Technical and Bibliographic Notes / Notes techniques et bibliographiques

The Institute has attempted to obtain the best original copy available for filming. Features of this copy which may be bibliographically unique, which may alter any of the images in the reproduction, or which may significantly change the usual method of filming, are checked below.

L'Institut a microfilmé le meilleur exemplaire qu'il lui a été possible de se procurer. Les détails de cet exemplaire qui sont peut-être uniques du point de vue bibliographique, qui peuvent modifier une image reproduite, ou qui peuvent exiger une modification dans la méthode normale de filmage sont indiqués ci-dessous.

- [ ] Coloured covers/ Couverture de couleur
- [ ] Covers damaged/ Couverture endommagée
- [ ] Covers restored and/or laminated/ Couverture restaurée et/ou pelliculée
- [ ] Cover title missing/ Le titre de couverture manque
- [ ] Coloured maps/ Cartes géographiques en couleur
- [ ] Coloured ink (i.e. other than blue or black)/ Encre de couleur (i.e. autre que bleue ou noire)
- [ ] Coloured plates and/or illustrations/ Planches et/ou illustrations en couleur
- [x] Bound with other material/ Relié avec d'autres documents
- [x] Tight binding may cause shadows or distortion along interior margin/ La reliure serrée peut causer de l'ombre ou de la distorsion le long de la marge intérieure
- [ ] Blank leaves added during restoration may appear within the text. Whenever possible, these have been omitted from filming/ Il se peut que certaines pages blanches ajoutées lors d'une restauration apparaissent dans le texte, mais, lorsque cela était possible, ces pages n'ont pas été filmées.

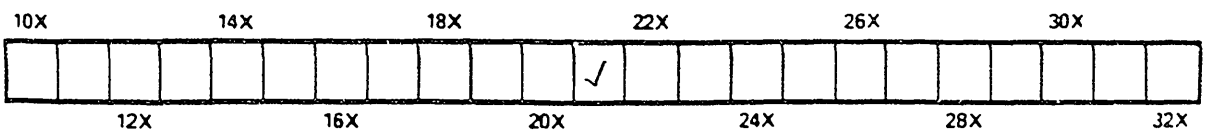
- [ ] Coloured pages/ Pages de couleur
- [ ] Pages damaged/ Pages endommagées
- [ ] Pages restored and/or laminated/ Pages restaurées et/ou pelliculées
- [x] Pages discoloured, stained or foxed/ Pages décolorées, tachetées ou piquées
- [ ] Pages detached/ Pages détachées
- [x] Showthrough/ Transparence
- [ ] Quality of print varies/ Qualité inégale de l'impression
- [x] Continuous pagination/ Pagination continue
- [ ] Includes index(es)/ Comprend un (des) index

  Title on header taken from:/ Le titre de l'en-tête provient:

- [ ] Title page of issue/ Page de titre de la livraison
- [ ] Caption of issue/ Titre de départ de la livraison
- [ ] Masthead/ Générique (périodiques) de la livraison

- [ ] Additional comments:/ Commentaires supplémentaires:

This item is filmed at the reduction ratio checked below/
Ce document est filmé au taux de réduction indiqué ci-dessous.



THE CANADA

EDUCATIONAL MONTHLY.

AUGUST-SEPTEMBER, 1901.

PATRIOTISM IN THE SCHOOLS.

John Lewis, Toronto.

The suggestion that patriotism should be taught in the public schools, as if it were a separate branch of study, seems to involve a somewhat narrow conception of patriotism and a defective appreciation of the work of the teaching profession. All the work of the school is patriotic in the broadest sense ; or at least it is patriotic when well done and unpatriotic when ill done. The development of natural resources is a familiar topic of patriotic addresses; and surely no part of our natural resources is so important as the children who are to be the citizens and the home makers of Canada. A natural preference for one's own country is of course an element of patriotism; but this is only the beginning. We must inquire into the basis of that preference; and we must see to it that the foundation is broad and strong.

Suppose that a Canadian were asked why he preferred his own country to Russia, he would be able to say something more than that he happened to be born in Canada. This country is free ; its laws are made by a Parliament elected by the people ; he can read what he pleases and utter his thoughts freely, except when public opinion itself becomes a tyrant. As compared with other countries, he would base his patriotism on the observance of law and order, safety to person and property, the sanitary condition of cities and towns, the progress of industrial arts, the educational system of the country. In a word, he would stake his country's reputation on its civilization. And this is well ; but patriotism must not stop here if it is not to degenerate into mere conceit. To fight for one's country is a duty : to praise it is a pleasure ; but above all, it is important to make it a country worthy to be fought for, worthy of praise.

If this is conceded, the most effective way of teaching patriotism in the schools is to insist that all good honest work is patriotic; the work of the school, and the work of life, however humdrum and humble it may appear to be. If it is patriotic to feel pride in our educational system, it is surely a still higher and more useful form of patriotism to say "Let us,

teacher and pupil, do our best to raise the standard of education—here and now, in this very school-room." Nations pride themselves on the observance of good faith, the fulfilment of treaty obligations, scrupulous regard for the rights of others, especially of the weak. All these qualities can be emphasized in the little community of which the teacher is the head. If children are allowed to cheat in school and to bully in the play-ground, we cannot expect the foreign policy of the nation to rise higher than its source. On the other hand, we ought to expect a high standard of conduct in a nation whose children had been taught to be scrupulously honorable, and to show special courtesy to the timid newcomer, the deformed, the feeble in mind or body.

It is a great work of patriotism to invest the common, everyday duties of life with dignity and interest. In theory, of course, every boy in Canada may become Prime Minister or a famous general; but in practice, most of them will just mark their ballots on election day, raise wheat and cattle, keep shop, work in factories and raise families. Now it is surely a mischievous thing to tell the mass of men that while they are doing these duties they are sordid slaves, and that they are patriotic only when shouting or letting off fireworks. Much better to say that a well-kept farm adds to the wealth and credit of Canada, and is therefore patriotic. He was a shallow fellow who coined the word "parochial" as a term of contempt to describe a low and petty view of public affairs. True, a township councillor may have a petty way of looking at things; but so may a member of the Imperial Parliament. The spirit in which the work is done is the vital thing. There is patriotism in the liberal provision for schools, in good roads and bridges, in clean and sanitary cities and towns. For all this is civilization, which is the rational basis of patriotism.

In this view the militant side of patriotism may seem to be neglected. But it must be remembered that the occasions for the display of militant patriotism are very few. Normally and usually the country is at peace; even in war, the proportion of the fighters to the whole population is small. What is wanted is a patriotism that will stimulate the whole people and illuminate their lives every day in the year. This cannot be done by merely recalling past wars and contemplating the possibility of future conflicts. But if it is once recognized that patriotism consists in the faithful doing of the everyday duties of life, industrial, social and political, a working basis of patriotism is established. Moreover, in case war should come, a people animated by a spirit of pride in their daily work and the civilization and institutions of their country would be very formidable.

IN MANY WOODLANDS.

Since the wood has been found so pre-eminently excellent for the making of pulp, the spruce forests of Canada have excited the interest of all the world. Apart from the making of pulp for paper purposes, however, our spruce wood has always been a valuable asset, and in the eastern provinces it is the chief wood used for house building and flooring, being tougher, stronger and more elastic than pine. So far as white spruce alone is concerned, it is said that the value of the growing timber is already as great as that of all our other trees combined. The white spruce (picea alba), is easily recognized and separated from the black spruce (picea nigra) by the difference of the cones. In the black spruce they are quite short, seldom an inch long, and the scales are corded and deep purple, even when quite old. The white spruce, on the other hand, has narrow, drooping cones, never under an inch in length, and the scales are pale straw color or brown at maturity. Picea nigra is abundant in Newfoundland and in every part of Canada, except southern Ontario and the prairie region. Prof. Macoun says it climbs the highest on the Shickshocks, in Gaspe, and creeps the closest of any of our creepers to the cold waters of the Labrador coast and Arctic Sea. At its northern and southern limit it nearly loses its tree form, becoming in the north a bush, while in the south, in the deep swamps, it is little larger than a hop-pole. All specimens of spruce obtained from Labrador and the far north are this species. It is closely related to the red spruce, and prefers damp situations, while white spruce prefers drier, well-drained soil. According to the late Prof. Dawson, it is very likely a common tree in northern British Columbia, having been observed on the Blackwater and other rivers up to 55 degrees. The black spruce in suitable soils attains a height of a hundred feet, but is a little inferior to white spruce in the quality of its wood for joiners' use. With the tender shoots of the black spruce is made the noted 'spruce beer,' the favorite beverage of the 'Canadian' during the summer months. Both black and white spruce have been found to increase in value as pulp woods the further north they grow.

