

time he will be able to calculate correctly, and rapidly enough for all ordinary purposes.

A third cause of failure is, the lack on the part of the teacher of a well selected stock of questions. However large the class, and however wide the abilities of the scholars, there must be work adapted to the requirements of each; some simple enough for the dullest, and others calculated to excite the interest of the brightest. There must be sufficient variety in the subjects, or the interest of the class will soon abate. The scholars will become slow and careless, and the teacher dissatisfied.

A class of very young children might begin with the numerals, the scholar at the head of the class saying 1, the second 2, the third 3, and so on; then the even numbers, 2, 4, 6, &c., and in the same way the odd numbers. The addition of two numbers might come next, then three or four numbers, but they should not be required to use large numbers at first. As soon as the Multiplication Table is learned questions may be selected from it; this will remedy the evil of having to begin at the beginning of a table, whatever line is required. Division may follow, but its meaning should be explained. Children understand Multiplication more readily. At first give questions in which there is no remainder to the answer. Thus, fives in 25? Five times. Then fives in 26? Five times and one over. Fives in 27? Five times and two over. This will teach them the meaning of quotient and remainder. When they come to Tables of Weights and Measures, they may be taught to work problems from them. An illustration may be drawn from the Money Table. How many farthings in a shilling? Four times 12 are 48. How many pence in a pound? Twelve times 20 are 240. "Time" is one of the easiest tables to use, as children have no difficulty in understanding it. A variety of questions may be taken from the days of the months; such as, How many days from Jan. 4th to June 17th? or from the longest day to Christmas day? This exercise will fix in their memories the number of days in each month, give them an idea of the relative length of different spaces of time, and they will learn the dates of important days of the year.

The Reduction of Money from currency to dollars and cents, and *vice versa*, may follow; then the value of so many articles at a given price; then the same, with the answer reduced. The Squares and Cubes, from 2 to 10, may be learned, and a variety of questions similar to that quoted above, but of course, very simple at first, and gradually more difficult. The expressions "plus," "minus," "sum," "difference," &c., may be employed so as to familiarize the scholars with their meaning. Questions in Mensuration may now be given, such as, the length and breadth of a field being given, to find its area. The three dimensions of a room, to find its solid contents.

If the teacher is in the habit of explaining the various rules of Arithmetic in class, it is an excellent plan to make the Mental Arithmetic work with it as to subjects. Thus, the definitions, rules, and simplest examples may be taken in one class, and the more difficult problems with the slate in the other. As a preparation for Fractions, the prime and composite numbers, as far as 100, may be learned; then the factors of the composite numbers in pairs, thus, the factors of 24—2 and 12, 3 and 8, 4 and 6—three pairs of factors. Each pair of factors may be given by a different scholar first, and afterwards all by one scholar. The next exercise may be the Divisors of Numbers (omitting the number itself and unity), thus, the divisors of 24—2, 3, 4, 6, 8, 12. They may be given separately and then by one pupil. A class that has become expert in these last exercises, will find no difficulty when they come to cancelling, which is one of the most important operations in practical arithmetic. Measure, Common Measure, and G. C. M. may now be taken; then Multiple, Common Multiple and L. C. M. In Fractions, besides the definitions, simple questions may be given in Reduction, Multiplication, Division, &c. Interest is a favourite rule with teachers of Mental Arithmetic, and affords a variety of interesting problems, which may be made to include Insurance, Assessments, &c.

In conclusion, I need not urge the importance of the subject: I think that is admitted by all. There is, however, one fact which perhaps is generally lost sight of. It is a general complaint that children are badly provided with books and other school requisites. This difficulty cannot apply in the present case; for, wherever you have half a dozen children endowed with ordinary capacity, there you have all the materials for a Mental Arithmetic class.

VERULAM, SEPT. 17, 1861.

J. H. KNIGHT.

2. HINTS ON SCHOOL DISCIPLINE.

FROM THE GERMAN.

