institution champions the theory that the race which constructed these mounds may be traced to the ancestors of the present American Indians, while another school of archæologists holds that the Moundbuilders were more advanced in civilization than the American Indians, and have endeavored to trace them to a Mexican origin or to some common ancestry. This being the broad question at issue, the Davenport Academy, which appears to have adopted no theory on the subject, became possessors by donation of three inscribed tablets and two elephant pipes—i. e., pipes with the figure of an elephant carved on them — which are stated to have been found in Iowa. In the words of Mr. Putnam, 'if their authenticity is established, then archæologists will find in them strong corroborative evidence that man and the mastodon were contemporary on the American continent, and the Mound-builders were a race anterior to the ancestors of the present American Indians and of higher type and more advanced civilization.' But doubts have been cast on the authenticity of these curious relics by the Bureau of Ethnology, and the Davenport Academy has taken the matter up with some warmth. Mr. Putnam's pamphlet is the Academy's reply, and is a vigorous defense of the genuineness of the elephant pipes and inscribed tablets. It describes in detail the circumstances under which they were discovered, the witnesses present, etc., and lays especial stress on the fact that the two pipes were dug up at different times and places, by independent persons, one, at least, of whom had no notion of the value of the object. The whole subject is one of extraordinary interest, and Mr. Putnam's statement, vouched as it is by a formal resolution of the Davenport Academy, must play an important part in any subsequent discussion as to the value to be attached to these remains. which, if authentic, are acknowledged to have much influence on the final settlement of the question as to who the Mound-builders were."-April 16th, 1885.

# SMITHSONIAN INSTITUTION.

In connection with the correspondence of Prof. Spencer F. Baird, Secretary of the Smithsonian Institution, hereinbefore presented, some communications of an earlier date from the same gentleman, concerning the shale tablets, should have been also included, as they have an important bearing upon the questions under discussion. They were, however, inadvertently omitted, and, though out of their proper order, will now be presented.

Upon the discovery of those tablets, the interesting event was immediately reported to Professor Baird, and by his request they were forwarded to Washington for his personal inspection. The tablets remained there during a session of the National Academy, were placed on exhibition and inspected by its members, and the results are stated by Professor Baird in these communications. In connection with the strong evidences of authenticity disclosed by the circumstances of the discovery, this favorable report from the Smithsonian Institution greatly influenced the subsequent action of the Davenport Academy in presenting these tablets to the scientific world as genuine mound-relics. Probably this would never have been seriously questioned but from the fact that one of these tablets has on it the tracing of a huge animal, generally supposed to represent a mammoth, and hence their authenticity has been made the object of a virulent attack by the Bureau of Ethnology. In now presenting these valuable communications we take the liberty of placing in italics certain passages to which we desire to call especial attention:

National Museum, Smithsonian Institution, Washington, April 11, 1877.

Dear Sir: The box of tablets came to hand in my absence in Florida, and was kept undisturbed until my return a few days ago, and when opened everything was found in first-rate condition. There appears every indication of genuineness in the specimens, and the discovery is certainly one of very high interest. We shall have photographs of

them made very soon. The National Academy meets here next week, when the specimens will be exhibited, and thereafter immediately returned.

Yours very truly,

SPENCER F. BAIRD.

W. H. PRATT, Esq., Curator Davenport Academy of Sciences, Davenport, Iowa.

SMITHSONIAN INSTITUTION, WASHINGTON, D. C., May 31, 1877.

Dear Sir: I am in receipt of your letter of the 28th, and in reply beg to say that the duplicates were submitted informally to the members of the National Academy of Sciences, but that an official presentation was prevented by the crowd of other business that pressed it out of place. Most of the persons who examined them — among whom were Professor Haldeman, Mr. Lewis H. Morgan, and others — were of the opinion that they were unquestionably of great antiquity, the absolute period of which could not of course be measured. The similarity in the weathering of the inscriptions to that of the rest of the tablets gave them this impression. Most of them, however, preferred to defer any formal consideration of the subject until they could have good photographs or lithographs for suitable investigation at home, their examination in the excitement and pressure of the meeting being necessarily hurried.

SPENCER F. BAIRD.