Respecting the distribution of picea nigra and picea alba, Sir John Richardson and Prof. Sargent assert that picea alba is really the more northern one, while Pro. Macoun holds the contrary opinion. He has specimens from Truro, N. S., from Gaspe, from Nepigon, north of Lake Superior, and from various points on the prairie, and from the foothills and slopes of the Rocky Mountains but not one from north of the Saskatchewan, except Dr. Dawson's, from the Athabasca, all the specimens from that quarter and northern British Columbia being most decidedly black spruce. The white spruce in habit is totally different from the black spruce. Picea Nigra is a lover of damp localities, as we have said, while white spruce prefers comparatively dry woods, and is found mixed with poplar, birch and other trees. On the prairies it is found on sand-hills and dry slopes of river banks, and, this

being the case, Dr. Macoun contends that it is not reasonable to expect it to take to cold and damp localities in the north. Without a doubt, however, this species ranges from Newfoundland, Anticosti, Nova Scotia and New Brunswick, through Quebec and Ontario, westward to the forest limit of Manitoba. In the prairie region it is found on the sand-hills bordering the first prairie steppe. Occasionally trees are met with in the Saskatchewan Valley and in the ravines of the Cypress Hills are numerous small groves. It ascends the Bow River from Calgary, and becomes intermixed with Picea Englemanni at Silver City, within the Rocky Mountains. Richardson gives its range as throughout Nova Scotia and Canada, to within twenty miles of the Arctic Sea and on the Coppermine River ; in latitude 67 degrees it attains a height of twenty feet or more. Spruce trees have no tap root, the roots are all lateral, so that the soil in which they grow need not be deep. The seed ripens in autumn and one pound contains about fifty thousand pickles, of which about eighty per cent. germinate under ordinary conditions. The seed is winged, and this is a common characteristic of the family, as of all of the conifers, it is contained in cones of overlapping scales. The white spruce attains a height of about fifty feet and a diameter of two feet at the base. Forests composed of these trees may be felled every ten or fifteen years for lumbering purposes, provided that all trees less than a foot in diameter are left standing. A great part of the sub-arctic forest is composed of white and black spruce. White spruce is being more generally used now for railway ties, fence posts, piles and telegraph poles, besides the general building purposes already mentioned ; black spruce is considerably best suited of the two for masts and spars.

Engelmann's spruce (Picea Engelmanni), according to Prof. Macoun, is first met with in the Bow River Valley, on the line of the C. P. R., about the Cascade Mountains, but does not completely supersede the white spruce until Castle Mountain is passed. At Laggan and all points westward it is the only spruce, and at Kicking Horse Lake there are groves containing many fine trees. In the Columbia Valley and all the valleys of the Selkirk Mountains, it grows to great size, often being four feet in diameter, and having an average height of over 150 feet. It is more a tree of the valleys than of the mountains, seldom ascending more than six thousand feet. The tree appears to characterize the interior plateau and eastern part of the Province of British Columbia, with the exception of the dry southern portions of the former, and forms dense groves in the mountains. It borders nearly all the streams and swamps in the northern portion of British Columbia, between about 2,500 and 3,500 feet elevation, and forms dense groves in the valleys of the Rocky Mountains. The wood is largely used in bridge and trestle work and for heavy construction work generally. The wood is very like that of the black and white spruces, and is used for the same purposes. It was the chief wood used in the construction of the Canadian

Pacific Railway from the Rocky Mountains westward.

Western spruce, or Menzies's spruce (Picea Sitchensis), is confined chiefly so far as at present known, to the immediate vicinity of the coast of British Columbia, ranging from the international boundry north to Alaska. In the southern part of the province it grows scattered among other trees, but in the north it is relatively much more abundant, growing sometimes in large clumps. Occasional trees of great size are found, but it generally averages less in diameter than the Douglas fir, those cut for lumber seldom being more than five or six feet in diameter. It is the most useful wood on the west coast, being in great demand for the manufacture of doors, window sashes, boxes, shelving and interior finishing. The wood is very white, is elastic and bends with the grain without splitting, so that it is much used in boat building, making of light oars, staves and woodenware. It resists decay for a long time, and, like the Douglas fir, is not attacked by insects. The chief value of the Sitka spruce in the near future, says Macoun, will be in the manufacture of pulp, for which purpose it is not excelled by any other tree. As soon as pulp mills are established in the vacinity of the large saw mills, the immense waste entailed by the present method of sawing dimensive timber in British Columbia will be obviated. Dr. Dawson observed it on the summit between the Coldwater and Coquinhallow rivers (3,280 feet) ; also on the Nicolume, a few miles beyond the summit, between that stream and the Sumallow, and on the west side of the Spioos, near the Trail crossing. It is also noted (doubtfully) on the summit between the forks of the Speena and Bamine Lake.

Norway spruce (Picea Excelas) is not indigenous to the soil, but it deserves a place among the conifers fitted for cultivation in all the provinces of the Dominion. It is hardy, presents a magnificent appearance, and grows to the height of a hundred feet. It has been known, without special care, to attain a height of thirty-four feet by fifteen inches in diameter at the base in twenty-four years. One of its good qualities is that it throws out extremely strong lateral bushes, which makes it highly suitable for wind-breaks around orchards, or permanent plantations of walnuts or oaks. There is one peculiar quality about its wood, it is fit to use before it reaches a foot in diameter, which is not the case with the other spruces. It is distinguished principally from the other spruces by its large cones and heavily drooping branches and branchlets. The spruces are distinguishable from the hemlocks from having their evergreen, needle-shaped leaves, which are somewhat four-sided, distributed all around the stem. The pines are easily distinguishable from both by their needles growing in small clusters, of from one to five, each assuming the shape of a cylinder when pressed together.

The pulp industry was first mentioned in the census of 1881, when the capital invested was stated to be $92,000, the wages paid $15,720, and the value of the product $63,300. Ten years afterwards the census of 1891 gave the capital invested at $2,900,907, the wages

paid $292,099 and the value of products at $1,057,810. The comparison of these figures shows for the ten years an increase of 3,053 per cent. in the capital invested, of 1,758 per cent. in the wages paid, and of 157 per cent. in the value of the products turned out. Until the present census returns are published, the statistics of 1891 are the only correct and complete figures to hand respecting the consumption of spruce in the four older provinces of the Dominion, in which for many years to come the pulp industry is bound to increase in importance. According to the figures of the 1891 census the whole of the spruce consumed in the four provinces for all purposes amounted to 5,146,236,287 feet, of which 2,958,926,740 feet were consumed for sawlogs, 1,566,412,166 feet for firewood, 212,582,464 feet for square timber, 111,889,150 feet for lathwood, 130,400,000 feet for pulpwood, 98,267,801 feet for railway sleepers, and 67,749,166 feet for shingles. In each of the provinces respectively the pulp wood used as follows : Ontario, 57,457,800 feet ; Quebec, 1,812,740,038 feet ; New Brunswick, 650,388,898 feet, and Nova Scotia 705,226,450 feet. The proportion of pulp wood to the other uses spruce had been put to when these figures were compiled was 2.53 per cent. for the four provinces together, 2.90 per cent. for Ontario, 3.51 per cent. for Quebec, 903 per cent. for New Brunswick, and 0.23 per cent. for Nova Scotia.

The extent of our spruce forests may be faintly imagined by stating the fact, that if since the date of the last census there has been cleared and put under crop about 2,000,000 acres of wood lands in Ontario, 1,500,000 acres in Quebec, 250,000 acres in New Brunswick, and 300,000 in Nova Scotia, the present forest area in Ontario would be 52,818,420 acres ; Quebec, 144,363,454 acres ; New Brunswick, 11,224,540 acres, and Nova Scotia, 10,853,544 acres. If this is divided by 260,818 acres, which is about the area demanded each year, even if the pulp industry were to consume 1,500,000 tons a year, it is estimated that it would take 840 years to exhaust our spruce forests. The period of exhaustion for Ontario is estimated at 860 years, Quebec, 1,103 years ; New Brunswick, 987 years, and Nova Scotia 3,255 years. It is well known, however, that where operations were carried out in a wise and provident manner, a spruce forest renews itself every fifteen or twenty years at most, so that the increasing magnitude of the pulp industry need not give rise to serious apprehensions with respect to the total destruction of our forests. The great dangers in this respect are fire and the abuses committed under pretext of colonization and wastefulness in lumbering operations. Some idea of the value of the timber destroyed by fire in our forests may be obtained by taking the province of Quebec as an instance. In this province the value of the timber destroyed in the forests of Lake St. John, the St. Maurice and the Ottawa would pay the whole of the provincial debt and still leave several millions to spend in developing our resources. In the Saguenay and Labrador districts, the ravages caused by fire have been more extensive, if not more disastrous, as regards the

value of timber. In one of his latest reports, Mr. Low, of the Geological Survey, gives the following information about these fires :

"At least one-half of the forest area of the interior has been totally destroyed by fire within the past twenty-five years. These fires are of annual occurrence and often burn throughout the entire summer, destroying thousands of square miles of valuable timber, to the south of the central watershed (in Eastern Quebec). The regions just devastated remain barren for many years, especially towards the northern limits, and the second growth of black spruce, Banksian pine, aspen and white birch is never as good or as large as the original forest. These fires are due to various causes, but the majority of them can be traced to the Indians, who start them either through carelessness or intentionally. The Nascaupee Indians of the semi-barrens signal one another by smoke made by burning the white lichens that cover most of the ground in the interior, and these signals cause many of the fires. The southern Indians signal in a similar manner, but do not practice it to such an extent as their northern brethren, having found that they are rapidly destroying their hunting grounds. Careless camp fires in dry seasons are another common cause of these forest fires, and many of these ascribed to lightning, if closely traced, would be found to have been set by wandering Indians, who are only careful of their own hunting grounds. From what is seen on the explored routes of the southern watershed, it would appear that at least one-half of the forest has been removed by this cause.

The greatest fire of modern times occurred in 1870 or 1871, and swept the country south of the height of land from the St. Maurice to beyond the Romaine River. The second growth is just beginning to cover up the traces of this great conflagration, which ruined the pioneers of Lake St. John, and it will be years before the country is generally again well wooded. The upper Romaine River Valley has been totally burned over within the last ten years, and the margin of that great burnt area has been extended southwards during the summers of 1893 and 1894, so that now practically no green woods exist along the course of this river from the St. Lawrence to its source. The country surrounding the Hamilton River is in a similar state ; except patches of original forest, along the lower part of the river valley and about Hamilton Inlet, only blackened stumps or a small second growth are seen along its course, with an occasional oasis of large green wood to break the monotony. In this region great fires occur annually ; that of 1893 covered a hundred square miles of the tableland between the Hamilton and North-west Rivers. Similar remarks apply to the forests of the western watershed, more than half of which has been burnt."