The teacher who has the good of the children sincerely at heart, will probably soon discover for himself what peculiar kind of praise and what peculiar punishment may, in each case, be most advantageously employed. This love for the children will prevent him from employing any kind of punishment which would be injurious

to them; but it will not prevent him from making use of every allowed and approved means by which the object of sound discipline can be best attained. The disciplinary means which we are now about to speak of, are means which have been devised as substitutes for corporal punishment. Whether when a fault has been committed, and punishment deserved, it should, in all cases, be corporal punishment, or whether other means of correction may be employed, is a point about which there is considerable diversity of opinion. Our own belief is, that inferior or secondary punishments, as they are sometimes called, may often be employed with advantage. Among this class of punishments may be reckoned—

1. *The removal of the children that have committed a fault, from the others.*—This may be effected either by placing the offender on a seat by himself, or removing him to a separate room. Such a punishment may be suitably employed in cases where the child has shown a violent or bad temper, and has quarrelled with his school-fellows; as well as in cases of confirmed carelessness and laziness. It may also be employed with a view to bring about a change in cases of very untidy habits, a want of cleanliness, &c. But in such cases, the teacher would do well to ascertain that the fault is entirely the child's, for the parents are sometimes in fault in this respect; and where this is the case, perhaps the best plan generally will be for the teacher to have an interview with them, and mention the circumstance to them in the least offensive way he can. Unless they are of a very unreasonable or hasty disposition, this will generally lead to an improvement. Should the children be removed into a separate room by themselves, they ought to be subjected to some oversight, otherwise more harm than good might arise from the arrangement.

2. *Detaining the children in school after the school hours.*—This, for several faults, is a natural and appropriate punishment. If, for example, the child has been idle and remiss in his school-work, either at home or in school, an opportunity is thus given him of repairing his neglect. Or if he has behaved disagreeably, and quarrelled with his school-fellows on their way home from school; by being detained after the others this will be prevented, and the child himself made to understand that by his bad conduct he has rendered himself unworthy of the society of the others. But in carrying this punishment into effect (and the same, indeed, may be said almost of every punishment), great discretion is required on the part of the teacher, and various circumstances are specially to be taken into account. For instance, the child ought not to be detained in school so long after the others that he cannot reach his home before it is dark. He ought not to be detained so as to interfere with his joining in the regular meals with his family; and the same may be said in cases where the parents require the services of the children after school, perhaps, for going necessary messages, &c. Besides this, it is a question whether the teacher's control over the child's time does not cease with the school hours.

3. *Excluding the children from play.*—This is an obvious and natural punishment for several faults. If the child has in any way misconducted himself, it seems but natural that he should be deprived of the pleasure and amusement which his school-fellows enjoy in the recess between the school-work, &c. Some children will feel an exclusion of this kind very much; on others, of a sluggish disposition, it will make but a slight impression, and will scarcely be regarded as a punishment at all: the teacher will naturally bear this in mind, and act accordingly. The children that are kept in school ought not to be allowed to run about in the school nor to idle their time away, but should have some work assigned them to do, and an oversight ought to be exercised over them to see that they do it.

4. *Solitary confinement.*—This punishment is but ill suited to our common elementary schools, and in such schools, indeed, is scarcely possible. The case is different in boarding-schools, where the child can be made to do his work, and yet pass the whole day alone in his own room. Shutting up the child alone, especially a young child, in a dark room, even for a short time, is a practice not at all to be recommended. In children of a timid disposition, it may excite a degree of terror in them which may be permanently injurious to their health. Confinement of this kind is a very different thing from a detention in the school-room, for a time, with work to do, under proper superintendence. To this latter kind of confinement we see no objection, where it can be conveniently put into practice.

5. *A conduct register.*—In many schools there is kept a register of moral conduct, either in a separate book by itself, or in a column appropriated to that purpose in the ordinary school register. Such a conduct register may be of service to the master himself, in assisting him to form a judgment of the individual's character; but it is not easy to see how it can be so managed as to be made to exercise a beneficial influence on the formation of the child's character. Conduct, regarded as a whole, is so complex—so many, and sometimes conflicting circumstances to be taken into consideration—that it is