

was quite sure that if they tried to bring it into Parliament, and thereby to the public notice, they would not get what they wanted; they must take the masters and influence them. At present the masters were trusted, and allowed to do what they thought best, and the main thing was to see that they got the right men in the right place, and trust them to carry on what they tried to do at present.

The *Pall Mall Gazette* says that the Rev. Charles L. Dodgson, of Christchurch, is a sort of Dr. Jekyll and Mr. Hyde. He is a mathematician not unknown to fame. As Lewis Carroll he is one of the best known story-tellers. The two existences overlap in that attractive work, "The Tangled Tale," which is a series of arithmetical puzzles conveyed in the form of amusing narratives. In *Nature* Mr. Dodgson comes out stronger than ever in the arithmetical puzzle line, and has produced for the edification of schoolboys two new rules.

Here is a rule for finding the quotient and remainder produced by dividing a given number by 9, the process being no severer than subtraction: "To find the 9-remainder, sum the digits; then sum the digits of the result; and so on, till you get a single digit. If this be less than 9 it is the required remainder; if it be 9, the required remainder is 0."

To find the 9-quotient you draw a line under the given number, and put its 9-remainder (found as above) under its unit-digit, then subtract downwards, putting the remainder under the next digit, and so on. If the left-hand end digit of the given number be less than 9, its subtraction ought to give the remainder 0; if it be 9, it ought to give the remainder 1, to be put in the lower line and 1 carried, when the next subtraction will give 0. Now mark off the

9-remainder at the end of the right-hand end of the lower line, and the rest of it will be the 9-quotient. The following is an example of the process: Divide 736,907 by 9.

736907

81878.5

the remainder is 5, the quotient 81878.

Mr. Dodgson gives a corresponding rule for dividing by 11. His discovery, he explains, arose out of the odd fact which he once remarked, that if you put 0 over the unit-digit of a given number which happens to be a multiple of 9, and subtract all along, always putting the remainder over the next digit, the final subtraction gives the remainder 0, and the upper line, omitting its final 0, is the 9-quotient of the given number. Mr. Dodgson's rules are really a simplification, and will probably be adopted by many teachers of arithmetic. It is with pardonable pride, therefore, that he gives the date (September 28, 1897) on which he brought them to completion, just as though they had been patented in order to forestall competition.

St. John, New Brunswick, says the *Review*, appears to be the only city in Canada in which University Extension lectures have been maintained with any degree of permanence. The course this year was opened by Prof. Davidson, who is giving a series of lectures on the Commercial Relations between Great Britain and her Colonies. The subject is of great interest, and Dr. Davidson, who has devoted special attention to this and kindred subjects for many years, has already enlisted the keenest interest on the part of his class by the clear presentation of his facts and the force and precision of his argument. Miss M. E. Knowlton, of the St. John High School, who