4. Algebra including simple equations.
*5. French, Dictation, Grammar and reading.
*6. History of England and of Canada.
*7. Art of Teaching.
8. Book-keeping, Use of the Globes, or Linear Drawing.

(c) *Academy Diploma.*

1. Greek, Xenophon, Anabasis Book I and Grammar.
2. Latin, Cæsar, Bel. Gal. Book I and Grammar.
3. French, Grammar, Reading and Composition.
4. Euclid, Books I, II, III, IV and VI.
5. Algebra including Quadratics.
6. History as above, Natural Philosophy or Scientific Agriculture.
*7 Art of Teaching.

Editors of English News Papers in the Province of Quebec will please insert this notice, and Teachers and others interested in the cause of Education will have the kindness to make it known to intending candidates fos Teachers' Diplomas.

GEORGE WEIR, M A.,
Secretary Protestant Committee of the
Council of Public Instruction.

* As in Elementary Examination.

MISCELLANY.

The Education of Girls.—Here is the root of the prevailing disappointment in the result of the education of our girls. The school is not at fault; the teachers are not to be blamed. The fault is with the mothers in their homes. They fail to attend personally to the education of their daughters. They limit the idea of a girl's training to thes phere of household duties, and yet permit a training which carries them beyond, it, and makes them restless and disappointed because they have not boen prepared to reach out to larger studies at the time when they begin to feel the inspiration of generous culture in the work of life. The mothers sacrifice the future of their girls because it is too much trouble to see that they study systematically at home, and are properly encouraged. Society is crowded with girls who know just enough to desire to do in literature, in daily employment, what they cannot do well enough to make a living by. The ability is not wanting, but their minds are not disciplined, because the years of study in the public schools were not directed by skillful and anxious mothers at home. The boys succeed and the girls fail, and the mothers are, in most cases, the parties to the blamed. It is the exception to find women who entertain high ideas, and act upon them, in the education of their girls, Harriet Martineau's "Household Education" might do an excellent missionary work in thousands of Homes, in teaching anew how women are to educate their daughters, and what Miss Martineau omits to say is presented plainly and wisely in Herbert Spencer's excellent work on "Education."—*Boston Sunday Herald,*

Curiosities of Language.—Mr. M. Patterson, who seems to have a peculiar talent for examining into the peculiarities of language, gives the following as a specimen:—

One of the principal difficulties in learning the English language is the inexplicable manner in which most of the words are spelled, the twenty six letters of the alphabet vieing with each other to represent the forty or forty two sounds of the language in the most bungling and disorderly manner.

Be the capacity of a child ever so good, yet he must spend years in learning these "curiosities of literature," while a foreigner can only master our noble language by a vast expense of labor, patience, and time.

The Protean nature of the vowel sounds is familiar to all. A few amusing examples will show that the consonants are nearly as bad:—

B makes the road broad. turns the ear to bear and Tom into a tomb.

C makes limb climb, hanged changed, a lever clever, and transports a lover to clover.

D turns a bear to beard, a crow to crowd, and makes anger danger.

F turns lower regions to flower regions.

G changes a son to a song snd makes one gone!

H changes eight into height.

K makes now know and eyed keyed.

L transforms a pear into a pearl.

N turns a line into linen, a crow to a crown and makes one none!

P metamorphoses lumber into plumber.

Q of itself, hath no significance.

S turns even to seven, makes have shave, and word a sword, a pear a spear, makes slaughter of laughter, and curiously changes having a hoe to shaving a shoe!

T makes a bough bought, turns here there, alters one to tone, changes ether to tether, and transforms the phrase "allow his own" to "tallow his town!"

W does well, e. g., hose are whose, are becomes ware, on won, omen women, so sow, vie view; it makes an arm warm, and turns a hat into—what?

Y turns fur to fury, a man to many, to to toy, a rub to a ruby, ours to yours, a lad to a lady!—*St. Louis Christian Advocate.*

Technical Education in the United Kingdom.—Technical education in the United Kingdom for many years experienced much difficulty in making its influence felt, but (says *Industrial Art*) since the exhibition of 1851, and more especially in recent years, the progress made has been more satisfactory. In the first number of a new monthly—*Industrial Art*—a few details furnished respecting the schools of art and science founded by Government are instructive. They where commenced "in 837, under the title of 'Schools of Design,' and where first opened at Somerset House. Afterwards, in 1853, they were transferred to Marlborough House. The classes continued to increase, and in 1857 were moved permanently to South Kensington. Many valuable prizes are attached to these schools, and are open to male and female students. Besides these at Kensington, which may be called the central organisation, there are eleven schools of art in the Metropolis, and 915 schools and classes over the country, all connected, as to instruction and Government grants, with the Science and Art Department. In 1876 there were 51,222 students examined in these schools. We also learn that the science schools, in which a complete course of subjects are taught, and which were opened four or five years ago, and are permanent, have already gained a firm root in the community forming "the centre for sciences classes dispersed throughout the country," and being fitted "up completely both for lectures and practical work"

Gold plating experiments.—Mr. A. E. Outerbridge, of the Philadelphia Mint, has recently made some curious experiments to determine the thickness necessary for a film of gold to impart its characteristic colour to the surface covered. The extraordinary malleability and ductility of the metal are well known, and it said that one ounce of gold can be beaten out into a sufficient number of sheets to cover ten acres of ground. That is the result by the purely mechanical method; the electro-chemical process gives more extraordinary results. A strip of very thin copper was covered by the battery process with sufficient of the precious metal to give a fine gold colour, the thickness of the film being estimated at a little more than the one millionth of an inch Portions of the strip, having had the gold stripped from one side, were placed in weak nitric acid until the copper was dissolved, and the film of gold floated on the surface. The film was taken up on glass, and the microscope disclosed the fact that it was perfectly continuous, very transparent, and of a bright green colour by transmitted light. Continuing his experiments, Mr. Outerbridge has succeeded in obtaining films of gold so thin that more than two and a half millions would be required to make up an inch, and yet the films, when examined by the microscope, are perfectly continuous as well as transparent. By reflected light the films appear of the true gold colour but transmitted light they vary through the shades of green, according to their thickness. From these experiments it appears that one grain of gold is sufficient to cover nearly four square feet of copper, and they thus help to explain the cheapness of the battery process of gilding, for it is impossible to reduce gold to such thinness by means of the gold-beater's hammer.

The Evils of Cramming.—The psychological mischief done by excessive cramming, both in some schools and at home, is sufficiently serious to show that the reckless course pursued in