arithmetic; and becomes so thoroughly disciplined that even in the most complicated problem he grasps the principles involved, and notes every necessary step in the solution before he ventures to make a single figure. With such mental drill, the student will have but little difficulty with the more difficult process of written arithmetic; without it, he is likely to depend on hand-work rather than brain-work-to hurry into the manufacture of figures before he has formed the conceptions and outlined the arguments of which his figures are only the visible expression.

We shall now proceed to illustrate the rational method of teaching arithmetic, taking up the fundamental rules, analysis, fractions, and percentages.

## Notes und News.

Uxbridge has decided to have military drill taught in the High School.

Bowmanville School Board has resolved to have drill taught in accordance with the Provincial programme.

The Ottawa P. S. Board has appointed Mr. Wm. Rae to the position of Librarian, at a salary of \$150 per annum.

A Columbian magistrate recently fined a pupil for resisting his

teacher. Toronto Public School Board has taken steps for the establish-

ment of an Industrial School.

At its last meeting, the Toronto School Board instructed the Committee on School Management to consider the advisability of establishing a Kindergarten.

London has opened a School of Art and Design. Col. Walker, W. R. Meredith. M.P.P., Mayor Lewis, W. Saunders, Ald. J. R. Peel, John H. Griffiths, W. L. Judson and Charles Chapman are the Committee of Management.

Mrs. Mackenzie, the wife of the Premier, encourages the teaching of the useful domestic arts. She recently presented two gold medals for proficiency in plain sewing and domestic economy to a girls' school in Ottawa.

The Hastings County Council has voted \$100 apiece to the five

back townships for school purposes.

At the recent examination of the faculty of Law in McGill College, the gold medal was taken by a lady, Miss Elizabeth Torrenco.

At the late professional examination at the Normal School, Ottawa, thirty-four out of a class of forty successfully passed. Forty five out of forty-eight passed in Toronto. The following are the names of the successful candidates:

TORONTO.—Thomas Beatte, John R. Chisholm, Thos. J. Collins, S. K. Davidson, M. G. Dippel, Dilman Erb, J. Forbes, A. W. Gerrie, George J. Gibb, Albert D. Griffin, Jacob B. Hagey, M. S. Hallman, Colin Johnson, Byron Jones, W. M. Leigh, William Linton, Isaac W. Lucia, Charles Miles, John McCabe, James W. Orr. James Pholon, Jos. W. Bekinger, Alex Shene, James W. Orr, James Phelan, Jas. W. Robinson, Alex. Skene, Jas. Stirton, Geo. Steurnagel, J. E. Tompson, T. R. Walmsley, H. E. Webster, Elizabeth Brooks, Barbara Cattanach, Maggie Creighton, Lizzie Cussack, S. J. Dale. Barbara Foote, Kate Garnsey, C. B. Gordon, M. E. Gray, Isabella Hamilton, Mary McCall, Annie Sinclair, Josephine Smith, J. L. Sutherland, Emma C. Field, Janet Patterson, Norman W. Ford.

OTTAWA.—Wm. C. Allin, Charles E. Bell, Wm. Bickell, Wm. Boal, Robert Boal, Alex. Cochrane, Darino Dean, Robert C. Dobbin, John Kelly, Joseph Law, David Lent, John A. Murphy, John McArthur, Wm. A. McIntyre, Goo. W. Sine, George E. Sneath, Ias. C Steele, David M. Stewart, Egerton J. Unger, Jas. Whaley, Chas. Whyte, Thomas Young, Ellen Calder, Euphemia Campbell, Lucy E Hinch, Alberta Janes, Millie Livingstone, Angelina Myers, Etta McIlroy, Aggie McMurchie, Annie C. Steacy, Agnes Wilson, Humphrey Johnson, David H. Waugh.

Brantford Collegiate Institute has organized a Company for military drill. It is fortunate in having two graduates of the Kingston Military College as students. The students also have a good literary

The Public School Board of Brantford decided at its last meeting

to appoint a Truant Officer.

