Contemporary Thought.

THE historical novel in most hands becomes somewhat of a bore. We are apt to see through the disguises, and, despite a vast affectation of antiquarianism, become somewhat weary of a number of the puppets of to-day masquerading in garments of the past.—*S. in the Book-Buyer.*

I DON'T remember having seen any allusion to Archdeacon Farrar's interesting admission that he had got more good out of Browning's poems than out of all the sermons he had ever read, and yet it was a very notable admission for a clergyman to make. Another suggestion that should have claimed attention was contained in his remark that Browning is perhaps the greatest living intellect. An English correspondent writes to remind me of the facts that Dr. Farrar was born in India, at Nasik, in Bombay Presidency, where his father served as an agent of the Church Missionary Society, and that before going to Oxford he studied at King William's School, in the Isle of Man.—*"Lounger," in the Critic.*

AN American student of pedagogy who, after working in the German literature of the subject, has found relief by turning to the French writers, will experience the same pleasant impression on becoming acquainted with the educational literature of Italy. Lightness and clearness are among its valuable qualities; while no one that has undertaken Siciliani or Rosmini will deny its depth and solidity. To an American school-man it is a wholesome lesson to survey the foreign pedagogic field and to learn that the great questions which press for solution at home are the questions among other peoples also, where they may often be seen in more advanced stages of development, or even already settled. By no means do we lead the world in education. We are a vigorous younger child in the great family of cultured nations, becoming now old enough to respect our elders.—*The University.*

THE *smallest* portions of matter that can exist are known as molecules, and they are so small that it is hopeless to think of ever being able to see them, even through the most powerful microscopes. The *thinnest* piece of matter of which we have any knowledge is the film of a soap-bubble just before it bursts. At this point the thinnest part of the film looks black, and its thickness is known with almost perfect accuracy to be the ten-millionth of a millimetre—say the three-millionth part of an inch. Some recent researches by Professor Rucker, Sir W. Thomson, and Van der Waals, attacking the subject both from a mathematical and a physical point of view, agree well in their estimate of the number of molecules of water which must lie side by side—like bricks—to make up the thickness of the film of water which constitutes a soap-bubble. It seems that the number cannot be less than *four* nor more than *seven hundred and twenty*. Twenty-six is perhaps the most probable figure; in which case the diameter of each molecule would be the nine-millionth part of an inch.—*The Week.*

NOWHERE have elective studies gained such a foothold as in the United States. It looks as though we are, in education, as in government, drifting farther from the fixed principles of our fathers, towards the destructive rocks of "do-as-you-please." Harmonious development requires that the faculties of each individual be evenly developed; that the result of training be evenly balanced. Memory, reason, imagination, should each receive due attention. He who likes only one class of mental exercises is far from having a well-trained mind, while he who likes equally well all classes mental exercises has a well-balanced mind. Harmonious development requires that the weakest faculties receive the most culture. Elections are harmful to most pupils. Children and parents are often incompetent to select. The effect of elections is clearly seen in the ungraded academy of the New England States. There it was not uncommon to find students pursuing one class of studies exclusively. Uneven development does little for the man and less for humanity. Philanthropists are generally men with broad views. A specialist who has not received a liberal eduction is narrow-minded. The really practical studies are those which fit one for usefulness; they are those that train one to think and to express his thoughts. It is the same whether training for one business, for the bar, the pulpit.—*Supt. A. W. Stuart, of Ottumwa.*

HOW, then, does the mechanism of the brain really act? I believe the true answer to this question is the one most fully given by M. Ribot and never yet completely accepted by English psychologists. It acts, for the most part, as a whole; or at least, even the simplest idea or mental act of any sort is a complex process involving the most enormously varied brain-elements. Instead of a dog being located somewhere in one particular cell of the brain, dog is an idea, audible, visible, legible, pronounceable, requiring for different modes of its perception or production the co-operation of an enormous number of separate cells, fibres, and ganglia. Let us take an illustration from a kindred case. How clumsy and awkward a supposition it would be if we were to imagine there was a muscle of dancing, and a muscle of walking, and a muscle of rowing, and a muscle of cricketing, and a muscle for the special practice of the noble art of lawn-tennis! Dancing is not a single act; it is a complex series of co-ordinated movements, implying for its proper performance the action of almost all the muscles of the body in different proportions, and in relatively fixed amount and manners. Even a waltz is complicated enough; but when we come to a quadrille or a set of lancers, everybody can see at once that the figure consists of so many steps forward and so many back; of a bow here, and a twirl there; of hands now extended both together, and now held out one at a time in rapid succession; and so forth, throughout all the long and complicated series. A quadrille, in short, is not a name for one act, for a single movement of a single muscle, but for many acts of the whole organism, all arranged in a fixed sequence.—*From "A Thinking Machine," by Grant Allen, in Popular Science Monthly for March.*

A CORRESPONDENT of the *Daily News* writes: On reading through the self-gratulatory remarks of the Director-General of Public Instructions in France, which appeared recently in your paper, one is naturally led to inquire whether a similar progress—progress of the good, substantial kind—has taken place in our own country. To those who answer in the negative, who deplore the mechanical cram which too often takes the place of any real education in our elementary school, may I be permitted to offer the following remarks, contrasting the French and English system of training teachers? In France no one is allowed to teach without a "Brevet de capacité," obtainable after an examination, to which none are admitted who are not at least 17 years of age. In England untrained and imperfectly educated boys and girls of from 14 to 18 have practically the entire responsibility of large classes, classes which they must teach as best they can; for the evening hours which a trained teacher might devote to careful preparatory work these unfortunate pupil teachers must spend upon their own studies for the yearly examination. In France the students enter training colleges at 15. They are young and impressionable, more important still, they have nothing to unlearn. Here they receive an entirely gratuitous three years' training, in return for which they are pledged to serve in the profession for ten years, an obligation which involves no great hardship, seeing that they would be free at 28 years of age. In our English training colleges no student is permitted to enter under the age of 18. They have already served an apprenticeship of four or five years. This means that they have formed habits which the majority of them are powerless to break through, and that all enthusiasm for their future profession has been crushed out of them by previous overwork and failure.

THERE has been a singular mortality of late among the principals of the Scotch universities. Little more than a year has passed since the decease of Sir Alexander Grant; Principal Shairp expired in September; Dr. Pirie, of Aberdeen, died in November last; and now news comes of the death, on the 13th of February, of the other principal of St. Andrews. Principal Tulloch had been suffering from broken health during all the early winter; but no immediate danger was apprehended till a week before his death, when dangerous symptoms set in. He was in his sixty-third year; in the full force of his fine and vigorous intellect; and his loss to his university and to Scotland, especially at the present crisis of ecclesiastical affairs in the north, is almost incalculable. His liberal and generous intelligence and great popularity gave him a power for good, the absence of which in the councils of the Scotch Church will be greatly felt. His death will be to Scotland a national loss, as well as a great shock and regret to many friends on the other side of the border. Principal Tulloch was a "robust Christian," and a scholar of the old Scotch school—about as great a contrast as is conceivable to his brother principal, Dr. Shairp, who died last summer. He was as combative a principal as Charles Reade was a fighting man of letters, while Principal Shairp was "all for culture." Of all the university officials at St. Andrews he was of the students the most beloved. They are a hard-headed, unpolished constituency, and his hospitality and geniality exactly suited them. His sympathies were broad, and he had, like Dean Stanley, a liking for heretics, being ever ready to side rather with the persecuted than the persecutor. On his own church his influence was eminently good. It was always exercised on the side of tolerance and progress.—*The Week.*