OBITUARY NOTICE

OF

DR. AUGUSTUS A. GOULD,

PREPARED BY DR. JEFFRIES WYMAN ON BEHALF OF A COMMITTEE APPOINTED FOR THAT PURPOSE.

Augustus Addison Gould was born in New Ipswich, New Hampshire, on the 23d of April, 1805, among the high hills and under the shade of one more prominent than the rest, which helped to form what he calls the amphitheatre that surrounds the town. His early life was passed there, and as soon as he was old and strong enough to labor the larger part of the year was given to his father's farm, and the rest to the common school. At the age of fifteen he took the whole charge of the farm; nevertheless a part of the year was devoted to study, and some progress was made in the classics. By the careful husbanding of the odds and ends of time and a year's teaching at an academy, he was prepared to enter college, and entered at Cambridge in 1821. With his college life came a struggle, the forerunner of many such by which his strength was to be tried. He had already come to know something of the barrier which limited means had put between himself and the things he aspired to, and now this assumed larger proportions, such as to most persons would have been disheartening. College duties and exercises demanded his time, nevertheless his education must be paid for, and he must do largely towards earning the means; and so by strict economy, by performing various duties for which indigent students received compensation, and also by hard work in vacations and on those days which others gave to

relaxation, he says he at length fought his way through, and attained to respectable rank.

In college he was noted among his classmates for industry, and it was there, too, that his taste for natural history began to show itself. He became familiar with the most of our native plants and to the end of life never lost his love for them. After leaving college, he held the office of private tutor in Maryland, and at the same time began the study of medicine. The rest of his pupilage was passed in Boston, and the last year of it at the Massachusetts General Hospital as house student. He was graduated in medicine in 1830, and at once began the practice of his profession, having given good grounds to his friends for expecting future eminence. But his struggles with poverty were not yet ended. Until his profession could yield him a support, he must go out of it, and did, to earn the necessaries of life. To this end he undertook burdensome tasks; one of them, the cataloguing and classification of the fifty thousand pamphlets in the library of the Boston Athenæum, was Herculean, as any one may see who will take the trouble to look over the four large folio volumes he wrote out, monuments of his patient industry and handiwork, and for which he got only a pitiful return.

The study of natural history was nearer to his heart than all other pursuits, and to that he could always turn, and did, whenever he could command a few spare hours or moments to do so. As a matter of course, he became a member of this Society. This was soon after its organization, and to the time he died, he labored for us without stint. When his studies began to assume a methodical shape, his first investigations were in the class of insects, of which, at one time, he had a large collection. Among his first published works was a monograph on the Cicindelæ of Massachusetts, printed in 1834, and in 1840 he published an account of the American species of shells belonging to the genus Pupa, in regard to which he found much confusion. These shells are very small, and Mr. Say, who named all the species previously described, gave no figures, and consequently naturalists fell into error. "I have received from our best conchologists,"

Dr. Gould says, "a single species under four of the names that Mr. Say applied to as many different species." Dr. Gould then points out how, by the use of the microscope, and a careful study of their minuter details, the classification of them might be improved. This paper was illustrated by about thirty figures carefully drawn by himself, with the aid of the microscope.

In 1841, he read before this Society a paper entitled "Results of an examination of the species of shells of Massachusetts, and of their Geographical Distribution." This is the more noteworthy since the geographical distribution of animals had at that time attracted but little attention, and none amongst us. Now it involves one of the most important zoölogical problems. From his examination it appeared that of the shells found within the borders of the State, forty-two were of land or fresh water, and two hundred and three of marine origin. While some of the marine species are found on the transatlantic shores, he thought that all the fresh water or land species were imported. Animals found in territories widely separated by salt water, appear to have been created distinct, and ever remain so, unless mingled by design or accidental transfer.

