million is the very utmost value of all liquor sminggled into the state. Thus twelve millions a year are saved directly, and indirect losses quite as great are escaped. Nine years ago prohibition - "the Mane law"-was embodied into the constitution of the state. Year by year the methods and measures ensuring prohibition are becoming more effective. Witness.

Woman suffrage is an accomplished fact in New Zealand and some of the United States. At the last general election in New Zealand the favorite candidates of the women-those candidates who favored probibition and free, unsectarian education-were returned by large majorities. Mrs. Yates has been elected mayor of Onehunga. She thus becomes a magistrate, a position which she is said to fill admirably.

In the February Forum Dr. Biggs makes known some facts refarding consumption, with which every school child should be familiar. Consumption is by far the most fatal of all contagious diseases-causing the death of one-seventh of the human race. It is caused by a microscopic microbe which is expectorated by the patient as the disease advances. The expectorated matter becomes dried, and being inhaled in the form of dust by those exposed, it multiplies in weakly and susceptible subjects, especially if they are ill ${ }^{\circ}$ fed or live in a vitiated atmosphere. Children should be warned of the danger and taught how to avoid it. It is of vital importance that the schools should be atilized to disseminate information of such moment to the community, especially as civic corporations and boards of health are slow to act in such matters.

## QUESTION DEPARTMENT.

Miss Auna B. McKenzie of Spencer's Island, writes: 1. About three weeks age a young lady of this place brought in some ferns. She put them in a tumbler of water and set them in the window. She kept putting fresh water into the tumbler as it was needed. This morning we discovered in the tumbler an angle worm about four inches long. We would like to know where it came from. Perhaps some of your readers would favor us with the information.
2. Do you know of any work on nataral science which would be of any help to the teaching lessons in a miscellan. eous school?

The discussion of the first subject we leave to our correspondents.

In reply to the last question we regret to say that we have never seen our ideal book of Nature Lessons. We may, however, name a few popular books that would be useful:

Paul Rert's First Steps in Scientific Knowledge; price 75 cts Clapp's Observation Lessons on Common Minerals; price 30 cts . Eberhart's Outlines of Entomology; price 45 cts . Gilman's Science; price 50 cts. Information Lessons on Common Things; price 50 cts. Rick's Natural History Object Lessons; price 81.50 .
G. S., P. E. lulant. Your questions 1, 2, 3, need only a little application to solve. No. 4, from Hamblin Smith, page 197, Ex. 5 :

$$
\begin{aligned}
& \text { If } R \text { represent the rate per cent. } \\
& \text { then }: 600 \times\left(1+{ }_{18}^{\left.{ }_{5}^{6}\right)^{2}}\right)^{2}=9196 \\
& \left.(1+10)^{5}\right)^{2}=4185 \\
& 1+{ }_{10}^{y_{0}^{\circ}=1}=1 \\
& { }_{10}^{80}=-1 \\
& R=10 \text {, rate per cent. of increase. }
\end{aligned}
$$

[This is of course an exercise in algebra, and should not appear in an arithmetic. If the reader has any difficulty in following the above solution, let him regard this as an exercise in compound interest where the rate is asked for and the time is two years]

Grand Maxan: Please solve from Hamblin Smith, page 217, section IV., exercise 4.

Let him invest $\$ 73$; the interest will be 83 ; this, together with another 873 , is invested; then at the end of the second year he will have invested 873+ $\$ 73+\$ 3$ and he will receive interest on $\$ 149$ at the rate of $\$ 3$ for every $\$ 73$ or $\$ 6 \psi_{3}$. He will have in all $8149+6 \psi_{3}=\$ 155_{\gamma_{3}^{2}}$.

| $8155 \%^{2}$ | ce |  | 73 in | este |
| :---: | :---: | :---: | :---: | :---: |
| 1 | " | ." | 73 | ، |
|  |  |  | $155{ }^{2}$ |  |
| 1085 | " | -" | 8510. | . . |

## For Enquirer

(1) Hamblin Smith's Arith. page 165, Ex. iv. 4. Time lost in 24 hours $=3 \frac{1}{8} \mathrm{~min}$.

$$
" \quad " \quad 118 \frac{\mathrm{~d}}{} "=15 \mathrm{~min} .367_{8}^{2} \text { sec. }
$$

The watch was 10 min . too fast. It will therefore on Saturday be $5 \mathrm{~min} .366^{\frac{7}{8}}$ sec. too slow.
(2) page 165, Ex. iv. 5.

290 min . on the watch $=300 \mathrm{~min}$. true time.
300 " " " $=5$ hr. 1019
again 310 " " " " $\quad$ " $=300 \mathrm{~min}$.
300 " " " $=4 \mathrm{hr} .50 \frac{1}{7}$
(3) page 165, Ex. v. 1.

For every idle day he lost $\$ 2.00$ also $\$ 1.50$, in all $\$ 3.50$

If he had worked every day be would have received $\$ 120$; but he received only $\$ 92$. Therefore he lost $\$ 28$, which at $\$ 3.50$ a day would take 8 days.

Therefore he worked 52 days.

