

21, 160, 167), purporting to represent the stages of the engulfment of the arthropod alimentary canal by its nervous cord, and the concomitant evolution of a new alimentary canal for the ancestral vertebrate. Your reviewer appreciates the labor of gathering real or supposed facts from so many and varied sources, the zeal of argumentation, and the ingenuity of the original hypothesis, and is not—he hopes—influenced unduly by the lack of its public acceptance, so far as he is aware, by any competent morphologist, but he finds himself unable to characterize it in terms more fitting than those applied by its author to an idea that did not commend itself to him (p. 15): "It is not only unheard of in nature, but so improbable as to render impossible the theory which necessitates such a position." But whatever be the fate of its main thesis, Gaskell's book will stimulate research and discussion respecting an interesting and complex problem, and it may hasten the publication of the volume which Patten has long been preparing. It may also further a reaction from the extreme specialization that has been forced upon biologists by the prodigious accumulation of facts and elaboration of ideas during the last half-century. There may be devised a coöperative educational scheme that will qualify certain selected minds to deal effectively with large questions demanding intimate knowledge and impartial judgment respecting data derived from the structure, development, and geologic succession of forms supposed to represent the transition from invertebrates to vertebrates.

The illustrations of the present volume are numerous and clear, but not always accurate. Some appear to have been borrowed and even modified without specification. There should be a complete list, with acknowledgment of all sources. The admirable summaries of the several chapters deserve to be in larger type. The bibliography is so nearly complete that it is not easy to account for the omission of the title of Patten's critical letter in the *American Naturalist* for April, 1899. The printing is well done, and, especially considering the numerous technical terms, typographic errors are few. It would be interesting and instructive to ascertain how much space might have been saved had the oft-recurring terms "central nervous system" and "alimentary canal" been replaced by *neuron* and *enteron*, already familiar in the compound, neuroenteric canal.

Among the books on science in the spring list of Cassell & Co. are the following: "The Nature Book," with an introduction on "The Love of Nature," by Walter Crape; "Gardening in the North," by S. Arnott and R. P. Brotherton; "Sweet Peas and How to Grow Them," by H. H. Thomas; "Live Stock," by Primrose McConnell; "Life

Histories of Familiar Plants," by John J. Ward; "Little Gardens," by H. H. Thomas; "Cassell's A B C of Gardening," by Walter P. Wright; "Cassell's Cyclopaedia of Mechanics," edited by Paul N. Hasluck; "The Handyman's Enquire Within," edited by Paul N. Hasluck; "Cassell's Household Cookery," by Lizzie Heritage; "Estimation of the Renal Function in Urinary Surgery," by J. W. Thomson Walker; "Structural Engineering," by Prof. A. W. Brightmore; "Outlines of Electrical Engineering," by Harold H. Simmons; "Elementary Dynamo Design," by W. B. Hird; "Popular Electricity," by W. Hibbert.

"The Baby: His Care and Training," by Marianna Wheeler, will be issued this spring by Harper & Bros.

Lieutenant Shackleton's exploit (see the *Nation* of April 1, p. 340) gives a special significance to the opening article of the *Annales de Géographie* for March on the Antarctic continent by M. Zimmermann. It is a résumé of the scientific results of the voyage of the *Discovery* and it closes with the enthusiastic statement that practically no work has been left for succeeding expeditions in that particular region except the collection of species of marine animals.

A work has been in serious demand when it reaches a seventh edition, which is the present status of Dr. C. W. Dulles's "Accidents and Emergences" (Philadelphia: P. Blakiston's Son & Co.), noticed in these columns in former years. That demand was fully justified by the clear and sensible discussion of those unforeseen occurrences which we call accidents, and this fully illustrated issue has been enlarged and truly revised. Its most novel injunction is the treatment of general freezing by heat, not mere warmth, applied with vigor and care by the hot bath or dry. Of this the author seems assured, and he cites confirmatory experiments with animals. His well-known skepticism as to hydrophobia leads him to advise against resort to Pasteur Institutes, on account of bites by presumably rabid animals; but in all other respects the well-indexed little volume may be accepted as a trustworthy compendium of practical information.

Dr. Persifor Frazer, a handwriting expert, died at his home in Philadelphia April 7. He was born in that city in 1844, and was graduated from the University of Pennsylvania. He served in the army and navy during the war, and afterwards joined the faculty of his university, teaching chemistry and geology until 1882. He wrote various papers on these subjects, but his most important publication was his "Bibliotics" (3 eds., 1894-1901), which, in the opinion of Bertillon, was the first scientific treatise on handwriting.

