king of France and Poland, and sometimes called 'father of French surgery.' We would fain reproduce it in all the quaintness of the original, as follows:

Étant à une mienne vigne, près le village de Meudon, où je faisois rompre de bien grandes et grosses pierres solides, on trouva au milieu de l'une d'icelles un gros crapaud vif, et n'y avoit aucune apparence d'ouverture, et m'esmerveillai, comme cet animal avoit pû naître, croître et avoir vie. Lors le Carrier me dit qu'il ne s'en falloit esmerveiller, parce que plusieurs fois il avoit trouvé de tels et autres animaux au profond des pierres, sans apparence d'aucune ouverture.—(1564).

Differing in nowise from the above, except that they are attested by numerous reputable witnesses, are the accounts presented to the French Academy in the early days of its history, one such being preserved in the *Mémoires* for 1719, and another in the volume for 1731. Nor should one fail to note what the old Toulonese historians have said concerning edible mussels which the inhabitants cracked out of the solid rock in the harbor of their city. Instead of going clam-digging, those in search of a delicacy sallied forth with a hammer, and the shell-fish so obtained were said to have had an admirable flavor.*

Coming down to our own time and country, the curious will find in the *American Journal of Science* for 1822 (Vol. XIX., p. 167) an edifying description by Mr. David Thomas of the discovery of a live toad in a block of limestone during the excavation of the Erie Canal. The details of this incident, even including the fact that the toad got away, are authenticated by various 'witnesses of unimpeachable veracity,' one of them afterwards becoming a state senator, as we are told. And so with similar anecdotes, which meet the eye from time to time in the daily newspapers.

Not the slightest suspicion of untruthfulness in any of these instances is attached either to the narrator or to the spectators who corroborate the original statement to the best of their belief and knowledge. It is probably furthest from the minds of these worthy people wilfully to deceive the public, and yet, on the other hand, a little reflection shows that from the very nature of things such tales are incredible, and those who vouch for them must be mistaken in their observations, even as the most alert and sharp-sighted persons are deceived by the feats of a prestidigitator. The evidence given by the spectators would, so far as appearances go, be perfectly trustworthy, but when we subject their accuracy of observation and memory to the test of reason, which asks whether they relate that which is perforce impossible, the credibility of these witnesses is at once challenged. The fact remains that the sea serpent has not yet been captured, and in every instance these long-imprisoned frogs and toads and other animals have suddenly become vivified and succeeded in making their escape. Hence we are bound to agree with Dr. Traquair when he remarks that he 'should certainly not like to see the issue of a trial, civil or criminal, depend on the question of whether a man had seen the sea serpent, or had witnessed a family of young adders creeping down their mother's throat.'

* Bouche, H., 'Chorographie, ou Description de la Provence,' vol. i., p. 924, Paris, 1664. The account evidently refers to boring mollusks.

C. R. EASTMAN.

HARVARD UNIVERSITY.

SCIENTIFIC NOTES AND NEWS.

THE medal of the Society of Chemical Industry, awarded every second year for services to applied chemistry, has been presented to Dr. Ira Remsen, president of the Johns Hopkins University.

DR. LUDWIG SYLOW, professor of mathematics in the University of Christiania, has been made a foreign knight of the Prussian order 'pour le mérite.'

DR. MORITZ CANTOR, the well-known mathematician of the University of Heidelberg, celebrated recently his seventy-fifth birthday.

DR. WILLIAM H. WELCH, of the Johns Hopkins University, has given the Lane lectures at the Cooper Medical College, San Francisco, his subject being 'Infection and Immunity.'

WE learn from *Nature* that the Lancashire and Western Sea Fisheries Joint Committee has appointed Dr. J. T. Jenkins, professor of biology in Hartley University College, South-

ampton, to be superintendent of sea fisheries in place of the late Captain Dawson.

Dr. Frederick B. Loomis, of Amherst College, has during the present summer been engaged in exploring for fossils in Wyoming.

A life of Andrée is to be issued by the Geographical Society of Stockholm, of which he was a prominent member.

Mrs. Imogen W. Eddy, computer in the Harvard College Observatory, was killed by a fall from an elevator on September 4.

The death is announced of Dr. Frederic Zahn, formerly professor of anatomy at the University of Geneva; and of Dr. Emilio Valleri, professor of experimental physics at Naples.

Dr. Alexander Graham Bell has presented to the Station for Experimental Evolution of the Carnegie Institution, at Cold Spring Harbor, Long Island, a six-nippled ram and two five-nippled ewes, one white and one black, from the remarkable race of multi-nippled sheep that he has created on Cape Breton Island. The sheep will be used to test the method of inheritance of characters.