It has been found by means of recent explorations of the Geological Survey that the immense spruce forests extending eastward to the Straits of Belle Isle, northward far beyond the height of land westward as far as the Rocky Mountains, and far beyond the

Peace River, contain merchantable timber everywhere. Mr. Low found white spruce trees, measuring 24 and even 30 inches in diameter, three feet from the ground, and 70 feet high in the valley of the Hamilton River, between the 53rd and 54th degrees of latitude, and he says in his report that trees of that size are not of uncommon occurrence. He also says that in some parts of the valley of the Ashnanipi River, one of the upper branches of the Hamilton, white spruce trees 30 inches in diameter and 40 feet high are pretty common as also are black spruce 24 inches in diameter. He found that as far as the centre of the Labrador Peninsula and 500 miles north of the St. Lawrence, there are spruce trees whose dimensions equal those of the largest in the finest forests of the south shore, of the St. Maurice and Ottawa. It is in these valuable forests of the Labrador Peninsula that the Indians have caused the greatest devastations. It is estimated that the timber thus destroyed might have yielded one million tons of pulp a year for half a century. Those interested in the general subject of forestry cannot do better than join the Canadian Forestry Association whose head office is at Ottawa. Much valuable information concerning all that goes to make up the fascinating study of forestry may be thus obtained.—Daily Witness

SIX YEARS OF RURAL SCHOOL BETTERMENT.

State Supt. W. W. Stetson, of Maine, has been doing a wonderful work for the schools of the Pine Tree State. And he is still at it with inexhaustible enthusiasm and vigor and an abundance of sound common sense. Since 1895, when the able "Study of the Rural Schools of Maine, by the State Superintendent of Common Schools" appeared, a work of steady transformation has been going on, which seems destined to put the country schools of Maine upon an equal footing with the best public schools of any city. The credit of leadership in this remarkable movement is Mr. Stetson's; yet his associates, and the community as well, merit praise. for there are states in which a transformation such as they have wrought would have been quite impossible.

In 1895 when Mr. Stetson made his memorable tour of inspection of 200 rural schools in eight different counties of the state, he was able to rank only six per cent. as "excellent." Twenty-one per cent. were designated as good, thirty-two per cent. as fair, and forty-one per cent. as poor or very poor. Not very encouraging conditions, these: nor was it true that the large percentage of poor schools was due to the great dist ricts of sparsely populated territory which are characteristic of Maine. Some of the best schools were found in the "back" districts, while many of the poorest were located within a few miles of the centers of population. No section of the state could be discouraged by contrast with any other. All were equally liable to censure. A few of the discourag-

ing things noted in the schools of 1895 may well be referred to here.

There were very few children in the schools who were more than thirteen years of age; eighty-seven per cent. being under that age. In olden times pupils of eighteen and twenty used to attend districts school; to-day the children seem not to care to study longer than they legally must and are inclined even to violate the state law which provides that all persons between the ages of five and fifteen shall attend school for at least sixteen weeks of the year.

INEFFICIENCY OF THE TEACHERS.

The teaching force was shown by statistics to be largely composed of young, inexperienced and untrained people. The oldest teacher found in a rural school was forty years of age, the youngest fifteen years. The average age was about twenty-four years. Fifty-two per cent. had acquired all the school education they possessed in just such schools as they were "keeping." Thirty-eight per cent. were reported as having attended academies or seminaries for about one year. Ten per cent. were graduates of normal or training schools, academies, seminaries or high schools of a standard grade. Only twenty-three per cent. had ever subscribed to an educational periodical or read one of the standard works on pedagogy. One teacher wanted to know what was meant by the word "methods" which she frequently heard used.

WHAT BUILDINGS WERE LIKE.

The school buildings were even worse than the schools. Sixty-five per cent. of those visited were so near the road, and surrounded by yards so small, that the children was obliged to play on the highway. Not more than five per cent. of the school yards visited were properly enclosed by fences. In an equally small number trees had been planted or flowers cultivated. Most of the school lots had been selected without reference to beauty or healthfulness. All but two of the buildings visited were of wood. Twenty-one per cent. were in distinctly poor condition, sixty per cent. were ranked as fair, fifteen per cent. as good, and four per cent. as excellent. Modern desks were found in only thirteen per cent.; the rest were equipped with old-fashioned plank desks, of which forty-seven per cent. were found to be in poor condition. Sixty per cent. of the rooms were noted as unattractive; in only ten per cent. were there evidence that the teacher had done anything to improve the appearance of the school.

In only a single instance had any attempt been made to place the window at a proper distance from the floor, or to ventilate the room in any other way than by opening the doors and windows. Very many of the school buildings had not been provided with locks, and there was every reason to believe that not a few were used as places of rendezvous by lawless characters.

The outbuilding of nearly all the schools visited were found to be a menance to the health and morals of the community. Windows had been removed, doors torn from their hinges. In several there were no partitions between the sections assigned to the two sexes. Every outbuilding inspected had the ordinary vault which

in many cases had not been cleaned for years. The odor from these shanties was indescribably foul, and positively dangerous.

In spite of these surroundings much good work appeared to be going on. Maine children are notably "smart" and ambitious to get on in the world, and it was evident that much of the sterling character which traditionally goes with the district school was being developed in the children. There was no doubt, however, that adverse conditions were doing much to neutralize the native progressiveness.

THE BEGINNINGS OF IMPROVEMENT.

That was six years ago. There are still plenty of disgraceful, rural school-houses in Maine, but the number has been largely reduced. In 1897 Mr. Stetson brought out a pamphlet of "Sketches, Designs, and Plans for School Buildings, School Yards, and Outhouses." In this he gave detailed information as to the choice of school sites, water supply, outhouses, school buildings, colors for exteriors, halls and wardrobes, stairways, windows, blackboard, interior finish, lighting, desks, and ventilation. In short, an opportunity was given to the school directors throughout the state to become informed on nearly all matters of modern school equipment. Floor plans and elevations of model rural school-houses in the states were printed in the pamplet. Nothing elaborate or fanciful was displayed, but only such buildings as were clearly possible in a poor community, and such as were easily intelligible to a handy carpenter.

On May 23, 1898, the School Improvement League of Maine was started as a direct result of the agitation started by Mr. Stetson. Its membership December 31, 1899, was 9,530. By March 1, 1901, it had passed the 30,000 mark. At the former date the state superintendent was able to report that the members had made repairs on the fences of thirty-three school yards; that from 221 yards unkempt grass, weeds, rocks, and refuse matter had been removed. Eleven stone walls were removed, and replaced with suitable fences. One hundred and seventy-six trees were planted and forty-four school-lawns graded, forty-six flower beds planted, thirty-four swings erected as well as eight trapeze bars and twelve teeters, twenty-three school grounds seeded down, fifty-eight flags purchased, thirty-eight school buildings cleaned and painted, 156 school-rooms otherwise decorated. Purchases of 436 portraits, 11,000 Perry pictures, and 1,390 photogravures, engravings, and carbon photographs were reported. Also through the efforts of the league 2,240 volumes were added to school libraries, with twelve globes, forty-six dictionaries, twenty-one dictionary holders, thirty-six large reference books, and twenty-three maps. Eleven blackboards, forty bookcases, nine organs, thirteen casts, thirty-one clock, 183 curtains, forty-six lamps, fourteen waste baskets, twenty-one wash basins complete the list of donations to rural school equipment in so short a time.

The league continues to grow rapidly under the guidance of President Payson Smith, of Rumford Falls, and the state secretary, Miss Kate McDonald, of Machias.

PLANS OF THE LEAGUE.

Some of the central ideas for which this School Improvement League stands are well worth setting forth. The fundamental thought is that of the school community plan. The school-house is to be made a center of social and educational activity—not all at once, for the promoters of this league believe in doing one thing at a time, but gradually, beginning with a movement for better physical surroundings.

Teachers are advised not to undertake to carry the enterprise themselves, for it is not primarily a teacher's movement. What is wanted is a str ng and vital interest on the part of pupils and patrons. Such a motive will be best served by making children and parents do something for the school, by giving them a proprietary interest in its well looking and well being.

The general plans of the league are comprehensive, but for the present it is judged wisest to concentrate attention upon the question of remedying defects in school equipment and construction. Accordingly a campaign of education is being waged which is resulting in almost marvelous improvements. Here are a few of the things that are now urged upon the schools :

Flags for such schools as have none ; the local G. A. R. and W. R. C. organizations to be interested in this movement.

Planting of trees and shrubs. Numerous copies of " How to Set out Trees and Shrubbery " by Mr. J. B. Upham, of the Youth's Companion, have been sent out through the courtesy of the author to Maine district teachers.

Yards to be graded ; men of the community to be pressed into service for this work.

Arbor day to be celebrated by removing tumble-down fences, rocks, and stumps, and by planting trees.

Flowers to be planted and flower beds to be kept in order by special committees.

School libraries to be started everywhere. Proper cases should be made by a local carpenter or by one of the boys who is handy with tools. All books should contain a list of rules governing their loan. Twenty-five to thirty books can be bought for ten dollars—a good nucleus for a library. " Book sociables," literary entertainments, etc., will help to augment library fund.

The traveling library system and its advantages should be made known throughout the state. The cost is trifling. Write the State Librarian, Augusta, Me., for information.