The number attending the High School in St. Thomas is increase ing so rapidly that an additional teacher has to be engaged.

In an address recently delivered before the Lanark Teachers' Association, G. W. Ross, M.P., made the following comparisons between the attendance at the schools of Ontario and those of other countries. He pointed out that in 1875, out of a school population in the United States of fourteen millions, four and a half millions did not attend at all, being about 60 per cent., while in Ontario 98 per cent, of the school population were in attendance more or less. Extending his comparisons to European countries, he stated that in Norway one in every six of school population attend throughout the year; in Prussia, famed for her compulsory system of education, one in every seven; in Scotland, one in every nine; in Austria, one in every ten; in France, one in every twentyone; in Russia, one in every seven hundred; and in Ontario, one in every three and a half.

LIST OF SUB-EXAMINERS.—The following is a copy of an order-in-Council approved by His Honour the Lieutenant-Governor the

15th day of April, A.D. 1878:-

"Upon the recommendation of the Honourable the Minister of Education, the Committee of Council advise that the gentlemen named in the annexed list be appointed sub-examiners at the next intermediate and second-class examinations :-

"Certified.

"J. G. SCOTT, (Signed), " Clerk Executive Council, Ontario.

"15th April, 1878."

1. Professor Bain, Victoria College, Cobourg.

2. Alfred Baker, M.A., Mathematical Tutor, University of Toronto.

3. James Brown, M.A., Mathematical Master, Upper Canada

College.
4. W. J. Alexander, B.A., Gilchrist Medallist and Professor in Prince of Wales College, Charlottetown, P.E.I.

Classical Gold Medallist (University of

5. William Dale, M.A., Classical Gold Medallist (University of Toronto), Rector of the High School, Quebec.

6. John Galbraith, B.A., Mathematical Gold Medallist (Univer-

sity of Toronto), Civil Engineer.
7. Alfred M. Lafferty, M.A., Classical Gold Medallist (University of Toronto.)

8. F. E. Seymour, M.A., Medallist and late Examiner in English and History (University of Toronto).

9. G. B. Sparling, B.A., (Victoria College), Assistant Methematical Master, Upper Canada College.
10. T. H. Redditt, Undergraduate in Honours (University of

Toronto) and Assistant Master in Upper Canada College.

11. D. B. McTavish, B.A., (Queen's University).
12. J. A. Culham, Undergraduate in Honeurs (University of Toronto).

13. James Panton, B.A., Science Medallist (University of Tor-

14. Rev. Septimus Jones, M.A., Bishop's College, Lennoxville, late Inspector Public Schools, Belleville.

15. Rev. E. H. Mockridge, B.D., Trinity College, Toronto, late Head Master of St. Mary's High School.

16. Rev. G. M. Milligan, M.A., (Queen's University), late Head Master High School, Bath.

17. J. E. Weatherell, B.A., Classical Silver Medallist (University of Toronto), Professor in Canadian Literary Institute, Wood-

18. John A. Patterson, M.A., Mathematical Gold Medallist (University of Toronto).

19. C. Logan, B.A., late of Trinity College School, Port Hope. 20. Donald Munro, B.A., Holder of 1st Class Certificate, Grade B., late Head Master Public School, Lindsay.

The following resolution was carried unanimously at the late Teachers' Association of the County of Haldimand:—"Moved by C. W. Harrison, seconded by W. S. Wood, and resolved, that whereas the Literature required for the 3rd Class Certificates is more extensive than that for 2nd, and whereas it is desirable to avoid the necessity for an extra class in those Schools in which pupils are being prepared for each examination, the Literature for candidates for 3rd class should be a part of that required for second.'

On Wednesday, the seventeenth of April, the Honourable the Minister of Education by special invitation of the Board of Public School Trustees of the City of Ottawa, paid a visit of inspection to the Public Schools of that city, more particularly the schools placed by the Board at his disposal to be used as Model Schools in connection with the Normal School.