

Euclid three years for 26 Propositions of the First Book; one year now for the remaining twenty two propositions of the First Book, the Second and Third Books, with deductions thrown in as a bonus. The Arithmetic of the Primary is to be continued and concluded. This means that a class of problems in Commercial Arithmetic and Mensuration are to be mastered for which the mathematical attainments and mental powers of the pupils are wholly inadequate.

When the pupil leaves the Junior Leaving behind, he abandons with it, all further study of Arithmetic. But to console him, he is required in another year, to grapple with the difficult and extended work involved in Algebra between the Quadratics of the Junior Leaving and Annuities of the Senior Leaving. He also begins Trigonometry, and is expected to complete the course required for Honour Matriculation. Euclid is extended two Books farther, with the addition of more difficult Deductions.

Now, what strikes the observer most forcibly is the wretchedly small amount of Mathematics required for the first three or four years, and the inordinately large amount for the next two. One must suppose that the Educational authorities expect the passing of the Primary examination to have a magical effect in suddenly enlarging the capacity of the pupil, and in strengthening his power of abstract reasoning. Up to this examination his mathematical training has been purposely limited. Is it not somewhat unreasonable, then, to demand from him, in one year, twice as much as he has been accustomed to accomplish in three years? Is it at all surprising that failures in Algebra and Arithmetic occur so frequently at the Junior Leaving.

2. Again, not only is there a most injudicious division of work, but the

order and manner of the work done must be condemned. The introduction of difficult problems in Commercial Arithmetic, and in Mensuration, for the Primary and Junior Leaving is simply irrational. A grave mistake was made when Arithmetic was left off the course of study for the Senior Leaving. The most difficult problems in Commercial Arithmetic and in Mensuration, should be left to the last stages of the High School pupils' training. Mental immaturity and lack of Algebraic and Trigonometrical knowledge alike condemn the introduction of such problems at an earlier stage.

Nor must the manner in which Arithmetic is studied be exempt from blame. From our Normal Schools, Training Schools and Colleges comes the complaint that the students who go into the teaching profession and into the Universities, do not understand the principles that underlie Arithmetical operations. They are beginning to go back to the old vice of leaning on rules and formulæ. Mental Arithmetic, a most valuable training for the mind, is utterly neglected; while the gross educational blunder of encouraging students to solve Arithmetical problems by means of Algebra, is robbing the study of Arithmetic of its chief educational value. One would not be at all surprised to hear that the educational authorities, in their zeal for practical results, should advise the introduction into our schools of a Ready-Reckoner.

3. To the improper division of work among the different Forms, and the wrong methods encouraged in the study of Arithmetic, must be added another cause for mathematical degeneracy. Looking over the values attached to the various subjects on which candidates are examined, one cannot fail to be struck with the evident determination of the Education