Dr. Gould also points out in this paper the influence of shore outlines, and shows from a comparison of species, that Cape Cod, which stretches out into the sea in a curved direction some forty or fifty miles, forms to some species an impassable barrier. Of two hundred and three species, eighty do not pass to the south, and thirty have not been found to the north. In the same paper he calls attention to the importance of the fact that certain species appear and disappear suddenly, and of the necessity, in order to construct a correct catalogue of the shells of any region, to extend observations through a series of years, a consideration which many naturalists, even of the present day, might profit by. In the spring of 1830, *Osteodesmus* was strewed upon Chelsea Beach in great number, and of very large size, but had never been observed there before, and has scarcely been seen since. *Cyprina Icelandica*, *Solemya velum*, *Varenius gemma* and *Margarita arctica*, also present instances of periodicity at long intervals. Dur-

ing the winter of 1838–39, *Nucula thraciæformis* was frequently found in the stomachs of the sand-dab, but search for them since has been almost fruitless.

One of the first results of the joint action of the members of this Society, and of which it has more reason to be proud than any other, was the part taken by some of them in the series of admirable reports on the natural history of the State, presented to the General Court in compliance with a legislative enactment. The report on the Trees was by Mr. George B. Emerson, then President of the Society, on Fishes, by Dr. D. H. Storer, on Insects Injurious to Vegetation, by Dr. T. W. Harris, and on the Invertebrate Animals, excepting insects, by Dr. Gould. They at once gained for their authors wide-spread reputation.

The Molluscs were Dr. Gould's favorite subjects for study, and his attention was chiefly given to them. Up to this time, few if any attempts had been made to give as complete a zoölogical survey as practicable of any particular region of the United States. As regards the Molluscs, the descriptions of Say, Conrad and others, pioneers in conchology, pertained more to the Middle and Western States, than to New England. Their writings were fragmentary and scattered through the narratives of travels, journals of science, and even newspapers. It was no small labor, therefore, to become acquainted, merely as a preparation for his task, with the writings of his predecessors. To make his report as complete as possible, and to ascertain what changes in the classification of Molluscs recent important progress growing out of the study of them would indicate, he opened correspondence for information and exchanges with European naturalists interested in the same branch of study, who obligingly and courteously lent their aid, and out of this correspondence grew up long continued friendships.

The report fills a volume of nearly four hundred pages, illustrated by more than two hundred figures skilfully drawn from nature by himself. "Every species described," he says, "indeed, almost every species mentioned, has passed under my own eye. The descriptions of species previously known, have been written anew, partly that they might be more mi-

nute in particulars, and partly with the hope of using language somewhat less technical than is ordinarily employed by scientific men." The number of species described was about two hundred and seventy-five of Molluscs and nearly one hundred of Crustaceans and Radiates.

As a contribution to zoölogical science, this report gave him an honorable name among the the naturalists of Europe and America, and so he attained to eminence.

Dr. Gould edited the admirable work entitled "The Terrestrial Air-breathing Molluscs of the United States," prepared, but left unfinished at the time of his death, by his intimate friend, Dr. Amos Binney, formerly the respected president of this Society, and whose name we hold in grateful remembrance, not only for his contributions to science, but for the munificent bequest which fills so large a space on the shelves of our library.

The plan of this work was broad and philosophical, passing far out of the region of generic and specific technicalities into the wider subjects of the principles of classification, of the geographical distribution of genera and species, and the causes influencing it, of zoölogical foci or points of origin, geological relations, habits, faculties and anatomical structure. Its incomplete state, the fact that many of the species collected by Dr. Binney in the southwestern States and Texas, had not been described by him up to the time of his death, and the changes made by more recent observations rendered the editorship of this work no sinecure. No one could be found more fit for the task, or more worthy to bring before the world the labors of a deceased friend.

In 1848 he was associated with Prof. Agassiz in the preparation of the Principles of Zöology.

His largest and most important contribution to natural history was the description of the shells of the United States Exploring Expedition. This was prepared under circumstances somewhat embarrassing. The collection was not made by himself, but by the late Capt. James P. Couthouy, well remembered as one of the most zealous and active members of this Society. Capt. Couthouy had drawn up full notes on the external characters of the soft parts, habits,

geographical distribution, and on other important points. Before the voyage was completed he left the expedition, but the notes and collections were sent to Washington. The former were unaccountably lost, and no trace of them was found. The collections, when they came into the hands of the Navy Department, were repacked by incompetent hands, the arrangement of them disturbed, labels in many cases lost, and the whole thrown more or less into confusion. Dr. Gould was called upon to save the wreck, but in accepting the task was obliged to submit to various arbitrary restrictions, and to leave undone many things he deemed of much importance. Fully appreciating the value of a knowledge of the internal structure of the animals, and knowing too well the folly of attempting to find all the characters for a zoölogical description in the shell alone, he expresses his regret at the outset that full dissections and delineations of the internal features had not been directed or allowed. This was all the more to be regretted, since there was a great abundance of material for the required investigations.