The late Dr. Albert W. Warden, of Union Hill, West Hoboken, has bequeathed $1,000 to the New York Academy of Medicine.

The Peruvian government is about to found a national museum of natural science, which will have its home in Lima, and in which there will be three departments, one devoted to animal life, another to plant life, and a third to minerals.

The British antarctic expedition steamer *Discovery* arrived at Plymouth on September 10.

It is announced that a powerful steamer will be built immediately at the McKay & Dix shipyard at Verona, on the Penobscot, for Commander Peary's next polar expedition. The steamer will be equipped with powerful engines and it is said that some new features will be embodied in the construction. It will cost between $300,000 and $400,000.

According to a press despatch the Ceylon mineralogical survey report gives details of the discovery of a mineral existing in small black cubical crystals in the refuse of the gem washings at Balangoda. The principal constituent is thorium oxide, of which there is present more than 75 per cent. The mineral appears to be new, and it is suggested that the name of thorianite be given to it, as it is radio-active.

There will be a civil service examination on September 14 for the position of aid and deck officer in the Coast and Geodetic Survey and one for the position of computer on September 19. Deck officers are appointed with salaries of $720 to $900 and computers receive salaries of from $1,000 to $2,000. Further information may be obtained from the active superintendent of the survey. Applications for the position of scientific aid (female) in the Bureau of Plant Industry, Department of Agriculture, will be received by the Civil Service Commission until September 28, 1904. Applicants must be graduates of colleges in courses of study tending to qualify them for the scientific work of the Department of Agriculture. They are not assembled for this examination, but must submit all the required material with their applications.

The U. S. Geological Survey has in the government building of the St. Louis Exposition an exhibit of radio-active substances, prepared under the direction of Dr. George F. Kunz, which will be of interest to scientific men who visit the exposition. It includes specimens from M. Becquerel, Sir William Crookes and Professor Ernest Rutherford and others. Everything obtainable relating to the source, manufacture and application of radium is exhibited, including all chemicals obtained from the separation of various radium compounds, and all instruments and devices with which it is proposed to apply radio-activity in medicine, science and the arts. A feature is the portraits and the publications of investigators, together with photographs of their laboratories and apparatus, and autograph letters from some of them. Two halls have been set aside for demonstration of the properties of radium. In one are grouped the specimens of ores and minerals containing radium. In the other illustrated lectures are given daily at 11:30 A.M. and 3 P.M. on a variety of subjects re-

lating to the history, nature and possibilities of radium. Its mode of occurrence, the methods used in separating it from its ores, the concentration of activities from low to high, and the manifold uses to which these remarkable radio-active substances may be put are described. Cinematograph Hall can be darkened, and different highly active specimens of radium compounds are exhibited as affecting the diamond, willemite, kunzite and other radio-responsive substances.

AT the last monthly general meeting of the Zoological Society of London the report of the council for July was read by the secretary, Dr. P. Chalmers Mitchell. It was stated that during the month 180 additions had been made to the society's menagerie. The total number of visitors to the society's gardens during the year up to the end of July was 417,170, an increase of 48,738 on the numbers for the corresponding period of last year. The number of fellows elected and readmitted during the year up to the end of July was 165, an increase of 31 as compared with the corresponding period of 1903.

Nature states that with the view to obtain further information on the growth and migrations of salmon (including sea-trout, salmon-trout, peal, sewin, etc.), the British Board of Agriculture and Fisheries had had a number of such fish 'marked' by attaching a small oblong silver label (oxidized, or blackened, and bearing distinctive letters and numbers) to the dorsal or large back fin. Small rewards will be paid for the recovery of fish bearing such labels or other 'marks,' or for information respecting them. The Board has prepared lists of persons in the south and west of England, in Wales and Monmouthshire, and in the north of England, who will receive marked fish. The experiments will be continued during a series of years, and the co-operation of net-fishermen, anglers, fishmongers, and all interested in the improvement of the salmon fisheries, is invited in order that the fullest possible results may be secured.

THE London *Times* says that the first instalment of specimens and a number of scientific instruments have arrived in Edinburgh from the *Scotia*. Many of the instruments were of so delicate a character that they had to be carried unpacked in the hands of those assisting in the transfer. Of specimens there were transshipped about 200 barrels, cases and packages. It is calculated that several years will be occupied in the classification of the immense amount of animal and oceanographic specimens which Dr. Bruce has brought home with him, and the contents of the great casks which contain the larger specimens will, even in rough sorting, take up some considerable amount of time. The larger specimens of oceanic life, upon being taken from the casks in which they have traveled so far, are placed in a specially designed zinc tub filled with methylated spirits and fitted with a rubber-rimmed lid, forming an excellent method of preservation. It is officially stated that a report which has been published regarding the sale of the *Scotia* is inaccurate.