Dr. Arthur Gamgee, a distinguished London physician, died in Paris, March 29, in his sixty-eighth year. He was educated at Edinburgh University, was professor of physiology in Owens College, professor of physiology at the Royal Institution of Great Britain, and was active in the investigation of physiological chemistry. He translated and edited Hermann's "Human Physiology" (1875), wrote a "Text-book of the Physiological Chemistry of the Animal Body," and contributed to scientific publications many papers on his specialty.

Drama.

HELENA MODJESKA.

Helena Modjeska, the Polish actress, died at Bay City, California, April 8, after an illness of about two months.

She was born in Cracow, in 1844, the daughter of Michael Oppido, a musician of fine cultivation, who had a large acquaintance among artists. Her early youth, therefore, was passed in a refined and inspiring intellectual atmosphere. Almost from the first she seems to have felt an impulse toward the stage. Two of her half-brothers became actors, and she wished to follow their example, but encountered strong opposition from her mother and her guardian—for her father had died while she was still a child. But when she was in her fifteenth year, the loss of family property forced her to earn her own living. Soon after her marriage to her guardian, Modrzejewski, she turned to the theatre, appearing under the abbreviated name Modjeska. Her success was immediate, and her husband straightway organized a travelling company, with which she visited all the principal towns in Galicia. In 1862, while she was still in her teens, she secured an engagement for three months in the government theatre at Lemberg. After this she passed through a difficult period, but she continued to advance in reputation until she was encouraged to lease a theatre, on her own account, in Czernowice, where she played the heroines in various standard dramas, with her two half-brothers and a sister in her company. By 1865 she was so popular that she was engaged as leading lady for the theatre at Cracow, and thenceforth her triumph was assured.

Her fame soon extended beyond the confines of Poland; offers began to come to her from European managers; and then the younger Dumas invited her to go to Paris, and play the part of Marguerite Gautier in his "Dame aux camélias," a sufficient proof of the prominence to which she had attained. All these offers she steadily refused, in order to devote all her energies to the Polish stage. By this time she had become a widow, her first husband having been many years her senior, and, after a brief interval, she married the Count Bozenta, who was to be her devoted manager during the remainder of her public life. Leaving Cracow for Warsaw, she began a series of performances in prominent Polish plays, and in the masterpieces of Shakespeare, Goethe, Schiller, and Molière, displaying notable versatility. There she remained for seven years, during which she played in nearly three hundred parts, with increasing fame. It was as Adrienne Lecouyreur, that she then achieved her greatest reputation.

But her husband incurred the ani-

mosity of the authorities on account of his political writings, and she herself incurred their ill will by resisting to the uttermost the Russian censorship of the Polish theatre. In course of time her health began to give way beneath the pressure of these worries, and in 1876 she resolved to emigrate to America, where she finally settled on a ranch near Los Angeles, hoping to found in that neighborhood a Polish colony. A year later she visited San Francisco, where, having won high praise by recitations in Polish, she began to study English, with the view of acting upon the American stage. In this enterprise she was encouraged by Edwin Booth, John McCullough, and others, and in due course she made her first appearance in California, as Adrienne Lecouvreur. This was the beginning of her successful American career which was to endure, with but brief interruptions, for thirty years. After a tour of the United States she recrossed the Atlantic to play two engagements in London—where she was hailed as one of the greatest actresses of her day—and also to try her fortunes once more in Poland. But soon she found herself excluded, by official decree, from Russian territory, and thereafter practically all her professional work was done in this country. In 1905 she bade farewell to the New York stage. Since then she had appeared in different parts of the country, but of late she had spent most of her time on her California ranch.

She was generally acknowledged to be one of the most gifted performers of her generation. In her prime her personal fascination was of an exceedingly rare kind. Her tall figure was singularly graceful, her face, though not of classic beauty, was wonderfully attractive in its intellectual charm and eloquent mobility, while her gestures were full of animation and significance. Her range of emotional expression was very wide. She could give full utterance to stormy emotion, maintain herself on the heights of tragic dignity, or relax in the gayest mood of refined comedy. All her work was distinguished by exquisite finesse. Her Adrienne Lecouvreur was a magnificent performance, glowing in its sentiment, superb in its scorn, most pitiful in its pathos. As the unfortunate Mary Stuart she presented a moving study of gracious womanhood and broken majesty. Her Juliet was bewitching in the early love scenes and finely tragic in its despair, although in the potion speech she could not attain to the frenzied horror of Adelaide Neilson or Stella Colas. Her Rosalind was more nearly the realized ideal of Shakespeare's delightful heroine than any interpretation known to modern playgoers. Her embodiment breathed the very spirit of romance and the woods. It had just the right touch of masculinity in the masquerade, and yet was

