While this mineral resembles the two preceding, it is somewhat heavier; and its metallic lustre is more silvery. Moreover, except in the granular varieties, the perfect cubic cleavage serves admirably to distinguish it. Where such cleavage is absent, some sort of test may be necessary to satisfy the cautious student as to its identity. Galena very often contains paying quantities of silver, and is then called *argentiferous galena.*

The advisability of chemical tests for minerals calls for a very brief outline of simple experiments easily performed in any schoolroom. The most necessary apparatus for testing minerals is the blow-pipe. A mouth blow-pipe costs only about fifteen cents. With it, one needs a piece of charcoal and an alcohol lamp (or Bunsen burner, if you are where gas is used). I find an ink bottle a very good substitute for an alcohol lamp. Get a cork to fit the bottle; punch a hole through it, and insert an iron pen-holder. Through this pass common candle wicking, doubled to snugly fit the holder. The holder prevents the cork from burning. A pint of alcohol (methylated spirits), which costs about thirty cents, will serve for a long time.

Besides these, a three inch piece of No. 27 platinum wire, costing about twenty cents, will be almost indispensable. A dollar invested in small test tubes, glass tubing, the common acids and salts, and some litmus paper would equip a school for very many instructive tests and experiments — not only in mineralogy, but in general chemistry.

Let us see what tests we can apply to the three minerals of the present article. First, get someone to instruct you in the use of the blow-pipe. It is easy to show you, but difficult to describe. The only art to acquire is to be able to breathe and blow at the same time. Having accomplished this feat, make a small cavity in your charcoal; place in it a fragment of stibnite; and with the blow-pipe, direct the alcohol flame upon it for a minute. Notice the easy fusibility and the dense white fumes which coat the coal. (This coating is the oxide of antimony. Where did the oxygen come from?) Continue heating until the mineral fuses down to a metallic globule of antimony. Is it brittle or malleable? Treat in the same way a fragment of galena. Unless heated cautiously, it will break and fly away. Which of the two minerals melts more easily? The yellow coating from the galena is litharge (Pb O). Can you, from any source, learn some of its uses? Do you see any difference between the metallic globules of antimony and lead obtained in this way? (They look alike, but lead is malleable and antimony is brittle. Moreover, you know the minerals apart by the color of the oxide coatings—antimony being white, and lead yellow).

There are many other tests worth knowing—both for these and other minerals. Flame tests and bead tests are very important, but they cannot be given here.

Domestic Science in Rural Schools.

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Domestic science, as the form of manual training for girls, may now be said to have gained an assured footing in the Nova Scotian school system. The leading educationists in the province, while not perhaps as yet realizing that it is, as a well known English author maintains,* "the greatest of all the sciences, and the mother of all the arts," still freely admit not only its great practical usefulness, but also that its value as a means of mental training is not inferior to that of any of the other branches of school study; that when properly taught it has been found to be a help rather than a hindrance to all the other studies.

With all this conceded it is a little disappointing to find that neither it nor the corresponding study for boys, mechanic science, has as yet been accorded its proper place on the curriculum of school studies; that both are still merely optional subjects which pupils may take or not, as they see fit, and which, if they do take and devote the required time and attention to them, will count them nothing, or next to nothing, at their examinations. Just so long as such a state of things exists, so long will parents and pupils alike be led to regard the subjects of comparatively little importance, and pupils be obliged to give up the study of them exactly at the time when they are beginning to appreciate the scientific part, and to acquire some dexterity in the manual part—to give them up so that may devote the time and attention to subjects that will count.

What is wanted is that the Council of Public Instruction should by deeds—not words—show that these subjects are to be considered as a necessary part of every school boy's and school girl's education, and as such must be taught in all schools, rural as well as town and city. It may, it is presumed, be taken for granted that the desire to have these subjects taught, and the need for them are as great in the rural districts as in the cities, and such being the case, is it just that country schools should be deprived of such valuable factors in the education of their pupils?

It may be said that it is practically impossible to introduce such subjects, and especially that of domestic science, into many rural districts; but that we are not prepared to admit. No doubt there will be difficulties to be overcome, as has been found to be the case in introducing it anywhere, but the future will undoubtedly show that there is no impossibility in the matter. Where consolidated schools have been opened the problem has been solved, for one teacher can give the lessons to pupils from several school districts, but even where consolidation does not exist, surely some method might be devised whereby the instruction might be supplied.

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* Philip Hammerton in his book "The Intellectual Life,"