Agreeably to his instructions, the work is almost wholly confined to generic and specific descriptions. In the introduction, however, he presents several generalizations of importance. By a careful comparison, he shows that Mollusca are confined generally to definite districts or areas. Descriptive writers have frequently given support to opposite views, and have fallen into error from not having taken proper care to ascertain the locality from which certain species came, a determination which is now considered of such prime importance. Shells purchased in the Hawaiian Islands are described as denizens of these islands, notwithstanding they may have been carried there from far off places. New England shells which have been sent to the western coast of America, have been known to come back in the way of exchanges, as natives of the Pacific shores. Errors have also been committed by attempting to decide the identity of species from distant places, by the shell alone, when observation has proved this in many cases impossible. When such, and other sources of error, are eliminated, the number of

apparently identical species from widely different sources rapidly diminishes. In fact the doctrine of the local limitation of animals meets with so few exceptions, that we admit it as an axiom in zoölogy, he says, that species resembling one another from widely diverse localities, especially if a continent intervenes, and if no plausible means of communication can be assigned, are different until their identity can be proved. It is true that some species are more or less cosmopolite, as the Cypreas, and as at present understood, do not appear to be limited by seas, while others become cosmopolite by transportation, as certain Helices, which attach themselves to the water-casks of ships, and thus are carried around the world.

Another general consideration, and closely related to geographical distribution, grows out of the fact that the shells from definite regions have peculiarities of external form and color, of what may be called style, just as have the human races from different parts of the world. Thus, he says, we distinguish the loose, colorless structure of the northern species, the stony, corroded and livid New Zealanders, and the polished and absolutely perfect specimens from the coral seas.

Another generalization illustrated by the ample stores of the Expedition, is the occurrence of analogous species in coordinate regions, though the species themselves are absolutely distinct; in confirmation of which he gives a list of some thirty-two species found on the eastern and western coasts of the United States.

Lastly, it is shown by a careful comparison of the land shells of the Pacific islands, how one is helped in drawing inferences as to the lands which once occupied the area of the Pacific, and how, in consequence of their submergence, their mountain peaks, which now alone project above the surface of the water, constitute these islands. The Samoa and Friendly Islands give evidence of such relation in having identical species.

The Otia Conchologica was the last of his printed volumes, but this was merely a reprint in a condensed form of the descriptions of species of shells previously published separately in different works. Besides the works already men-

tioned, there is a long catalogue of communications made to the Boston Society of Natural History, and which is appended to this notice, which may be referred to as showing that he did not allow himself to become a mere specialist, but kept his mind awake to the relation of individual forms to higher and more general truths.

We must not forget that Dr. Gould was a member of the medical profession, and that his time was of necessity chiefly devoted to this, while the scientific labors we have been considering were the yield of spare moments made useful. He was an active member of the medical societies of this city and of the State, and held offices of trust in them. The Massachusetts Medical Society conferred on him the honors which it has to bestow upon its fellows. In 1855 he delivered the annual address, which was marked for the soundness of its views and the characteristic clearness and elegance with which they were presented. He took for his text the advice of Harvey to the Royal College of Physicians of London, when he founded the annual oration which bears his name, and in which, among other things, he enjoins upon the orator "an exhortation to the members to study and search out the secrets of nature by the way of experiment." Dr. Gould was elected president of the Society, and his term of office ended within a few months of his death. He was for several years one of the physicians of the Massachusetts General Hospital, was an efficient member of the Boston Society for Medical Improvement, where he often communicated valuable observations, and took an active part in its discussions. He labored much and long in preparing the vital statistics of the State from the official returns.

