## EDUCATIONAL REVIEW

papers.  $\frac{31}{42}$  of the papers are correct.  $\frac{31}{42}$  = 73+per cent.

Problems of this kind are also valuable because they are more like the problems that the pupils will have occasion to solve after they leave the school-room. One criticism that is sometimes made upon the work of the schools is that the pupils do "book work" and cannot apply this knowledge to everyday affairs. Just to see if there is any truth in this criticism by business men, let the teacher who has a class that has worked in percentage for some time, and that, in her judgment, understands percentage very thoroughly, ask her pupils to give the per cent of the class that have correct papers the next time she gives a spelling lesson. This, of course, without any preliminary drill or explanation. She will simply state the number present in the class, the number of correct papers and It is very possible that ask for the per cent. the result may be a surprise.

Another interesting series of problems may be made by finding the per cent of attendance for a half day. For example: Suppose that the number of pupils enrolled is thirty-five, and that thirty-three are present, to find the per cent of attendance.  $\frac{33}{35}$  of the pupils are present.  $\frac{33}{35}$ = 94+ per cent.

The numbers will change constantly, and there will be a great variety of combinations. Then the teacher may give the number of pupils enrolled, the number absent, and ask for the per cent of attendance. For example: Suppose the enrollment is thirty-five, and three are absent, to find the per cent of attendance: 35-3=32, the number present.  $\frac{32}{35}$  of the pupils are present.  $\frac{32}{35} = 91+$  per cent.

There is no reason why pupils cannot work out the monthly report for the school, the teacher giving the data. Such work would be of great practical benefit to the girls who may some time become teachers. With this kind of instruction they would not be completely stranded the first time that it was necessary for them to make out registers of their own.

Another class of problems may be made by finding the per cent of the school time that is each day, making five hours in all. There is a recess of fifteen minutes in the morning and one of equal length in the afternoon. What per cent of the school time is devoted to recesses? The total time give to recesses is thirty minutes. The total time that the school is in session is five hours, which equals three hundred minutes. Therefore, the time given to recesses is  $\frac{3.0}{30.0}$  of the whole time.  $\frac{3.0}{30.0} = \frac{1}{10} = 10\%$ .

There are many other problems connected with school work that will suggest themselves to the teacher. A few are given as illustrations. It is not expected that the examples given here will apply exactly to any school, but they will serve to show the kind of problems that are suggested.

1. There are forty weeks in the school year in a town, and in this time there are five holidays. What per cent of the whole time are holidays?

40 weeks = 200 days. 5 holidays are  $\frac{5}{200}$  of the whole time.  $\frac{5}{200} = \frac{1}{40} = 2\frac{1}{2}\%$ .

2. There are fifty-two weeks in the year, and the schools are in session in a certain town for forty weeks in the year. What per cent of the time are the schools in session?

Ans. 7613 %.

3. In a town there were fifteen hundred pupils in the schools, and one hundred and twenty are in the ninth grade. What per cent of the pupils are in the ninth grade? Ans. 8%.

4. The morning session of a school begins at 9 o'clock and closes at 12 o'clock. There is a recess of fifteen minutes. What per cent of the whole time of the session is the recess? Ans.  $8\frac{1}{3}\%$ .

5. The primary schools of a town are in session from nine o'clock to eleven o'clock in the morning, and a recess of fifteen minutes is given. What per cent of the time is taken by the recess? Ans.  $12\frac{1}{2}\%$ .

-Popular Educator.

there is a contract. In the state one should be

In Sweden, King Gustav and many of his people are calling for an increase in both army and navy, because they are afraid of Russian aggression. Warned by the fate of Finland, they believe that Russian rule would mean the loss of some of their most cherished liberties. The Ruthenians, on the contrary, who are virtually a Russian people under Austrian rule, are said to be plotting for the separation of their country from the Austro-Hungarian Empire and its annexation to Russia.

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devoted to recesses, and to the different studies. For illustration: Suppose a school is in session from 9 o'clock to 12 o'clock in the morning, and from 1.30 o'clock to 3.30 o'clock in the afternoon,