W. H. PRATT, Esq., Davenport, Iowa.

# SUPPLEMENTARY NOTE.

While the foregoing paper was in the hands of the printer, Volume III. of the "Transactions of the Anthropological Society of Washington" was received, and as its contents have an important bearing upon the questions under discussion, we will add a few notes by way of comment thereon. Thus, at the meeting held on December 4th, 1883, it appears that Major Powell, in the discussion which followed the presentation of a paper by Mr. William H. Holmes, on the "Textile Fabrics of the Mound-builders," made the following report concerning the paper of Mr. Henshaw under review:

"Mr. Henshaw, also of the Bureau of Ethnology, has made an interesting investigation of a subject which throws light upon this question. The early writers claimed that the stone carvings found in the mounds were often representations of birds, mammals, and other animals not now existing in the region where these mounds were found, and that the Mound-builders were thus shown to be familiar with the fauna of a tropical country, and they have even gone so far as to claim that they were familiar with the fauna of Asia, as it has been claimed that elephant pipes have been found. Now these carvings have all been carefully studied by Mr. Henshaw, and he discovers that it is only by the wildest imagination that they can be supposed to represent extralimital animals; that, in fact, they are all rude carvings of birds, such as eagles and hawks, or of mammals, such as beavers and otters, and he has made new drawings of these carvings, and will, in a publication which has gone to press, present them, together with the drawings originally published, and he makes a thorough discussion of the subject, being qualified thereto from the fact that he is himself a trained naturalist, familiar with these forms by many years of study. It will thus be seen that many lines of research are converging in the conclusion that the Mound-builders of this country were, at least to a large extent, the Indian tribes found inhabiting this country at the advent of the white man, and that in none of the mounds do we discover works of art in any way superior to those of the North American Indians."

We have quoted this paragraph in full, because it plainly indicates that the paper of Mr. Henshaw was not included by Major Powell in his official report through oversight, but that it had been by him carefully considered, and that its argument had his hearty approval and endorsement. The statement, however, that "these carvings have all been carefully studied by Mr. Henshaw," is scarcely borne out by the curious fact that he failed to discover the "tails" on our elephant pipes, but, on the contrary, based his principal argument against their authenticity upon the omission of these appendages.

In turning over the pages of these "Transactions," the careful reader will not fail to notice the frequency with which Major Powell presents his favorite theory that "the Mound-builders were the Indian tribes found inhabiting this country at the advent of the white man." It furnishes an important part of the entertainment at nearly every meeting. If at any time omitted, it is a noticeable exception. It seems to have become almost a "craze," and to dominate all his thoughts. As constant droppings of water are said to wear even stones, so, it would seem, Major Powell considers that incessant iterations will finally establish his theory. Not only are the proceedings of the Anthropological Society thus taken up, but the limited scientific press of the country is largely occupied for the same purpose. At one time Major Powell appears in Science with a statement of his Indian theory, at another Professor Thomas occupies the pages of The Antiquarian with a restatement of the same theory. Wherever in the country there is published even a semi-scientific journal, large or small, there will be found a ready writer from the Bureau of Ethnology prepared to fill its columns with statements that the Indians were the true Mound-builders.

So, too, Mr. Henshaw prepares for a Government publication an elaborate paper to establish this theory, and Major Powell introduces it to the scientific public as a masterpiece of "thorough study" and exact research. Then Major Powell quotes from Professor Thomas, and Professor Thomas quotes from Major Powell, and both quote from Mr. Henshaw, for the purpose of establishing this theory. Thus reasoning in a circle, the Indian theory started out by Major Powell is returned to him, thoroughly embellished, by his obedient assistants. Thereupon Major Powell gravely announces to the scientific world that "many lines of research are converging" to the establishment of his new theory concerning the Mound-builders. If any reader should consider this a fanciful account of some "mutual admiration society," let him turn to the "Transactions" at the meeting of December 19th, 1883, and he will find that our statements have a substantial basis of fact:

"At our last meeting we had an interesting paper from Mr. Holmes, who, from his studies, concluded that the Mound-builders were no other than the Indians inhabiting the country. Last year we had a paper from Mr. Henshaw arriving at the same conclusion, from the facts discovered in another field of research. And now Professor Thomas finds that some of the earth-works of this country are domiciliary mounds, as suggested long ago by Lewis H. Morgan, who was the great pioneer of anthropologic research in America, and, further, that the houses found in ruins on the mounds are such as were built by the Indians, as recorded in the early history of the settlement of this country. Thus it is that from every hand we reach the conclusion that the Indians of North America, discovered at the advent of the white man to this continent, were mound-builders, and gradually the exaggerated accounts of the state of arts represented by the relics discovered in these mounds are being dissipated, and the ancient civilization, which has hitherto been supposed to be represented by the mounds, is disappearing in the light of modern investigation."

It will be perceived that no outside investigators are referred to by Major Powell, and hence that the sweeping phrase employed by him, "thus it is from every hand," must have reference solely to the work of his own assistants, and of these one was an entomologist and the other an ornithologist, and both without any extended or thorough experience in archæological research.