At one of the meetings of the National Academy of Sciences, of which he was a member, he presented an important paper on the distribution of certain diseases, especially consumption, in reference to the hygienic choice of a location for the cure of invalid soldiers. The census of 1860 gave the means of arriving at a definite result, and of showing that the mortality from the disease mentioned was greatest in the north, and diminished southwards almost as regularly as the States could be called. It causes about twenty-nine per cent.

of all the deaths in Maine, and only three per cent. of those in Arkansas. Infirmaries established with the idea of sending patients to those regions where the disease to be treated is presented in its mildest aspect, must be far more successful than the ordinary method of mingling together invalids suffering from all sorts of infirmities.

As a citizen, Dr. Gould made a principle of going out of the ordinary routine of life to lend a helping hand wherever it was desired and he could. He served the public in many capacities; in the religious society of which he was from early life a member, and in the public schools where he took an active interest in all attempts to improve the ways and means of instruction. He from time to time gave public lectures, and although in this capacity he could not be said to be brilliant or highly accomplished, yet his unostentatious manner and simplicity, his knowledge of his subject and hearty interest in it, always gained him attentive listeners, who went away instructed.

What can be said by way of acknowledgment of the unrequited work he did for us? of his services in the formation of the cabinet, and in promoting the interests of the Society in a hundred ways, above all in the drudgery which only ended with his life, his aid in preparing for the press and in superintending the publication of the various volumes printed by the Society, from the first to the last?

What has now been said relates only to some of the more tangible features of his principal works, leaving out of sight the industry, the critical acumen, the tact and perceptive power required to prepare them. This we can never appreciate, nor the difficulties under which his work was done. One could only do this by watching his patient studies in the intervals of professional calls, or as he labored at early dawn or late at night in the hours stolen from sleep. Though often an invalid, the sickness must have been irksome indeed, which could restrain him from his accustomed work.

In his temperament he was genial, and drew friends around him, retaining the old and attracting new. He came to the social gathering with joyous face and kindly feelings. His love for natural scenery was genuine and hearty, and what-

ever personal enjoyment came from this source, it was always enhanced if others partook of it with him. There are too many naturalists who stand in the presence of nature all their days, but see her not. To them the world offers nothing but the forms they would technically describe and arrange in their cabinets. Take away this object and all becomes a waste, for they are neither warmed nor enlivened by the world around them. Not so with our associate; no one toiled more industriously than he over individual forms and specific descriptions; but all this aside, every aspect of nature touched him to the innermost. Those who have been intimate with him know how his face would light up while in the presence of the least as well as of the greatest natural objects! the flower of a day, or the sturdy tree that had known its centuries of life, the quiet or the grander scenes of the world. His emotions were not those of an enthusiast, but rather came of a clear perception and calm contemplation of the things around him, and of his own responsive nature.

His life, all too poorly and inadequately represented in this sketch, was throughout a consistent one, and to the end each day was full to the round. He was still endeavoring to improve what had been done before, and looking forward to the accomplishment of new and better ends, when suddenly it was closed. He had been less well than usual; on the afternoon of September 14th, 1866, he manifested the usual symptoms of an attack of Asiatic cholera, soon after fell into a state of collapse, and on the following morning just before the dawn, he died.

For the following chronological catalogue of Dr. Gould's communications, I am indebted to Mr. Samuel H. Scudder, Secretary of the Society.

Lamarck's Genera of Shells with a Catalogue of Species. Translated from the French. 16mo. Boston, 1833.

On the Cicindelæ of Massachusetts. Bost. Journ. of Nat. Hist., I. Art. iv, pp. 41–55, Plate 3.

Report on the Geology, Mineralogy, Botany and Zoölogy of Massachusetts, made and published by order of the government of that

State. 2d Edition, by Edward Hitchcock. 8vo. Amherst, 1835. Part IV. A Catalogue of the Animals and Plants in Massachusetts. vi., Crustacea, by A. A. G. pp. 548–50. Part IV. separately published. Crustacea, pp. 28–30.

First Report on the Geology of the State of Maine, by C. T. Jackson. 8vo. Augusta, 1837. List of shells found in Maine, by A. A. G. p. 119.