SCHOOL-ROOM DECORATION.

School-rooms must be made more home-like, more attractive, and more beautiful. Some hints as to school-room decoration may be given as follows :

Tint the walls with soft, restful shades. Avoid wall-paper with figured designs. Tinted papers are best.

Picture moulding is inexpensive; use it instead of unsightly nails and screws.

Place good-sized pictures on the walls or none at all. Avoid conglomerate masses of insignificant pictures.

Every school should have at least one good cast. Avoid perfectly white casts. Ivory or light

cream are the best tints. The works of Donatello and Della Robbia are especially fascinating to children.

In framing pictures secure plain mouldings. Ornate, gilt frames are in very bad taste. Remember that a dark picture is made lighter by a very dark frame and that a light picture is made darker by a very light frame.

Get good copies only of the best pictures. In some of the school-houses visited by Mr. Stetson, the only decorations were some glaring posters issued by a manufacturer of chewing tobacco. Plain, bare plaster is far more artistic than such decoration.

Call in the local woman's club where there is one to aid in the adornment of the school-rooms.

The league offers opportunities for a revival of the old-fashioned "lyceum." There should be meetings at the school-house devoted to literary work. Study of the lives of men famous in the history of the state, items of town and country history, is very valuable and in many communities has proved successful.

Photographs should be taken of all work done by the local league and should be sent to the state secretary for the annual exhibition

MEMBERSHIP OF THE LEAGUE.

The form of organization of the School Improvement league ought to be explained briefly. The leagues are of three kinds, namely: local leagues, organized in the several schools of a township; town leagues, whose membership consists of the officers of the local leagues and a state league, whose members are delegates from the town leagues.

The regular membership of the local leagues and a state league, whose members are delegates from the town leagues.

The regular membership of the local leagues is made up of pupils, teachers, school officials, and other citizens. The contribution of five dollars, or more, entitles a person to honorary membership. The president of a local league is ordinarily the teacher of the school in which it is organized. When any person has paid into the treasury through fees or donations, or both, the sum of five dollars, he is entitled to the diploma of the league signed by the state superintendent of instruction, the superintendent of the town in which the school is located and the teacher in charge of the school. A person holding a diploma is entitled to vote in his own league, at the town league, or at any meeting of the state league.

The membership fee is fixed at not less than one cent a month for each pupil, and ten cents a school term for other members.

With a membership of 30,000 and a constantly growing enthusiasm. this league promises to be of great help in raising the whole standard of living in Maine. The promoters of it have many circumstances on their side. They have a population that is practically homegeneous racially, that is, almost free from distinction of caste and class spirit, that is keenly alive to influences that make for good. Maine has for years exerted a political force in the country that is all out of proportion to the population and wealth of the state, by virtue of the character of the men who have been put in office, and kept there. The

state is destined in similar fashion, to stand for high character and practical accomplishment in the greatest educational movement of the twentieth century—the reorganization of society around the school-house as a social center.

The School Journal.

THE AMERICAN WOMAN.

And now America is indebted to Dr. Muensterberg for a most thought-provoking discussion of that topic on which so much has been talked and so little of worth really said, "The American Woman." His is the most important article that has appeared this month and ought to be of especial interest to teachers and students of education generally. It will probably provoke livelier argument than most of the others put together, with the possible exception of Dr. Hyde's address on "Academic Freedom." Dr. Muensterberg has been with us for some years. He has entered into real American life and thus is able to speak from genuine acquaintance, not simply from observation. His conclusions appear in the International Monthly for June. They are certainly "profitable unto many things."

Omitting the writer's delightful introduction and plunging into the midst of his discussion, Dr. Muensterberg makes the astonishing suggestion—astonishing to the average American woman at least—that it is no less important for America to be influenced by the German ideals of a woman's life than for Germany to learn from America! The Germany of to-day, he says, is not that of twenty years ago. The industrial development of the country has left no sphere of German life untouched. The efforts of this new Germany in the interests of woman have taken four forms. The first movement is a tendency to soften the hardships of the female wage-earner; the second seeks to raise the character of the general education of girls in the higher classes: the third endeavors to open new sources of income to the better educated women of narrow circumstances, and the fourth aims to clear the way for women of special talent, that they may live out their genius for the good of humanity.

These tendencies, Dr. Muensterberg continues, have a single background of principles. One of these is that it must remain the central function of the woman to be wife and mother. The other is that public life and culture, including politics, public morality, science, art, higher education, industry, commerce, law, literature, the newspaper, and the church, are produced, formed, and stamped by men. Every tendency that strikes against these two principles of German conviction has been paralyzed by the spirit of the country. All efforts towards the solution of the woman question in Germany strengthen and reinforce the family idea.

There cannot be the slightest doubt, in the writer's opinion, that all that tends to uplift the lot of

the working woman protects the home in protecting the individual girl, wife, or mother. The central endeavor is to give her time for the household cares and for her functions as a member of the family. The higher education, on the other hand, is almost wholly in Germany of a character to make the young women better fitted for marriage. Since in the better classes the education of the woman was for a long time so much inferior to that of the man that it seriously interfered with deep intellectual comradeship in married life, the successful efforts to raise the standard of female education have given new attractiveness to marriage life and have made the girl more marriageable. Again, the increased opportunities for German women to make their own living make not at all against the establishment of the home. These opportunities lift from many homes the burden of misery, but under the existing conditions of public opinion, there is no fear that they will ever have any chance as substitutes for marriage. They remain, for the large masses, only a question of second choice, merely for those who have no chance to marry, or who are afraid they will not marry, or who hope that it will somehow help them to marry.

The movements in the interest of woman in America have exactly the opposite tendency! Serious forces are at work to undermine the home. To use Dr. Muensterberg's own words: I will not warm up to the argument so often repeated in Europe, that the higher learning makes a girl awkward and ill-mannered, and that the man will never be drawn to such a bluestocking. I take for granted that no American girl loses in attractiveness in passing through a college. The woman has not become less attractive as regards marriage, but has not marriage become less attractive to the woman? And long before the freshman year did not the outer influences begin to impel in that direction? Does it not begin in every country school where the girls sit on the same bench with the boys, and discover, a long, long time too early, how stupid those boys are? Co-education, on the whole unknown in Germany, has many desirable features; it strengthens the girls, refines the boys, it creates a comradeship between the two sexes which decreases sexual tension in the years of development; but these factors make, at the same time, for an indifference toward the other sex, toward a disillusionism, which must show in the end. The average German girl thinks, I am sorry to say, that she will marry any man who will not make her happy; the ideal German girl thinks that she will marry only the man who will certainly make her happy. The ideal American girl thinks that she can marry only the man without whom she will be unhappy; and the average American girl aproaches this standpoint with alarming rapidity.

Co-education means only equality. The so-called higher education for girls means under the present conditions of American life, not the equality, but the superiority of women. In Germany, even the best educated woman—with the exception of the rare and ambitious scholars—feels her education inferior to that of

the young man of her station, and thus inferior to the mental training of her probable husband. The foundations of his knowledge lie deeper, and the whole structure is built in a more systematic way. This is hardly so in America; the lawyer, the physician, the teacher, obtain excellent preparation for the profession, but in a lower degree his studies continue his general culture and education. And as for the business man who may have gone through college with a general education in view, how much of his culture can be kept alive? Commerce and industry, finance and politics absorb him, and the college time becomes a dream—while the college girl remains in that atmosphere of mental interests and inspiration, where the power she has gained remains fresh through contact with books. When the time for marriage approaches she is his superior in intellectual refinement and spiritual standards. As the girl instinctively feels that it is torture to be the wife of a man whom she does not respect, she hesitates, and waits and shrinks before the thought of entering upon a union that has so few charms.

The college studies do not merely widen the horizon; they give to many a student a concrete scholarly interest, and this is still truer of professional training. The woman who studies medicine or natural science, music or painting, can we confront her with the suggestion, which would be an insult to the man, that her work is so superficial that she will not care for its continuation after she undertakes the duties of a married woman? Or ought we to imply that she is so conceited as to believe that she is able to combine the professional duties of the man with the not less complex duties of the woman? No one can blame her, however much she may love her own home, for loving still more the fascinating work for which she has been trained.

The American girl lives amid social enjoyments, cultured interests, flirtations, and refinements—what has she to hope from the change which marriage brings? The foreigner, who sees with amazement the social liberty of the young girl, is hardly surprised that the American girl almost hides the fact when she becomes engaged. She has to give up "many fine things"; a period almost of resignation has to begin. She not only has no new powers to expect—she has in marriage a positive function before her, which she, unlike her European sister, considers rather a burden: the care of the household. The atmosphere here is filled with the theory that housework is somewhat commonplace, a necessary evil to be reduced to the minimum. The boarding-house life of married people, so common in America, is not only unknown but unconceivable in Germany. The German girl anticipates from marriage the possession of a household after her own domestic tastes. Her whole home education is a preparation for this, and it is certain that the German way develops an instinctive inclination toward the home life.

Germany, with its condensed population, is not able to do without the help of female muscle in running the economic machine;

America does not really need this. Man's labor can support the households of this country, and, economically the country would be better off if female labor were almost entirely suppressed, since it lowers the wages of the men, and wastes domestic energies which in a more intensified effort would save the more. It is disinclination to domestic cares which has created the present situation, with the effect of pushing the woman from the hearth to the mill, the office, and the class-room.

Other than mental factors need to be taken into account. The foreigner cannot see American girls without the feeling that there is something unhealthy in their make-up, a pathological tension not desirable for the woman who is preparing herself to be the mother of healthy children. The vital statistics tell the story. The census of 1890 showed that there were born in Prussia 36.6 per thousand of the population, in Massachusetts 21.5 including all of foreign birth.

