E.—9.

Arrangement of Desks for Mathematics.—The arrangement preferred is probably that adopted in the Dunedin High School. The "desks" are shelves fastened by hinges round three sides of the rooms. When writing, the boys sit at these with their faces to the walls; when not writing, they sit facing the other way. Our present desks and benches would not be available for use in this way. But, further, the facing the walls, the impossibility for the Master of having the whole class within his glance at once, the necessity of having his back to the boys on one side of the room if he leaves his desk and faces those on the other, and the use of forms without support for the backs, make the arrangement, to my mind, objectionable. I have visited the following New Zealand schools: Timaru High School, Christchurch Boys' High School and Christ's College Grammar School, Waitaki High School, Nelson Boys' College, Wellington College, Napier High School, Auckland Girls' High School, and Dunedin Girls' High School. Unless it be in the last, as to which my recollection is not definite, the arrangement is not found in any of these schools, nor have I seen it in any English school.

Disuse of Slates.—Slates were deliberately abolished by me throughout the school, as injurious to handwriting, tending to encourage recklessness, and uncleanly in use. I mentioned this at the time to the Board. Their chief recommendation is that they are economical.

Algebra, Euclid, &c.-Alpha, Division 2, consisted of boys who had not completed one term in the class. Gamma, Delta, and Zeta contained poor material. All the best boys on entering the

Upper School pass over Zeta into Epsilon.

Slow-Progress from Class to Class.—This is due, not to the cause suggested by the examiners below, but (1) to the late entrance, and therefore late commencement of mathematics; and (2) to the great drain of boys from the classes in the middle part of the school, and the overwhelming influx of boys in the lower parts of the school. Recently the influx has ceased, but the consequent reduction of the staff equally necessitates promotions. These have to be made much too often, and without proper regard to fitness, simply to fill up the higher and make room in the lower classes; and when unprepared boys are sent into a class the standard must come down to them.

"Thus, in arithmetic the classes do not become strong in the general subject until Alpha and Beta—the two highest classes in the Upper School—are reached."—Alpha learns no arithmetic, though, of course, it takes up the whole subject for examination; Beta merely does occasional papers to prevent the boys from forgetting—a thing which, if allowed to lay the subject on one side, even the district scholars, who have for many years made arithmetic their chief study, do with surprising rapidity. Gamma and Delta, in like manner, merely revise the subject, and, when necessary, add one or two new rules which are not taken in the Sixth Standard—the measure of the attainments of district scholars. Experience has shown that it is not wise to drop arithmetic as soon as the rules have been gone through; but it is in the main "got done with" in the lower classes of the Upper School. As to the Lower School, it is sufficient to point out that the boys in the

highest class (A) have, on the average, been but eighteen months or less in the school.

Six Classes said to "jostle" one another.—The "six classes" are, Beta, Gamma, Delta, Epsilon, Zeta, Division 1, and A, Division 1. The last two are not whole classes, but divisions. Zeta, Division 1, a portion of the lowest class in the Upper School, is really inferior to A, Division 1, from which, so soon as their other subjects permit them to enter the Upper School, boys go directly to Epsilon. Beta was doing simple simultaneous equations when examined—that is, in the first term of the school year. At the end of last school year it was in quadratic equations. So, in Euclid, Beta at the end of last school year had finished Book IV., and Gamma was where Beta now is. It was and is intended that Alpha, Division 2, should begin trigonometry at once: by the end of the school year it will have made considerable progress. But the six Forms are not in fact successive, and cover a very short space of time. As I have mentioned, nearly two-thirds of the boys in Beta have spent little more than a year on Euclid and algebra. For such a period the amount of work is, in my opinion, more than respectable. And, be it noted, Beta is highly commended by the examiners, a proof that these boys have rightly been advanced above their fellows.

Mathematics said to be weaker than they should be.—I do not believe that the mathematical department is notably, if at all, weaker than the others. In all alike the standard is necessarily very low. I cannot but think that the examiner has been led to take a somewhat more severe

view of it by the fact that he has a theory to support.

Arithmetic of the Lower School said to be not strong. Note, "of the Lower School."—If this is the case, and if, as I contend, there are causes beyond my control which tend to depress the standard, at least it is right to carry on arithmetic until it is, as the examiner allows that it is in

the highest classes, really strong.

"There are, no doubt, several subsidiary causes."—With this brief reference the examiners dismiss all the exceptional difficulties under which the school has been carried on, except that further on they mention the district scholarship difficulty as a thing of the past, which, as regards its effects, it will not be for many years. But I can well believe that none but those who have had actual experience of them can realise what our difficulties are.

"We believe the main cause to lie in the present organization of the mathematical department." —It will be convenient if I here briefly describe the system introduced by me and now criticised by the examiners. I found a division of the school into Upper and Lower existing. (I may remark parenthetically that a report in which I pointed out that this division is not very convenient, and that it mulcts the young and forward whilst favouring the old and backward in the matter of fees, and suggested that the difference of fee should depend, not on a boy's place in the school, but on his age, has shared the fate of many others in not securing the consideration of the Board.) The boys of the Upper School are distributed into as many Forms as the number of masters permits for Latin, English, French, and natural science, on the basis of their attainments in those subjects. For mathematics they are redistributed into classes—as they are called for the sake of distinction—on the basis of their proficiency in mathematics. Thus it is possible, though so extreme a case