

## Question Drawer.

## QUESTIONS.

Please explain what is meant by the term Thirty Years' Purchase. And give the solution of the following question No. 125, (Examination papers, Kirkland & Scott's edition of H. Smith's Arithmetic).

How many years' purchase should I give for an estate, so as to get  $3\frac{1}{2}$  per cent. interest for my money? Answer given is 30 yrs. Is that correct? J. S., Newmarket.

I wish to study short-hand writing in as short a time as is possible, and without the assistance of a teacher. What book had I best procure? TEACHER, Ennismore.

1. Why are the following sentences correct? "I took it to be her." "Whom do you imagine him to be?"

2. In what number of Macmillan's Magazine was a sketch of the life of the late J. R. Green given?

3. Where does Paxton Hood, author of the "Life of Cromwell," live? What is his profession?

4. Are Cowper's letters published in book form? If so, who is the editor of the volume?

5. What is the Literature for 1st C for 1887? "SAUGEEN."

Editor CANADA SCHOOL JOURNAL.

DEAR SIR,—Please answer the following in your next issue:—

1. Who is Gladstone? What office does he hold? What is his religion?

2. Who is Premier?

3. What office does Mr. Disraeli hold?

4. What is necessary in order that a bill may become law?

5. To what church does Victoria belong?

6. Who are the Parnellites?

7. Name the teachers' holidays.

8. How are the phrase exercises in the Second and Third Books to be used?

9. Is there to be a paper set in drawing next July?

10. Of what is Parliament composed? Give the duties of the two houses.

11. Who is Governor-General of Canada at present? What are his duties?

12. I hold a Second Class non-professional certificate, and have been trained at a county Model School. How long may I teach? Lawrence, May 19th, '86. M. G.

1. Show how the Latitude of a place is determined, and give Latitude of New York, Toronto, Montreal, Florence, Cape of Good Hope.

2. Explain how to find the Longitude, and give the Longitude of Ottawa and Bristol (Quebec). A SUBSCRIBER.

1. A piece of sheet iron is three feet long, and two feet wide. It is required to make it into a tube, having one end twelve inches larger than the other. What must be the length and end diameters of the largest possible tube which can be cut from the above piece of sheet iron?

2. Inscribe an equilateral triangle in a given circle? ARICHAZ.

## ANSWERS.

J. S., Newmarket. "Thirty years' purchase," means a sum equivalent to thirty years of the income of the property in question, or thirty years interest on the investment. The answer to the question quoted by J. S. is clearly correct, since  $30 \times 3\frac{1}{2} = 100$ , i.e., the interest on any sum at  $3\frac{1}{2}$  per cent. per annum, will in thirty years be equal to the principal. This reckoning is of course at simple interest.

TEACHER, Ennismore. We can hardly take the responsibility of giving a direct answer to your question. There are so many com-

peting systems and methods, that no one but a short-hand expert could be qualified to give an opinion, and even experts will not be found to agree on the point. Isaac Pitman's is, we believe, the most popular system in use, but we do not know that it is most easily acquired; Mellwain's claims to be very easily mastered. Isaac Pitman's is a good system. We presume a question addressed to Bengough's Shorthand Bureau, Toronto, would elicit a courteous answer from a good authority.

SAUGEEN. 1. See Mason's English Grammar, §394, page 157. 2. Can some reader give the answer?

3. Rev. Edwin Paxton Hood, author of "Oliver Cromwell," and numerous other works, is a minister of the Independent denomination, and lives and preaches in London, England.

4. McMillan & Co. publish in their Golden Treasury Series, an edition of Cowper's Letters, edited by Rev. W. Benham, Rector of St. Edmund. An edition is also published by the Religious Tract Society of London, England. Name of editor not given.

M. G., Lawrence:

1 and 2. William Ewart Gladstone is Prime Minister, or Premier, or Leader of the Government in Great Britain. He is a member of the Established Church of England.

3. Mr. D. Israeli has been dead several years. He was for many years leader of the Conservative or Tory party in England, sometimes as Premier, sometimes in opposition.

4. It must be read a first, second and third time in the Houses of Parliament. Of course, it can be read only when there is a majority in its favor.

5. To the Established Church.

6. The Parnellites are the Irish representatives in Parliament who follow the leadership of Mr. Parnell, who is the great champion of "Home Rule" for Ireland.

7. See the preface to Second Reader, sixth paragraph.

8. In England, of the House of Commons and the House of Lords. In Canada, of the Commons and the Senate. It would take too much space to answer the second part of the question fully. Most school histories contain the information. In both countries the members of the Commons are the elected representatives of the people, and have the control of all the public moneys.

9. Lord Lansdowne. He is the representative of the Imperial Government, and the medium of all communication therewith. He opens and prorogues Parliament, etc.

To the Editor of the CANADA SCHOOL JOURNAL:

Allow me space for a brief reply to "H's" letter in the Question Drawer of May 1st. He has pointed out my error in saying that any number of correct answers could be obtained for the problem under discussion. It is true that only one answer satisfies the conditions of the problem. Nevertheless the point of my criticism is not affected by this oversight. My contention was, and is still, that none of the four solutions in the JOURNAL of March 1st reach the conclusion that the man does twice as much work in a day as the boy by logical reasoning. In the first three solutions given this fact is assumed with scarcely an attempt to show on what ground the assumption is made. The writer of Solution No. 4 shows an appreciation of the point of difficulty in the problem, but trips in his reasoning. Taking the first  $b$  from his 1st series does not make the two series similar, for it can easily be shown that the 1st series must end with  $b$ , and the 2nd with  $m$ . In either case, at the end of any even number of days the same work would be done, therefore the work must be finished in an odd number of days; and therefore, when the boy does the first day's work, the boy must also have the last day in which to finish the work. So also, when the man takes the first day, he must likewise finish the work on the last day. It remains to be shown that the boy will, of necessity, require the whole of the last day to finish the work, or that the man will finish it in exactly half of the last day. By a process of "guess and trial" one may easily convince oneself that this is true, but it is quite another thing to obtain the fact by reasoning from the data of the problem.

T. W. S., Langford.