The second great difference between Germany and America, as seen by Dr. Muensterberg, lies in the fact that in the older country the whole public life bears the stamp of man. By public life the writer does not mean politics. In America politics so directly penetrates man's whole welfare that there is no danger of his letting it pass into the hands of the women. What is referred to is rather public expression of the ideal energies, the striving for truth, and beauty, morality and religion, as embodied in the public consciousness. In Germany no one of these functions of public life is without the support and influence of active women, but the bulk of the work is done by men. Here the women are the real supporters of ideal endeavors; the whole system tends to push the men out and the women in. Can we deny that there are about eighty-five per cent. of women among those who attend public lectures and concerts, who look after public charities and the work of the churches? As a matter of course, the patron determines the direction which the development will take. The result is an effemination of the higher culture, which is antagonistic to the development of a really representative national civilization.

How differently the woman's mind works from that of man we see by turning our eyes toward the half-educated multitude. Here we are confronted with the woman who antagonizes serious medicine through her belief in patent medicines and quackery; the woman who injures the progress of thought by running after every new fad and fashion introduced with a catchy phrase. The half-educated man is more inclined to show an instinctive respect for trained thought and to abstain from opinions where he is ignorant. But the half-educated woman cannot discriminate between the superficial and the profound; she effuses, like a bit of gossip, her views on Greek art or on Darwinism, between two spoonfuls of ice cream.

That such effeminization makes progress may be seen from the teaching profession. The disappearance of men from the class-room is distinctly alarming. The

primary school is monopolized by women teachers, and in the high school they have an overwhelming majority. Since the woman does not have to support the family she can work for a small salary and thus, as in the mills, the men tend toward the places for which women are not strong enough. Even granting that woman's work is just as good as man's work, can it be without danger that the male youth of this country, up to the eighteenth year, are educated by unmarried women? Where will this end? Must we not expect that in the same way in which the last thirty years have handed the teacher's profession over to women, the next thirty will put the ministry, the medical calling, and the bar into her control?

No one can suggest that woman's education in this country ought to take any steps backward; only one practical change must come in response to the urgent needs of the period: The American man must raise his level of general culture. In short the woman's question is the man's question. Reform the man and the difficulties will disappear.

The School Journal.

RELATION OF NATURE STUDY TO DRAWING.

By J. M. Stone, Worcester, Mass.

The classification of parts of plants and animals according to similarity of form, character and function, and the study of these in groups, may be made a profitable and pleasant part of the nature study course. Some of the things to be thus observed are oak and maple leaves, the various kinds of grain, garden biennials, spring and autumn flowers, seeds, the teeth of carnivora, eyes and claws of the cat family, feet of the swimming birds, etc. Drawings can and should be made from nature in most cases. In all these studies the children are taught that the drawings are as important a part of the record as the notes, and they are made in the same spirit.

One of the charming results of nature study is the familiarity which children acquire with the many kinds of animal life from which they are apt at first to shrink. For instance, do you suppose a little girl who has seen on her own desk and on her companions' desks the moth pass through its metamorphic state, from the egg to the devouring caterpillar, from the caterpiller to the dormant chrysalis and from the chrysalis to the perfect moth, will cringe, shriek, and go into hysterics if a caterpillar crawls upon her? Oh, no. It is no uncommon thing to see the caterpillars crawling around on the children, who pick them up and set them on their branches, and make no more ado about it than they would about picking up a handkerchief or wiping a pen.

This familiarity, the interest in and kindness towards the life about the children, we believe, cultivates a better temper, kindlier feelings, and a gentler spirit. And this is our aim, to make school life a pleasure, to cultivate an interest in the beautiful and interest-

ing things of life, and by these means to bury the unlovable qualities of the child so deep that they will not in after life come to the surface.

In our design work the children are taught to go to nature for everything, and every design has a purpose. Many of the things decorated are common things, such as the children see about them daily, and such as have pleasing associations connected with them. In ornament and design everything depends upon the spirit in which the decorator goes to nature. He may treat his motive in such a way as to be quite in the spirit of nature study, and on the other hand he may make a design in quite the opposite spirit. A design from nature may be realistically or it may be decoratively treated. In Egyptian ornament taken from the plants we recognize the perfect individual plant and where it grew. The floral parts of Gothic ornament which were taken from nature were copied in much the same spirit. The most naturalistic type of ornament is that of the Japanese. They start quite frankly from nature, copying natural forms as closely, apparently, as their skill and the conditions under which they work will admit. Ornament must never run wild. There must be a manifest restraint of confusion, producing restfulness and dignity. In good ornament everything is inspired by nature, but it is compelled into ornamental form, and is made to conform to the necessities of decoration. The principle of selection must be adhered to. One can hardly conceive any motive which is not more or less modified by considerations altogether apart from literal description of the natural forms. In all applied design there is something, let us say, not contrary to nature, but non-natural. The perfect example is what is required as a model ; it must then be designed into its place, conventionalized, and adapted to its purpose. In this process the subject or example loses its individuality. Thus decorative design is the exact opposite of nature study. But in the lower grades, where the decorative work consists of little more than arranging natural forms to produce decorative effects, these two courses need not conflict. As long as the student aims at the perfect thing, he remains in harmony with nature study principles, but as soon as he acts according to tne prerogative of the decorator, selecting, arranging and adapting, he parts company with nature study principles. As soon as the scholars in the higher grades study historical ornament and the principles of decoration they must understand that tney go to nature for decorative elements in a different spirit from that of nature study. It is the function of the teacher to lead the child to nature as the great storehouse of material for his use, and to show him how to use it in diverse ways for the varied purposes called for by society.

Education in color we regard as very important. Color as a source of enjoyment opens up new avenues of pleasure ; it is an essential element in decoration, and is an important feature in drawing and nature study. The aim in the lower grades is to educate and

refine the color perception. In the higher grades the theory of color is taken up. But everything is based on nature both in practical work and color theory. We make Autumn the special season for taking up color work. The country is then teeming with color, and Nature is dressed in her gayest attire. The analysis of the colors in plants, birds and insects is then full of interest. The harmonies based on the relation of colors to each other, or the order in which they occur in the solar spectrum form an excellent basis for a scheme of study. This, with some knowledge of principality, and the light and dark effect in design, supply the elementary principles. In teaching the theory of color the drawing teacher finds himself at a disadvantage because there are no fixed standards generally accepted by educators. Artists and scientists are at variance as to the primary colors. Certain French painters are working on pseudo-scientific lines accepting the ray of light theory, but it is too early to predict whether this movement is destined to result in the general adoption of the scientific theory of color. It seems safe to assume, however, that the color teaching in the public schols is not likely to be affected by it for a long time to come.

While we aim to correlate drawing with every other branch of study, a specially intimate association of it with nature study seems desirable. In every large grammar building a room should be set apart for the purposes of art and nature, thus enabling the teachers to have departmental instruction more successfully carried on. This room may become a general receptacle for things of beauty and interesting specimens from nature. All drawing material, works of art, potted plants, aquaria, vivaria and breeding cages, etc., would here be stored. Such a room with its collections, would furnish a vast amount of material for the drawing as well as the nature study .

In this work of drawing we have a variety of materials. In the lower grades the pupils use clay, drawing pencils, charcoal and colored pencils. In the higher grades watercolors are added to the equipment. For the rendering of form, clay is by far the best medium. Many things can be very satisfactorily represented with the common drawing pencil and colored pencils. Where large masses of color are desired, watercolor will be found most satisfactory.

It is a mistake to do only one kind of art work in a school, as it is also to try to do all kinds of work with one kind of material. In New England, during the last few years, we have witnessed some amusing oscillations of the fads ; drawing teachers have swung swiftly from one extreme to another, at one time casting aside all books, whether for teacher or pupils, at another time holding high carnival in watercolor painting. Just now some of the drawing teachers are recovering from a severe attact of Japanese notan. The prospect ahead is serene, and, if the faddists present nothing very alluring, we shall have an opportunity to devote ourselves to the highest interests of the children. Many have already discovered their errors, and have

adopted the broad course of making drawing correlate with every study possible, vying with language itself. We in Worcester still continue to teach clay modelling ; we have not thrown away our type solids ; drawing books are still used by the children, and drawing manuals are found convenient by the teachers ; and we still find the lead pencil a good tool with which to draw.

And now, in conclusion, let me quote the words of President Hall of Clark University, in relation to nature study. " Cast out," he says, " the things you hate and fear, and develop the things you love and are interested in." I would that we might respond to this great human note. I would that we might attack these subjects in a real joy-seeking, fear-destroying spirit, teaching the children to love and protect the useful and beautiful, and perhaps destroy the noxious. In preparing our courses, let nature and art prevade them. The great diversity of life to be found in nature appeals to the young with all-absorbing interest. Let us recognize their natural interests, let us enlist their finest sympathies, let us cultivate in them the spirit of artistic appreciation, let us lead them to an intelligent discrimination between beauty and ugliness, between hateful things and things loveable, and thus we shall make the schoolhouse not only a place of learning, but also a place where the very finest human interests and instincts are fostered. The awakening of the child's higher spiritual powers, the opening up of new avenues of enjoyment. the wise development of the sense activities will lead to enlarged observation of beauty in nature and in art, the cultivation of better possibilities of usefulness to others.—Educational Gazette.

WHAT ARE THE MOST DIFFICULT SUBJECTS TO TEACH ?