THE U. S. Geological Survey has recently perfected plans for the systematic collection and preservation of well records and samples. The demand for information regarding wells has become so great that the survey has decided to issue an annual publication containing a brief account of the wells bored each year. This report will be published as near the beginning of the year as practicable, and will be sent to all those who apply for it. It will contain the names and addresses of persons doing well work and will summarize the work done by them in the preceding year. In order to obtain data for such a year book, the survey wishes to make arrangements with well drillers and well owners to send samples and records to the survey's headquarters in Washington, D. C. On receipt of names of persons willing to save samples of well borings the Survey will at once send them supplies of canvas bags in which they may transmit them through the mails without paying postage. As these samples may be sent as often as the drillers visit the postoffice, there is no danger that they will accumulate and become burdensome. For the keeping of a log a convenient pocket memorandum book will also be provided. It is hoped that the drillers and well

owners of the country will appreciate the importance of the Survey's effort and will cooperate so heartily as to assure its complete success. It should appeal to them for several reasons: (1) Their names and work will be kept before a class of readers interested in well drilling. (2) Records of their work will be carefully filed in the office of the survey, and will be readily available to them at any time, so that in case their notes are lost they can be duplicated. (3) Their cooperation will aid materially in the study of the geologic structure of the United States, and will thus assist in obtaining knowledge which can not fail to be of ultimate benefit to well drillers. It may sometimes be necessary to regard the records as confidential. In such cases the information will be carefully guarded and used only under the conditions stipulated by the informant. The director of the survey will be glad to have an expression of opinion regarding this work from well owners and drillers, and will be grateful to them for any suggestions.

UNIVERSITY AND EDUCATIONAL NEWS.

THE courts have confirmed the bequest of $40,000 made by the late Dr. William H. Crim to the University of Maryland School of Medicine.

THE Cooper Medical College, of San Francisco, has received a bequest from Mrs. Pauline C. Lane, wife of the late Dr. C. L. Lane, which enables it to build a library.

IT is stated in *Nature* that Mr. Frederick Soddy has concluded a series of university extension lectures in Western Australia. The last lecture was delivered on July 23, and on this occasion the premier of the colony, Mr. Walter James, in proposing a vote of thanks to Mr. Soddy, referred to the desirability of establishing a university in Western Australia. During the course of the last twelve months one distinct step has been taken in advancing the movement by the passage of the University Endowment Act. Endowment trustees have been appointed, and in these trustees some 700 or 800 acres of land have been vested, which promise to give the future university the richest endowment enjoyed by any university in Australia. They were very apt to think, Mr. James continued, that no university could be established unless they first expended a large sum of money in an elaborate building. He wished only they could convince the residents of Western Australia that so long as they had efficient workshops for their professors, the sooner they commenced to get their professors the sooner could they begin the work of the university, without money overburdening it in the first instance. Mr. Soddy's visit has done good in bringing home more thoroughly than before how necessary it is that the establishment of this university should be commenced without undue delay.

THE position of assistant in bacteriology in the Laboratory of Hygiene, University of Pennsylvania, and the Thomas A. Scott fellowship in hygiene in the same laboratory are vacant for the year 1904–1905. Further information may be obtained from the director of the laboratory.

MR. WILL GRANT CHAMBERS has been called from the chair of psychology and education in State Normal School at Moorhead, Minn., to the chair of psychology in the State Normal School of Colorado, at Greeley.

DR. H. T. MARSHALL has been appointed professor of pathology at Baltimore Medical College.

L. C. KARPINSKI, A.B. (Cornell, '01), Ph.D. (Strassburg, '03), and John W. Bradshaw, A.M. (Harvard), Ph.D. (Strassburg, '04), have been appointed instructors in mathematics in the University of Michigan.

PROFESSOR LORRAIN SMITH, of Belfast, and Dr. A. S. Grünbaum, of Liverpool, have been appointed to chairs of pathology, respectively, at the Universities of Manchester and Leeds.

DR. H. BATTERMANN, astronomer at the Berlin Observatory, has been appointed professor of astronomy at the University of Königsberg.

PROFESSOR O. E. MEYER, director of the physical laboratory of the University of Breslau, will retire from active service.