

his customer with the value of the book. When pay-day comes the customer pays this amount, and meantime uses the coupons for the purchase of supplies, the same as paying cash, thus avoiding all disputed accounts and saving valuable time to both the dealer and his customer. They are manufactured by the Historical Publishing Company, of Dayton, Ohio.

— The October issue of *The Chautauquan* is the initial number of Vol. X., and appears in a new form and with a cover of new design. It presents the following in the table of contents: "The Politics Which Made and Unmade Rome," by President C. K. Adams, of Cornell University; "The Life of the Romans," by Principal James Donaldson, of the University of St. Andrews, Scotland; Macaulay's "Lays of Ancient Rome," paraphrased by Arlo Bates; "Map Quiz" on *The Chautauquan* Map Series; "The Study of the Seasons," by Professor N. S. Shaler, of Harvard University; "Child Labor and Some of its Results," by Helen Campbell; "Mental Philosophy," by John Habberton; "The Uses of Mathematics," by Professor A. S. Hardy, Ph.D., of Dartmouth College; "The Burial of Rome," by Rodolfo Lanciani, of the University of Rome. Professor La Roy F. Griffin explains the general principles of "Explosions and Explosives"; "Canada and Ireland: A Political Parallel," is discussed by Professor J. P. Mahaffy of Dublin University; "The Future Indian School System" is an article full of practical suggestions for improving Indian schools, by Elaine Goodale; Hon. S. G. W. Benjamin, ex-minister to Persia, writes entertainingly of "The Women of Persia"; Bishop J. F. Hurst tells much that is interesting about "The Current Literature of India"; "Impressions Made by the Paris Exposition" is a timely article, translated from the *Revue des Deux Mondes*. The list of contributed articles ends with the Rev. J. G. Wood's observations of "Some Odd Fishes."

#### LETTERS TO THE EDITOR.

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

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

Twenty copies of the number containing his communication will be furnished free to any correspondent on request.

#### Methods of Burial.

THERE is one method of preserving the body that is well worthy of notice, and that has not received the attention that its importance demands. It is the desiccation of the remains, considered in a report on the disposal of the dead, by John M. Peacocke, M.D., presented to the Medical Society of the county of Kings, Brooklyn. Long before the Spanish conquest, the Peruvians were adepts in this mode of preserving the dead. The bodies of the Incas, and their queens and countless numbers of their subjects, testify to this. The interesting question is often asked whether the ancient Peruvians embalmed their corpses, or whether the bodies owe their good preservation to the influence of the climate, which is so conducive to mummification. Señor Rivero, the director of the National Museum at Lima, having examined hundreds of mummies, was unable to find any preservative substance in them. It is true that in the skulls a brown or blackish mass, in dust or small pieces, has been found; but a chemical and microscopical analysis has proved that the dust and the pieces were composed of cerebral fat and globules of dried blood. All the mummies contain the brain and intestines, and in none of them could Rivero discover any incision which would have been necessary for evisceration had the bodies been subject to embalment. In the mummy of a child found by Dr. Von Schudi, and which is now in the Imperial Academy of St. Petersburg, the ribs of the left side were detached from the sternum, exposing the thoracic and part of the abdominal cavities, plainly showing the heart, with the pericardium, the shrivelled lungs, the diaphragm, the transverse colon, and portion of the small intestines. These facts prove that the Peruvians did not have recourse in the preservation of the dead to any elaborate process of embalming as customary among the Egyptians. The bodies were simply desiccated by exposure to the air. The heated soil and calcined sand on the coast dried the corpse, and the pure cold air and dry winds of the interior did the same thing.

In Peru the animals that drop by the wayside will be found at the end of months entire, not corrupted, but dried. On the highway from Arequipa to Lima a number of the mummified animals are to be seen, which serve as landmarks to indicate the road when the wind covers it with sand. The climatic conditions of the imperial city of Cuzco are very favorable to the desiccating process. Here, in the great temple of the Sun, the remains of the Incas have been discovered in a marvellous and lifelike condition. Cuzco, the most ancient city of Peru, has an elevation of 11,380 feet above the sea. Surrounded by lofty and snowclad mountains, it might be supposed to possess a cold, not to say frigid, climate; but its temperature, though cool, is seldom freezing. In what is called the winter season, from May to November, the pastures and fields are dry and withered, more from drought than from frost.

La Casas describes the Peruvian burial rites as follows: "The dead are wrapped in the skin of the llama, then clothed and deposited in a sitting posture. The doors of the tombs, which are all toward the east, are then closed with stone or clay. At the end of a year, when the body becomes dry, the doors are again opened. There is no bad odor, because the skins in which the bodies are placed are sewn up very closely, and from the cold they soon become mummies."

Travellers in Africa have found bodies of camels, which had evidently died of fatigue in the desert, to be so dried and preserved by the heat of the sun that no evidences of post-mortem decay were discovered. The atmosphere of our North-west Territories is, in some places, so dry that the snows of winter pass off from the ground without leaving it wet, and mummified buffalo have been found on the plains of Colorado. When freshly killed meat is subjected to a dry summer heat, it is rapidly converted into the well-known *jerked beef* of the plains. Dried apples, peaches, and other fruits are familiar examples to every housekeeper of desiccated vegetable matter. This method of preservation is as widely known as it is primitive, and clearly indicates that absence of moisture prevents decomposition of organic material, or, in other words, desiccation takes the place of putrefaction. X.

New York, Sept. 16.

#### Monopolies and the People.

IN the criticism which you make (*Science*, xiv. p. 186) of the plan which I proposed for settling the railroad question, in my book "Monopolies and the People," I think you slightly misapprehend my views, as you say, "All fares and freight tariffs are to be fixed by the government commissioners." At the present time, in a number of the States of the Union, fares and freight tariffs are fixed by a State commission; and the provisions of the Interstate Commerce Law subject rates on all interstate traffic to the approval of the United States Government Commission.

My contention is that these rates should be fixed, not by a company, which holds a monopoly, or by a government commission, holding autocratic power. The one plan is unjust to the people; the other, to the railway-owners. The principle which seems to me the true one is, fix rates in proportion to the expense of carrying the traffic.

CHARLES WHITNEY BAKER.

New York, Sept. 14.

#### Queries.

48. ORIGIN OF THE COMMON NAME OF CROTALUS CERASTES. — Recently a naturalist friend residing in Santa Fé, N. Mex., begged to know of me the origin of the name "side-winder" for the horned rattlesnake (*C. cerastes*), and, although I have often heard that term applied to the crotaline species alluded to, I have never been able to ascertain how such a name came into use. The few persons versed in such lore to whom I have referred the matter could give no account of it, or state whether they knew of any particular habit of the horned rattler that would justify its being so called. Yarrow quotes the name in his "Check List of North American Reptilia and Batrachia" for the species in question, but, so far as I know, nowhere explains its origin; and I would be glad of any light upon this point.

R. W. SHUFELDT.

Takoma, D.C., Sept. 11.