When the question is couched in this form, there appears to be only one answer possible—That depends on the teacher and on the taught. But let us transpose the question into another mood : What, judging by results, appear to be the subjects that are most difficult to teach ? Phrased thus, the question seems to be susceptible of a fairly definite answer : and this answer may help us to answer yet another practical question—On what subject does the average teacher need to bestow most pains and perhaps require outside assistance and advice ? If we can discover, by careful investigation of a considerable number of facts, that in a certain kind of school certain kinds of results are uniformly attained, we are then in a position to make some contributions towards the answer to the question which forms our text. Such a careful investigation forms the subject of the present article ; my inquiry is entirely independent of any other inquiries which may have been made into the subject, and I shall not consult any other sources of information besides those made use of here until I have obtained my own results. comparison of a number of such results, each independently reached, would not, I conceive, be without a value of its own.

What then are the facts at present before me? They are, in brief, the numerical results obtained from five distinct examinations of the same school in five successive years. The examiner is the same person throughout, and is, therefore, more or less a constant factor; the personnel of the school—teachers as well as taught—naturally varies from year to year. It would obviously be a breach of confidence to name either the school or the examiner; but the general character of the school itself must be indicated. It was a girl's school with pupils varying from thirty to forty in number and from ten to sixteen or seventeen years of age. The staff consisted mainly of trained secondary teachers, and the school seemed to be efficiently conducted. At any rate, no girls ever failed to reach the normal pass standard of one-third of full marks, except those who had been at the school for a very short period or who had been irregular in attendance. These explanations, I ought to add, were obtained by putting together a schedule of attendance and the mark-lists, and were not in any way prompted by the headmistress.

So much for the character of the school; now for the data and the method by which the appended results were obtained. During the five years under review there were altogether 167 girls examined, about 250 papers were set, and about 1,500 scripts were marked. Each annual examination was quite independent of the preceding ones; it was not until the five years were over that the chance discovery of the records suggested the idea of attempting to extract some lessons from putting the results together in a kind of quinquennial report. Those parts of this report which were designed to illustrate the general progress of the school as a whole do not concern us in this place; we need summarize only those parts which bear on the relative difficulty of the subjects offered.

The survey was based on a laborious analysis of the mark-lists of the several years. This method was, I think, calculated to eliminate various inequalities which are inevitable in any single examination: for instance the average intelligence of the members of the school probably varied from year to year; not all of the papers set—two hundred and fifty in all—can have been equally adapted to the class for which they were intended. But when the several results—each independently arrived at—are put together the general results should be almost absolutely trustworthy.

The relative difficulty of the subjects handled may be deduced in several different ways from the analysis of the mark-lists. First, there is the obvious method of ranging the subjects in the descending order of the percentages gained in each throughout the school. Another method consists in the investigation of the number of unsuccessful scripts per subject and the proportion which these bear to the total number of scripts submitted in each subject. And, finally, there is the method of tabulating the subjects according to the number of papers set in them which proved beyond the average capacity of the class for whom they were designed—that is, where the average marks

gained by each member of the class fell below one-third of the maximum attainable. This last method is, perhaps, the least satisfactory; for, obviously, such wholesale failure in any subject might possibly be due to causes other than the intrinsic difficulty of the subject. For instance, the papers might have been over the heads of the pupils—questions "outside the syllabus" have been known to occur in our most highly esteemed public examinations. But no complaint of this kind was made to the examiner, and there are other possible explanations.

For instance, there are several cases in which, to satisfy the exacting demands of the British parent, two girls were working as one class in some subject not generally offered: one would be a duffer getting no marks at all, the other might do a respectable paper; but the average would fall below 33.3 per cent. Again, in nearly every school there is one class at least with a very heavy "tail"—new-comers to the school or fresh promotions—which would weigh down the whole class; in the case before us it was noticeable that when a class failed as a whole in one subject it failed also in others. I think, therefore, that we may take this method into consideration in arranging our subjects; though the others carry with them more intrinsic weight.

The following tables show respectively the figures obtained by an analysis of the mark-lists and the various subjects ranged in order of difficulty according to the various methods just now specified of inspecting the results:

TABLE I.—STATISTICS.

Subjects Examined.	Average Percentages.	Scripts.			Papers.		
		Done.	Failures.	Percentage of Failures.	Set.	Failures.	Percentage of Failures.
Literature	58.8	132	16	12.1	20	1	5
English Grammar.	52.6	95	22	23.2	16	1	6.2
Composition	61	111	7	6.3	17	0	0
Dictation	78.7	145	1	.7	22	0	0
History	41.6	159	51	32.1	24	6	25
Geography	67.4	139	11	7.9	22	1	4.5
Scripture	66.5	146	19	13	22	1	4.5
French	52.9	161	23	14.2	24	1	4.1
German	54.2	39	8	20.5	16	2	13.3
Latin	44.3	16	6	37.5	9	2	22.2
Arithmetic	35.3	159	85	53.4	24	11	45.8
Algebra	37.5	37	16	43.2	11	4	36.3
Euclid	56	25	2	8	7	0	0
Science	49.9	82	15	18.3	16	0	0
Av's and Totals	53	1446	282	19.5	249	30	12

TABLE II.—RESULTS.

Subjects ranged in descending scale according to results as estimated by the following methods:

	By Average Percentages	By Proportion of Unsuccessful Scripts.	By Proportion of Unsuccessful Papers.	Deduced Order.
1	Dictation	Dictation	Dictation	Dictation
2	Composit'n	Composit'n	Composit'n	Comp'sit'n
3	Literature	Geography	Science†	Geogr'phy
4	Geography	Euclid*	Euclid*	Euclid*
5	Scripture	Literature	French	Literature
6	Euclid*	Scripture	Scripture / Geogy	Scripture
7	German	French	Science†	Science†
8	French	Science†	Literature	French
9	Eng. Gra.	German	Eng. Gra.	German
10	Science†	Eng. Gra.	German	Eng. Gra.
11	Latin	History	Latin	Latin
12	History	Latin	History	History
13	Algebra	Algebra	Algebra	Algebra
14	Arithmetic	Arithmetic	Arithmetic	Arithm't'c

*Euclid=mainly Bookwork.
†Science=Botany, or Physiology, or Mechanics.

I do not know whether this order agrees or not with any other attempts that may have been made to range the subjects of the curriculum of an ordinary secondary school in order of difficulty. But the order indicated above, as that obtained by a threefold method, bears a natural look on the face of

it. Remembering that "Euclid" and "Science" on the above schedule stand mainly for book-work (riders having a minor place, and the science being set out of prescribed books), it is obvious that the subjects which yield the best results are those which, as usually taught, appeal mainly to the memory, while those which come low down in the list make more and more appeal to the intelligence. The tendency of the four language subjects to come close together, quite unpremeditatedly, seems to give a considerable measure of vraisemblance to the entire set of results. It might be interesting to apply the same, or improved, methods to the results obtained in a boys' school, and to the results recorded in the "criticism lessons" note-books of inspectors or training college officials.

The Journal of Education.

EDITORIAL NOTES.

Deliver not the tasks of might
To weakness, neither hide the ray
From those, not blind, who wait for day,
Though sitting girt with doubtful light
That from Discussion's lips may fall
With Life, that working strongly, binds—
Set in all lights by many minds,
So close the interests of all.

SOMETIME, SOMEWHERE.

Unanswered yet! The prayer your lips have pleaded.
In agony of heart, these many years?
Does faith begin to fail, is hope departing,
And think you all in vain those falling tears?
Say not the Father hath not heard your prayer;
You shall have your desire, sometime, somewhere.
Unanswered yet? though when you first presented,
This one petition to the Father's throne,
It seemed you could not wait the time of asking,
So urgent was your heart to make it known.
Though years have passed since then, do not despair:
The Lord will answer you sometime, somewhere.
Unanswered yet? Nay, do not say, ungranted!
Perhaps your part is not yet wholly done,
The work began when first your prayer was uttered,
And God will finish what He has begun.
If you will keep the incense burning there,
His glory you shall see, sometime, somewhere.
Unanswered yet? Faith cannot be unanswered,
Her feet are firmly planted on the Rock:
Amid the wildest storms she stands undaunted,
Nor quails before the loudest thunder shock.
She knows Omnipotence has heard her prayer
And cries, 'It shall be done, sometime, somewhere.'

—Robert Browning.

The editor of the Westminster has been considering the rapid increase in number and popularity of the private schools for boys and girls. The increase in number during recent years has been quite marked and as the numbers in attendance became larger the efficiency of these schools became more pronounced year by year,

until now they are not one whit in any particular, inferior to the very best of our Collegiate Institutes : why is this the case ? The Westminster has come to the same conclusion which The Canada Educational Monthly was forced to arrive at years ago, that the demand of parents for these schools was unmistakable evidence of their dissatisfaction with the state controlled schools. Canadians do not pay twice for the same service if they can at all avoid it. In regard to the duty of the Government both as regards the schools and teachers of our public schools we are glad of the hearty support of the Westminster in urging upon the attention of the school authorities the vital importance of the question under discussion.

The Canada Educational Monthly cannot see any just reasons which can be consistently pleaded against these so called "private" schools being debarred from financial support by the Government as well as wise and liberal inspection. Equal recognition for equal service in all parts of our educational field, is our position.

* * *

Judged from the standpoint of numbers, this year's meeting of the Dominion Educational Association was a failure, judged from the fact that many of the prominent men whose names appeared on the programme failed to appear, it was also a failure. But otherwise it was a great success, a fact which was due in no small measure to the energetic efforts of Dr. Goggin, Superintendent of Education for the Northwest Territories.