In this connection we must not omit to call attention to an injustice done Mr. Holmes by Major Powell in the above quotation. The former, in his paper upon "Prehistoric Textile Fabrics," thus stated his conclusions:

"The work described, though varied and ingenious, exhibits no characters in execution or design not wholly consonant with the art of a stone-age people. There is nothing superior to, or specifically different from, the work of our modern Indians."

In its passage through the alembic of Major Powell's intelligence, this conclusion of Mr. Holmes is thus curiously transformed:

"At our last meeting we had an interesting paper from Mr. Holmes, who, from his studies, concluded that the Mound-builders were no other than the Indians inhabiting this country."

Now, all that Mr. Holmes said was that the textile fabrics he was describing were not superior to, or specifically different from, the work of modern Indians; but, through the dominant thought ever uppermost in Major Powell's mind, it underwent the above remarkable transformation.

At this same meeting, also, Major Powell made the following interesting statement as to the antiquity of man on this continent:

"There is abundant evidence of antiquity—good, geologic evidence. Stone implements are found in geologic formation to such an extent as to leave no doubt that this continent was inhabited by man in early Quaternary time."

This fully agrees with the following recent statement made by Dr. D. G. Brinton in the third supplement to Johnson's Cyclopædia:

"This presumed antiquity of the race is fully borne out by the discoveries of stone implements, chipped bones, and human remains in deposits dating back to the close of the glacial period in both North and South America. Such are the 'Trenton gravels,' near Trenton, New Jersey; the 'modified glacial drift' of the upper Mississippi; the 'lake beds' of Nebraska; the 'auriferous gravels' of California; the glacial 'mud-beds' of the pampas of Buenos Ayres, all of which have furnished undoubted specimens of human workmanship dating back to the close of the Tertiary and beginning of the Quaternary epochs, and thus proving that America was peopled throughout its whole extent at that remote date."

As it is now well established that the elephant also existed here in the Quaternary period, therefore, in making the above statement, Major Powell joins with Dr. Brinton in establishing the fact that man and mastodon coëxisted on this continent, and by this concession Major Powell removes the principal objection to the authenticity of the elephant pipes and inscribed tablets.

In looking over the discussions in this volume of "Transactions," the reader will discover indications of some confusion of thought in the expressions of Major Powell's views concerning the Mound-builders. Thus, he repeatedly urges, with great gravity, that some of the early tribes discovered on this continent were themselves mound-builders, and that many of these mounds were constructed within the historic period. No one will dispute this undoubted fact, but in no sense can it be said to support his theory. The statement that some tribes of modern Indians have built mounds is a poor argument by which to show the non-existence of a prior race of mound-builders of a higher grade of civilization. Certainly it cannot be claimed that any of the great earth-works and effigy mounds have been built by modern Indians within the historic period. There are occasions, too, when Major Powell seems to be on the point of abandoning his own theory. Thus, in the meeting of February 5th, 1884, in the discussion which followed the presentation of a paper by Prof. Cyrus Thomas, entitled "Cherokees Probably Mound-builders," Major Powell uses this language:

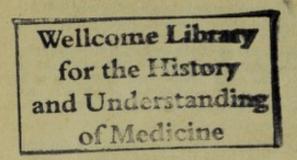
"We have not yet discovered what particular tribes built many of the mounds, nor is it possible to discover when they were built — that is, to fix with accuracy the date of their erection. Some of them have been built within the historic period,

doubtless, but very few compared with the whole number, and some of them are doubtless of great antiquity. And during all the centuries of history when these mounds were erected some tribes may have been destroyed, and there may be mounds built by tribes whose history is lost. Some of the Indian tribes occupying the continent at the advent of the white man were mound-builders, and a few mounds have been built since that time. The great number were erected prior to that time by these tribes, and perhaps by others still existing, but of whose mound-building we have yet no knowledge, and still others may have been built by tribes that are lost."

In his reference to mound-building by "tribes whose history is lost," Major Powell seems to almost abandon his own, and to accept the theory of Squier and Davis, that the Mound-builders were a distinct, and are now an extinct, race.

February 19th, 1886.

C. E. P.



# ERRATA.

Page 17, Note §, for "Britanica" read "Britannica."

- " 37, line 13 of note, erase the name of "Peet."
- " 46, " 13, for "Madeleine" read "Madelaine."
- " 57, " 32, for "Primigenus" read "Primigenius."
- " 65, " 24, for "Willis" read "Wills."
- " 68, " 18, for "irrefragible" read "irrefragable."