Reports of the Commissioners on the Zoölogical Survey of the State. Massachusetts House Documents, 1838, No. 72. Dr. Gould's Report (on molluscous and the other lower animals.) pp. 105–7.

Scientific Proceedings of the Boston Society of Natural History in the months of June, July and August, 1838; drawn up from the Records of the Society, by A. A. G., Recording Secretary. Amer. Journ. of Science and Arts. XXXVI; pp. 379–93, XXXVII; pp. 391–7.

Report on a paper by J. P. Couthouy on Thracia Conradi, with Rev. F. W. P. Greenwood. Amer. Journ. of Science and Arts. XXXVI; pp. 379–80.

On the marine product commonly called Neptune's Goblet. Amer. Journ. of Science and Arts. XXXVI; p. 386.

Remarks on Rostellaria occidentalis. Amer. Journ. of Science and Arts. XXXVII; p. 396.

On Dephinula minor. Amer. Journ. of Science and Arts. XXXVIII; p. 193.

Descriptions of Shells. Amer. Journ. of Science and Arts. XXXVIII; pp. 196–7. Otia Conchologica, pp. 179–81.

Report on shells from California. Amer. Journ. of Science and Arts. XXXVIII; p. 396.

On Scutella bifissa. Amer. Journ. of Science and Arts. XXXIX; p. 183.

Monograph of the Species of Pupa found in the United States; with figures. Bost. Journ. of Nat. Hist., III, Art. xiii, pp. 395–404, Plate III; IV, Art. xxviii, pp. 350–60, Plate XVI. Otia Conchologica, pp. 182–3.

Results of an Examination of the Shells of Massachusetts and their geographical distribution. Bost. Journ. of Nat. Hist., III, Art. xviii, pp. 483–94.

Report on the Invertebrata of Massachusetts, comprising the Mollusca, Crustacea, Annelida and Radiata. Published agreeably to an order of the Legislature, by the Commissioners on the Zoölogical and Botanical Survey of the State. 8vo. Cambridge, 1841. Otia Conchologica, pp. 181–2, 237. Annales des Sciences Naturelles, 2e Ser. T. XVI, p. 379. Amer. Journ. of Science and Arts. XLI; p. 378. Revue Zoologique, 1841. p. 282.

Results of investigations concerning the Testacea of Massachusetts. Proc. Bost. Soc. of Nat. Hist., I ; pp. 6, 7.

Notice of the origin, progress and present condition of the Boston Society of Natural History. Amer. Quart. Register, XIV ; pp. 236–41. Also published separately, pp. 1–8.

Characters of shells to be fully described in the next number of the Journal. Boston. Journ. of Nat. Hist., IV, third page of the cover of No. 1. Proc. Bost. Soc. of Nat. Hist., I ; pp. 137–8. Otia Conchologica, p. 183.

Review of Ellis's work on Corallines. Proc. Bost. Soc. of Nat. Hist., I ; p. 16.

Notice of Paludina ponderosa. Proc. Bost. Soc. of Nat. Hist., I ; p. 32.

Examination of a paper by Henry C. Lea, purporting to describe eight new species of shells. Proc. Bost. Soc. of Nat. Hist., I ; p. 61.

Remarks on the variations of a species of Neritina. Proc. Bost. Soc. of Nat. Hist., I ; p. 71.

On the powers of locomotion in Mytilus edulis. Proc. Bost. Soc. of Nat. Hist., I ; p. 72.

Notice of Sowerby's Thesaurus Conchyliorum, No. 1. Proc. Bost. Soc. of Nat. Hist., I ; p. 86.

Review of a pamphlet by Prof. C. B. Adams, on the Mollusca of Vermont. Proc. Bost. Soc. of Nat. Hist., I ; p. 89.

Description of Pasithoe umbonata. Proc. Bost. Soc. of Nat. Hist., I ; pp. 92–3.

Notice of some works recently published on the nomenclature of Zoölogy. Amer. Journ. of Science and Arts. XLV ; Art. i. pp. 1–12.

Remarks on Dr. Binney's critical notice of the species of the genus Pupa found in the United States. Proc. Bost. Soc. of Nat. Hist., I ; p. 106.