At the public meetings, at the committee meetings, and at the meetings of the Higher Education Section, for whose programme he, as its chairman, was responsible, his tact and common sense brought the best results out of the discussions and caused them to be embodied in practical form, and not in resolutions only. The Association did well to elect him as its president for the meeting to be held at Winnipeg in July, 1903. He will see that the meeting is duly advertised and that the attractions of Winnipeg are set forth in sufficiently alluring form to draw thither a goodly representation from all parts of the Dominion and from the adjoining States.

Mid-August is not a good time for a convention of teachers, in Ontario especially, even if they had known early enough that the meeting was to be held. But had they known how attractive Ottawa is, with the Parliament, and other, public buildings, its parks in the city and out in the suburbs, they would have felt that a week or ten days could be pleasantly spent there as a holiday, at no great cost. The electric railways offer easy access to Rockcliffe, Britannia, and Alymer, which are as attractive as any pleasure resorts to be seen near any other city in Canada. The trips up or down the Ottawa River and on the Rideau are incomparable, while the beautiful views of mountain and river are unsurpassed even at Quebec, Montreal, and Queenston Heights. When to all this were added papers far above the average on subjects, not only of professional importance but also of national concern, those who

were not present have the greater cause to regret their absence, while those who did attend the meetings have reason to congratulate themselves upon their good fortune.

The greatest recommendation of this comparatively new association is that its membership is representative of the whole Dominion. At its triennial meetings the opportunity is afforded for Vancouver and Victoria men to meet face to face with men from Halifax and St. John to discuss questions of common interest, in regard to which the various provinces have much to learn the one from the other New ideals are revealed, new ideas are put forth, and new methods of treating old subjects are discussed, the most diverse views being set forth by the representatives of dignified, conservative, old Quebec, with all its traditional culture, and those of the breezy West, whose boast it is that they have no hide-bound traditions to prevent them from making whatsoever experiments they please.

There has been a fear expressed that certain members have tried to capture the Association for their own purposes. If such is their desire, they did not attain it this year, and it is to be hoped they never will, for their doing so would mean the certain death of the Association. A Dominion Educational Bureau for collecting the educational statistics of the various provinces and for promoting such general interests of education as may be legitimately promoted, with due regard to the B. N. A. Act, may be desirable, and so may a Dominion certificate for teachers and a Dominion registration of certificates. If nothing more can be said in favour of these questions than was said by the gentlemen who advocated them, it would seem to be the better part of wisdom for the committee to preserve the peace by ruling the questions off their programme, till what seems like personal irritation shall have had time to subside. As a beginning in the direction mentioned, it would be quite sufficient to adopt the suggestion of the Honourable M. Boucher de la Bruere, that the statistical part of the scheme be taken up by the Department of Agriculture, seeing that such a course is not open to objection on constitutional grounds.

Patriotism and the fostering thereof was, perhaps, one of the most important subjects discussed at the meeting ; the paper (in French) of Professor Mognan of Montreal and that of Mr. Andrew Stevenson, late of the Woodstock C. I., on the Teaching of History being especially deserving of praise for their sanity as well as for their sentiments. The Association decided by a large majority in favour of that broad, generous and yet strong view of patriotism advocated by these two gentlemen, which, while cherishing national and social traditions, strives to recognize at all times the rights, language, and religion of our fellow-subjects no less than of foreign nations, and which while it teaches men to fight for their country, teaches them also that love of country consists as Professor Magnan, quoting Souvtestre, in all the home ties and home duties, all the municipal, and all the national obligations rightly and faithfully discharged in times

of peace among the humdrum surroundings of the ordinary workaday life.

Manual training and nature studies, in regard to which we in Ontario have been slow to move, occupied a large share of the time and thought of the members, Professor Robertson, of Ottawa, Principal Ellis, of Kingston, Mr. G. N. Hay, of the "Educational Review," St. John, N.B., and Dr. Goggin being the chief exponents of the same. The Association appointed a committee to work out an experiment of methods in these lines of work in a school specially supported for that purpose. Manual training and nature studies may not do for the schools and the pupils in them all that their advocates claim for them but they certainly do vastly more than the obscurantist critic and opponent dreams, if he ever does dream, and the man who does not dream should never be a teacher or have anything whatsoever to do with educational affairs.

Programmes of study, examinations, and the like, naturally came up for discussion, and, again naturally, at the hands of the members from Ontario, who know only too well what a hindrance to true education the present educational system of Ontario is. They came up in the paper of Mr. W. J. Robertson, of St. Catharines, on "Modifications of High School Courses demanded by conditions of to-day," in that of Professor Squar, of University-College on "Entrance Requirements to High Schools and Universities," as well as in those of Mr. John Henderson, of St. Catharines and Professor Young, of Trinity University, on "Should Greek and Latin be retained as subjects of study in our Secondary Schools"? and "What a Pupil has a right to expect as the Result of his High School Training in French and German." Nor were they absent from Professor Dupuis' paper on "Modern Geometry," and Mr. A. H. McDougall's on "Geometry in Secondary Schools." When men of such different modes of thought come, in some respects, to practically the same conclusions regarding the present order of things, and that quite independently of each other, it is surely time for the Education Department to further decrease the number of the examinations and to so remodel the course as to make it better suit the requirements of the average pupil, who is neither to teach nor to proceed to a university degree, but who has to discharge the duties of citizenship and to manage in some way to keep alive in himself any love of learning he may carry away from school with him.

"Why do we do it"? was asked by a distinguished educationist in Manitoba when he found teacher after teacher from Ontario saying that he never failed to pass at least 75 per cent. of his pupils at their examinations. That view was entirely foreign to his conception of what things ought to be. It needs to be fought down in Ontario still, it seems, for the gentlemen already mentioned found it necessary to enter the strongest possible protests against advertising scholarship and other successes as well as the invidious comparisions

which are made between schools in the same district and even between teachers on the same staff. When teachers are guilty of such unprofessional conduct they have only themselves to blame if trustees, bettering their instructions, dismiss them for failing to pass their pupils. As Mr. Harstone, of Lindsay, well said in the discussion, teachers ought to teach the subject and the examinations will take care of themselves. And it will be better for the pupils, too, who, after all, are the chief concern.

Ontario teachers have as yet stood aloof from the Dominion Educational Association. In so doing they are making a mistake, for they would not only gain by taking an interest in it, but they would have an opportunity of contributing something to the uplifting of education to a higher plane (and it needs it) as well as of advancing incalculably the best interests of the Dominion. The schoolmas ers and its schoolmis- Dominion is in the hands of its tresses.

CURRENT EVENTS.

Lord Leven and Melville recently unveiled in St. Giles' Cathedral, Edinburgh, a memorial window to General Wauchope, who fell at the head of the Highland Brigade at Magersfontein. The new Commander-inChief in Scotland, Sir Archibald Hunter, was present.

The mind should be nourished as well as the body. Select a good book, and read so many pages each day. The habit once formed of using the odd moments for the purpose of increasing one's store of knowledge, will grow, and increased power and usefulness will result.

The inscription selected in the prize competit ion for the proposed medallion of Ruskin in Westminister reads as follows :

He Taught Us
To Hold
In Loving Reverence
Poor Men and Their Work
Great Men and Their Work
God and His Work.

Lord Roberts has a daughter, known to all her friends as "Pretty Aileen Roberts," who since the death of her only brother, heir of the newly-created viscount, has acted as her father's private secretary, and in that capacity has shown a remarkable understanding of the details of military business methods. Her work in this connection has been of such nature as to secure for her special recognition from Queen Victoria, who in the patent of her father's new title made a special "remainder" of his daughter since there is no male heir to this brave general.

Dalhousie University will lose one of the ablest members of her teaching staff. Dr. J. G. MacGregor, Professor of Physics, has been unanimously elected to the Chair of Natural Philosophy in the University of Edinburgh, Scotland. The announcement of Dr. MacGregor's election tc one of the most important and desirable positions in the Scottish Univer-

sity was not unexpected, for it has been known for some time that he was likely to receive the appointment. Hosts of Dalhousians throughout Canada will congratulate Prof. MacGregor on his appointment, but will also regret the severe loss Dalhousie will suffer in his removal. The Edinburgh chair carries with it a salary of £2,000.

Nearly all the asphalt which is used in the streets of our great cities comes up from Venezuela. There are other deposits in Judaea in Siberia, and in Mexico, but nowhere is the asphalt so easily accessible as in the wonderful asphalt lakes of Venezuela and Trinidad. The lake on the mainland is about 1,000 acres in extent, that in Trinidad about 115 acres. Both are in a semi-fluid state. They may be walked upon, but it does not do to stand still in one place. If a man went to sleep on the surface he would be swallowed up during the night. Carloads of the material are taken out every day, but as fast as a hole is made a fresh supply oozes in, so that the surface of the lakes is always fairly even. Soundings have been made to the depth of 200 feet and no bottom reached. The pure asphalt is too soft to be used as paving. It appears in our streets mixed with sand and powdered limestone.

The monument to the memory of Laura Secord consists of a shapely shaft of granite, rectangular in shape, some seven feet in height, resting upon a base of the same material. Upon three sides of the shaft are polished shields bearing inscriptions cut into the stone, that on the front, which faces the Lundy Lane monument, being as follows :

"To perpetuate the name and fame of Laura Secord who (on June 23, 1813) walked alone nearly twenty miles by a circuitous, difficult, and perilous route to warn a British outpost at De Cew's Falls of an intended attack, and thereby enabled Lieut. FitzGibbon, on the 24th of June, 1813, with 49 men of H. M. 49th Regiment, about 15 militiamen and a small force of Six Nation and other Indians, under Captains Dominique Ducharne and William Johnson Kerr, to surprise and attack the enemy at Beechwoods (or Beaver Dams), and after a short engagement, to capture Col. Boerstler, of the United States army, and his whole force of 542 men, with two field-pieces. This monument, erected by the Ontario Historical Society from contributions of societies, the 49th Regiment, military organizations, schools, and private individuals, was unveiled 22nd of June, 1901."