irresistibly and indisputably feminine. It had the air of high-breeding, it had buoyancy, courage, tenderness, wit, and grace. Henrietta Crosman comes, perhaps, the next in order, but her Rosalind is of less ethereal and poetic texture. Another exquisite embodiment of Madame Modjeska was her Ophelia, which might well be compared with that of Ellen Terry. She played this part on the memorable occasion of the benefit for Lester Wallack; and Edwin Booth, the Hamlet, had to act his best to save himself from eclipse. In England she created a sensation with her Odette, and her admirable work in "Frou-Frou" and "Camille." Her Magda also was eloquent in its pride, its fierce contempt, and its despair. But it was not in the modern emotional drama or in such sensational pieces as "Les Chouans" that her best powers were revealed. These found their full scope only in the higher regions of the poetic drama. She was in later days the sole representative of such Shakespearean women as Imogen and Isabella, and she was the last notable interpreter of Lady Macbeth, although that was not to be accounted among her greatest achievements. Nor must her Viola be forgotten, a delightful bit of true Shakespearean comedy. Shakespeare was always her chief delight.

OUR FOREIGN AND NATIVE ACTORS

The death of Helena Modjeska may be said to mark the end of a theatrical era. She was the last surviving member of the group of great players of foreign nationality and training who repeated here in English the triumphs which they won originally in their native tongues. Prominent among them were Adelaide Ristori, Fanny Janaschek, Daniel E. Bandmann, and Charles Fechter. Tommaso Salvini, who, happily, still lives in retirement, may be added, perhaps, to the company, for although he never ventured himself to act in any language but Italian, he played habitually in this country with English-speaking support, and so great was his genius that it suffered comparatively little from that polyglot arrangement. Among their illustrious contemporaries, who contributed to the glories of the American stage, but adhered to their native speech, may be mentioned Bogumil Dawison, Seebach, Rossi, Sonnenthal, Ludwig Barnay, Frederick Haase, and Constant Coquelin—all of whom have joined the great majority—Sarah Bernhardt—who may or who may not be seen here again—and Eleonora Duse.

All these performers, and the list might be increased, have acted in this country during the last forty years, and it may be interesting to glance for a moment at the sum of their artistic achievement, as compared with that of their English-speaking contemporaries

on both sides of the Atlantic. Such a comparison cannot be made very flattering to the Anglo-Saxon theatre. What players of the first rank—not to insist too particularly upon the word "great"—has it produced since Macready, Phelps, Charles Kean, Edwin Forrest, E. L. Davenport, J. W. Wallack, and Charlotte Cushman, ended their careers? The question, it must be remembered, relates only to interpreters of the higher drama, the drama that demands imagination, brains, eloquence, and artistic cultivation. Two or three names suggest themselves instantly. Among them are those of Edwin Booth, Henry Irving, and Ellen Terry. Next in order—but on a distinctly lower level—come Lawrence Barrett, John McCullough, and Richard Mansfield. Of these, all but one are already dead. Their most promising successors are Robert Mantell, E. H. Sothern, Julia Marlowe, Forbes Robertson, Oscar Asche, Arthur Bouchier, and Beerbohm Tree, and of these all except Oscar Asche have already reached their meridian. Of competent performers in the modern drama—except when it partakes of the romantic—there are many, but their art is lower in degree, although some of them are eminent in their specialties.

If the actor be judged by his identification with the most notable characters in the imaginative drama, Edwin Booth is the greatest English-speaking actor of his period. In Hamlet, Lear, Shylock, and Macbeth, as well as in such romantic characters as Richelieu and Bertuccio, he attained heights that none of his rivals could approach. Henry Irving, at least his equal in romance and his superior in comedy, was, in tragedy, his inferior. Ellen Terry was supreme in the brilliant comedy of Portia and Beatrice and in the pathos of Ophelia. She was out of her depth in Lady Macbeth, or even in Juliet. John McCullough's highest achievement was his Virginius, though he had inspired moments in Othello and Lear. Barrett was sound and able in many characters, great in none. Mr. Robertson is the most eloquent, intellectual, and attractive of living Hamlets, but it would be absurd to compare his impersonation with Booth's.

None of the other English players mentioned has accomplished anything very significant. None of them certainly has done anything comparable with the Othello of Salvini, or—with the single exception of Mr. Booth—anything to equal certain passages in the Lear and Macbeth of the Italian actor, who, in grandeur of passion and pure pathos, was without a peer. In his own peculiar characters, Niger, Saul, Samson, and Conrad, for instance, he defied rivalry. Ristori's Lady Macbeth, whether in Italian or in English, was probably the greatest, after that of Sarah Siddons, while her Elizabeth, Marie Stuart, Phèdre, and Medea were ac-