

no place should be given to any selection, however suitable from a Catholic standpoint, if it be lacking in literary value. Hence the necessity of having skilled and, at the same time, practical educators as compilers.

If these precautions be taken, we may expect to have a series as complete in plan and general make-up as the present

Ontario readers, a series having all the advantages of the latter and none of their disadvantages. And, when this much has been accomplished, other reforms in the same direction may be looked for; but, not until then may we hope to see the Separate Schools doing their proper work by turning out Catholic pupils imbued with thoroughly Catholic ideas:

HUGH J. CANNING, '93.



FORMATION OF THE SOLAR SYSTEM—FAYE.



At all times, amongst all nations, the origin of the earth and of the solar system has been, and is more particularly at present, a problem, the solution of which excites our deepest interest and evokes profound research. The greatest geniuses of every age have endeavoured to fathom this mystery, and have presented to us theories embodying their views upon the subject. But all of these, owing to the rapid strides with which science is ever advancing, have been in turn rejected. The theory that was long accepted as the most probable, is that of Laplace, upon which, however, recent discoveries have cast discredit. Laplace beheld all the planets and their satellites rotating and revolving in the same direction, and concluded that this was a general and absolute law. In this he was mistaken, for shortly after his death, it was established beyond all question, that the satellites of Uranus were retrograde, that is, their revolution around the central body was in a direction opposite to that of other planets and their satellites. At a subsequent period, when the existence of Neptune became known, it was found that his satellite also was retrograde. According to Laplace the solar system was formed from an immense mass turning in one body, and gradually casting off rings, from which the

planets would issue, the most distant first and the others in succession. As Laplace himself maintained and as his theory necessitates, all the planets would originate in the same manner, and all their movements must be in the same direction. Laplace based his theory upon the assumption that all the planets and their satellites possessed a similarity of motions. Since, then, we are aware that the moons of Uranus and Neptune, and, judging from present observations, these planets themselves, are exceptions to this law, Laplace's hypothesis must be admitted to be sadly deficient, if it is not to be rejected entirely. Laplace compared the primitive nebula to an enormous atmosphere adhering to a central body, the strata of which would press one upon the other, obeying their attraction towards the centre; now in concentric nebulous rings each stratum does not exercise any pressure upon the succeeding one, because in all revolutions, following the laws of Kepler, the centrifugal force exactly counterbalances the tendency towards the centre.

If, then, we have a nebulous ring turning round a central mass, the velocity of each molecule does not increase in the ratio of its distance from the centre, but, on the contrary, decreases "in the ratio of the square root of this same distance" owing to the attraction of the central mass. If we adopt the theory of Laplace, it follows, that the molecules of the interior of such a ring would be in advance of those at the ex-