Notice of Mighel's Catalogue of the marine, fluviatile and terrestrial shells of the State of Maine and adjacent Ocean. Proc. Bost. Soc. of Nat. Hist., I ; pp. 117–8.

Notice of Haldeman's Monograph of the freshwater univalve Mollusca of the United States. Genus Physa. Proc. Bost. Soc. Nat. Hist., I ; pp. 132–3.

Review of characters of shells described on the cover of the Boston Journal of Natural History, Vol. IV., No. 1. Proc. Bost. Soc. Nat. Hist., I ; pp. 137–8. Otia Conchologica, p. 183.

Descriptions of two foreign species of Pupa. Proc. Bost. Soc. of Nat. Hist., I ; pp. 138–9. Otia Conchologica, p. 189.

Characterization of Shells appearing to be hitherto undescribed, received from the Rev. Francis Mason, missionary at Tavoy, British Burmah. Proc. Bost. Soc. of Nat. Hist., I ; pp. 139–41, 144. Otia

Conchologica, pp. 189–92. Mason's Burmah, pp. 371, 372, 374. Journ. Asiatic Soc. of Bengal, [n. s.,] No. 186, pp. 62–5.

Report on Papers of the Rev. R. T. Lowe, relating to the plants and land-shells of Madeira. Proc. Bost. Soc. Nat. Hist., I; pp. 148–9.

Remarks on some Shells received from Dr. Savage from Cape Palmas. Proc. Bost. Soc. Nat. Hist., I; p. 153.

Descriptions of Shells received from Drs. Savage and Perkins, from Africa. Proc. Bost. Soc. Nat. of Hist., I; pp. 157–9. Otia Conchologica, pp. 192–3.

Descriptions of two species of Anodon from the River Salwen in British Burmah, sent by Rev. F. Mason. Proc. Bost. Soc. of Nat. Hist., I; pp. 160–1. Otia Conchologica, pp. 193–4. Mason's Burmah, p. 375.

Descriptions of Land Shells from the Province of Tavoy in British Burmah. Bost. Journ. of Nat. Hist., IV; Art. xxxviii, pp. 452–9, Plate xxiv. Otia Conchologica, pp. 183–4, 189–92. Mason's Burmah, pp. 371–2, 374. Journ. Asiatic Soc. of Bengal, [n. s.,] No. 186. pp. 62–5.

Descriptions and notices of some of the Land Shells of Cuba. Bost. Journ. of Nat. Hist., IV; Art. xli, pp. 485–98. Plate xxiv.

On Helix lucida. Proc. Bost. Soc. of Nat. Hist., I; p. 174.

Descriptions of two species of Helix from the Sandwich Islands. Proc. Bost. Soc. of Nat. Hist., I; p. 174. Otia Conchologica, p. 194.

Notice of a paper by Mr. I. Lea, describing shells supposed to be new. Proc. Bost. Soc. of Nat. Hist., I; pp. 183–4.

Remarks on Mighel's descriptions of shells. Proc. Bost. Soc. of Nat. Hist., I; p. 189.

Descriptions of species of Land Shells from the Sandwich Islands. Proc. Bost. Soc. of Nat. Hist., II; pp. 26–8. Otia Conchologica, pp. 194–6.

Descriptions of Shells collected by Dr. Charles J. Bates, on the Coast of Liberia. Proc. Bost. Soc. of Nat. Hist., II; pp. 37–8. Otia Conchologica, pp. 196–7.

Descriptions of recent Shells collected by Mr. John Bartlett in the Everglades of Florida. Proc. Bost. Soc. of Nat. Hist., II; p. 53. Otia Conchologica, p. 197.

Descriptions of Shells from the Coast of Africa. Bost. Journ. of Nat. Hist., V; Art. xix, pp. 290–3, Plate xxiv. Otia Conchologica, pp. 196–7.

On Pholas costata and P. truncata. Proc. Bost. Soc. of Nat. Hist., II; pp. 81–2.

Remarks on certain characters in the shell distinctive of Lottia and Patella. Proc. Bost. Soc. of Nat. Hist., II; pp. 83–4.

Description of Shells from Tavoy. Proc. Bost. Soc. of Nat. Hist., II; pp. 98–100. Otia Conchologica, pp. 198–9. Mason's Burmah, pp. 367, 370, 373.

Description of a species of Bulimus from Brazil. Proc. Bost. Soc. of Nat. Hist., II; p. 101. Otia Conchologica, pp. 199–200.

On the occurrence of Esox lucius in Connecticut River. Proc. Bost. Nat. Hist., II; p. 107.

Expedition Shells; described for the work of the United States Exploring Expedition, commanded by Capt. Wilkes, U. S. N., during the years 1838–42. 8vo. Boston, 1846. Proc. Bost. Soc. of Nat. Hist., II; 141–5, 148–52, 153–6, 159–62, 165–7, 170–3, 175–6, 177–9, 180–1, 182–4, 185–7, 190–2, 196–8, 200–3, 204–6, 208–9, 210–12, 214–15, 218–21, 222–25, 237–9, 251–2. III; 73–5, 83–5, 89–92, 106–8, 118–21, 140–4, 151–6, 169–72, 214–18, 252–6, 275–8, 292–6, 309–12, 343–8. Otia Conchologica, pp. 1–100.

Note to description of two new species of Shells by William Case. Amer. Journ. of Science and Arts. [2] III; pp. 101, 276.

Description of new Shells received from Rev. Mr. Mason of Burmah. Proc. Bost. Soc. Nat. Hist., II; pp. 218–21. Otia Conchologica, pp. 200–201. Mason's Burmah, pp. 371, 374–5.

Remarks on Planorbis multivolvis. Proc. Bost. Soc. of Nat. Hist., II; p. 259.

Description of shells collected by Dr. C. T. Jackson on the shores of Lake Superior. Proc. Bost. Soc. of Nat. Hist., II; pp. 262–4 (wood cuts). Otia Conchologica, pp. 201–2.

On the experiments of Prof. Matteuci with reference to the phosphorescence of animals. Proc. Bost. Soc. Nat. Hist., III; p. 7.

On the occurrence of Bulla solitaria on Plymouth Beach. Proc. Bost. Soc. of Nat. Hist., III; p. 9.

Principles of Zoölogy, touching the structure, development, distribution and natural arrangement of the races of animals, living and extinct; with numerous illustrations. For the use of schools and colleges. Part I. Comparative Physiology, by L. Agassiz and A. A. G. 8vo. Boston, 1848. English Edition, revised by Th. Wright. 8vo. London, 1851. German Edition, 8vo. Stuttgart, 1851. 2d edition, 1855.

Description of Shells collected by Mr. J. Bartlett in the southwestern States. Proc. Bost. Soc. of Nat. Hist., III; pp. 37–41. Otia Conchologica, pp. 202–5.

Description of Shells found in Connecticut, collected and named by the late Rev. J. H. Linsley. Amer. Journ. Science and Arts. [2] VI; Art. xxi, pp. 233–6. (wood-cuts).

Descriptions of Shells. Proc. Bost. Soc. of Nat. Hist., III; pp. 64–5. Otia Conchologica, pp. 205–6.

The Naturalist's Library, containing scientific and popular descriptions of Man, Quadrupeds, Birds, Fishes, Reptiles and Insects; compiled from the works of Cuvier, Griffith, Richardson, Geoffroy, Lacépède, Buffon, Goldsmith, Shaw, Montague, Wilson, Lewis and Clarke,

Audubon and other writers on Natural History; arranged according to the classification of Stark, edited by A. A. G. With four hundred engravings. 8vo. Boston, 1849.

On the nature of the Ohio clay formation containing Mastodon bones. Proc. Bost. Soc. of Nat. Hist., III; pp. 117–18.

An account of some tame fishes and turtles at Hingham, Mass. Proc. Bost. Soc. of Nat. Hist., III; p. 175.

Remarks on specimens of Lymnæa from Lake Superior. Proc. Bost. Soc. of Nat. Hist., III; p. 181.

On the occurrence of Helix hortensis of Europe, on an island near Cape Ann. Proc. Bost Soc. of Nat. Hist., III; p. 181.

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