This is the first public monument erected in Canada to the memory of a woman. The occasion of its unveiling was made all the more interesting by the presence of several relatives of the heorine of Beaver Dams.

At the meeting of the Eastern Teachers' Assn. at Souris, P.E.I., Inspector McCormac announced that he had received a checque for $250 from Lord Strathcona to purchase flags for the schools in the eastern inspectorate. He also made the pleasing announcement that a manual training school would be established in the inspectorate before the close of the

year. Since then Mr. Jas. Waddel of the P. E. I. Electric Light Co., has offered ten sets of steel halyards to the first ten schools procuring flags.

For some three years past the Whitehall School Record has chronicled the happenings in the Whitehall combined school, Philadelphia. The little paper has, as Prin. J. L. Shroy says, apparently come to stay. The April number contains a few suggestions from Mr. Shroy, concerning "school as business" that are worthy of the consideration of teachers, pupils, and parents.

We talk so much of business with reference to men and women, says the writer, that we sometimes overlook the fact that the term applies with equal significance to boys and girls—going to school being their business. There are some differences, we know, and the nearness of financial profit to men and the "far off-ness" of financial profit to boys has often led the latter to leave school and go to work. Life long regret follows: "How I wish I had continued at school!"

Yes, school is a business. It is a time-keeper that takes account of those who came late to work. It knows that a succession of lateness means loss of interest in the business. A succession of absences may mean failure. Men who lose no time at their business for years because of the smaller amount of money in the envelope at the end of the week or month, will allow their children to stay at home for the most trivial reasons. They forget that their children's "envelope" of knowledge will be proportionally short for every day lost—knowledge being their pay. The harder a man works—the more he is interested in his work—the more cheerfully he carries out the wishes of his employer—then the more chance he has for promotion and advance in wages,—the same is true with children, the studious, the interested, the well behaved pupil is the one who stands near the head of his class and has for his pay a fund of systematized knowledge which will some day have a value that gold cannot purchase for him.

To the educated, cultured, refined young man and young woman, there are many open doors, many opportunities for advancement, many fair fields for the attainment of honor, wealth, and position. Can we afford to thrust all these aside? Can we afford to hold a dollar so near the eye that it hides the beautiful landscape of wisdom, whose "ways are ways of pleasantness and all her paths are peace"? If our parents have not interested themselves in our business when we were children and we now feel the loss of many golden opportunities. should we not make a special effort to place the business of our children upon a paying basis, the income from which will be a thankful heart, a longing satisfied and an enrichment of earth's treasures in good, true, noble men and women. Some one has said "There is no happiness to be compared to the happiness of an aged parent in the true success of a son or daughter." Are you storing up such happiness now? Isn't it worth while?

WATERWAYS AND CANALS OF CANADA.

The rivers and lakes of Canada, to say nothing of the splendid systems of canals by which they have been linked together, form a continuous inland water route which is unmatched in any other quarter of the globe. From the mouth of the St. Lawrence to the most westerly port on Lake Superior, a vessel may steam continuously in Canadian waters for a distance of 2,260 statute miles: while from Bell Isle to Montreal the St. Lawrence River offers a channel, large enough for the accommodation of ocean steamers, for a distance of nearly a thousand miles. The difference in level between Lake Superior and tidewater on the St. Lawrence near Montreal is 600 feet, and a vessel, in ascending from Montreal to Port Arthur, has to be lifted through this great vertical distance. Of this total 551 feet is covered by means of locks, and 49 feet of it are overcome by steaming against the stream, which, in some stretches of the river, is so strong that the vessels have to be assisted by tugs. According to figures furnished by J. L. Bittinger, consul-general, there are between Montreal and Kingston seven canals, with a total length of 50 1-4 miles, and a total lift at the locks of 207 1-2 feet. The width of these locks is 45 feet, and the depth of water on the sills, 14 feet. Steamers on the run down from Kingston make no use of several of these canals, for the reason that the rapids may be run with safety. From Kingston the westward course is through Lake Ontario to Port Dalhousie, where the Welland Canal commences. This structure is 26 3-4 miles in length, and the total lift of 326 3-4 feet is effected by twenty-seven locks each 270 feet by 45 feet, with a depth of 14 feet. From Port Colborne, at the Lake Erie end of the canal, there is deep water for a distance of 394 miles to the Sault Canal, which is 5,967 feet in length, and contains a lock 900 feet by 60 feet, with a depth of 20 feet 3 inches, the total lift being 18 feet. Once through the Sault Canal the last natural obstruction is passed, and there is deep water to Port Arthur.

In addition to this magnificent system, Canada has another water-course, which runs from Montreal to Ottawa, and then down to Kingston, a total distance of 245 miles. On this route there are four canals and locks! In addition to these main-line canals, moreover, there are other canals on the line of the Richelieu River, in Ontario, and through the Peterborough district; and there are a number of branches conecting with the Rideau and Welland systems. The total traffic through the several canals in the Dominion, in 1889, amounted 6,225, 924 tons. The total quantity of through freight passed through the Welland and St. Lawrence Canals from Lake Erie to Montreal was, in 1890, 231, 746 tons eastward and only 5,991 tons westward. The total expenditure for the fiscal year ending June 30, 1900, was $3,351,164, and the total net revenue was $322,642. Commending on this, the council-general says that if it is judged by the net revenue received, as compared to the outlay, the

Canadian canal system would be found wanting ; but that the Canadians do not take so narrow a view of the question, and recognize that waterways and roadways are essential to the commercial life of the country.—Scientific American.

COMMENTS.

DREAD OF THE KINDERGARTEN CHILD.

There are kindergarten children and kindergarten children, to be sure ! Old-fashioned people are coming to the conclusion from experiences of various kinds, however, that many kindergarten children are not all that they were taught in their own youth to expect little folks to be ; they are forward, not easily controlled, non-observant of others' rights, and obnoxious in various ways. That this is not a necessary result of kindergarten training is evident from the fact that the best kind of kindergarten child—may his tribe increase—is to be found, not so conspicuously perhaps, but still in very appreciable numbers.

The great difficulty with certain kindergartens is suggested by a Boston correspondent to the New York Evening Post. The writer is herself a kindergartener, and her words are of special significance from that fact. She suggests that the mistake made by many kindergarteners is in allowing too lax discipline. "Dread of the Kindergarten Child," in the primary grades, is the result.

In some schools where the kindergarten has been established as part of the system, she says, children who are promoted from the freedom of these elementary rooms to the primary grades are liable to be troublesome elements. Primary teachers are met with the vexing question of discipline at the very outset of their term. The freedom allowed children in the kindergarten finds no parallel in higher grades, and the little people who have been allowed to exercise their free-will under this play-teaching are often harmed. The influence of the kindergarten in the way of developing a tendency to turn everything into play often reaches to the higher grades. Habits acquired here are frequently never shaken off. Strict discipline, such as must be observed in higher grades, cannot be secured with little children, but a certain amount of discipline is absolutely necessary if the child is to be properly prepared for his later school life.

The writer expressed herself vigorously, "Play times in the kindergarten," she said, "may well be nearly without restraint, or with only so much as good manners demand, but when it comes to the gift lessons of the day, the teacher should insist upon the children's attention." In referring to the kindergarten visited she said that while the teacher was giving a lesson story, the children were part of them attentive but the others were laughing and playing among themselves. This is one great fault of the kindergarten. Attention must be secured in the instruction periods or the child is learning lessons in inattention and thoughtlessness,

habits that will work him mischief for many years. Noise is not a sign of happiness. Children may be interested without compulsion, and when they are really interested in the lesson-story, the are quiet and attentive.

Classes in weaving, sewing, and manual exercises in a really good kindergarten do the work in perfect silence and they are happy and contented in what the little fingers are fashioning. The kindergarten teacher who thinks that discipline should not be aimed at in the kindergarten as in other grades, has a wrong idea of her profession. Attention should be cultivated here as in other grades. Unless the kindergarten produces some degree of discipline of thought it degenerates into the day-nursery. This is not what kindergarten was originated for.

Many kindergartners permit and encourage an excess of affection on the part of their charges. They kiss their children both at the opening and closing of school, a practice that is not only injurious to the health but is a moral injury as well.

The statements made by the writer will meet with ready sympathy from the primary teacher. One teacher said she positively dreaded to have a kindergarten child come to her classes. Such children are in advance of those who have not received kindergarten training, but it is harder to control them, and the bad children are "simply dreadful." They do not know what it is to be attentive, and whatever notion seizes them they usually follow.

One primary teacher who had been giving free expression to her ideas of the play-instruction in the kindergarten told her experience with a botany lesson. She had given each child a leaf and told him to tell what he saw in it. Instead of answering something relative to the veining he said he saw a boat. The leaf was not a leaf to him, it represented something that was the result of his play-instruction in the kindergarten. Imagining may be all right but it works sad havoc among children oftentimes. As this teacher observed, many children are really benefited by kindergarten instruction, but there is enough foolish work done to make a great deal of trouble for the grade teacher.

Ex.

Two very competent observers of American life have lately been setting forth some of their conclusions on an extremely interesting subject. One of these gentlemen is an American, President Thwing, of the Western Reserve University. The other is a German, Professor Hugo Munsterberg, at present connected with Harvard. The subject which they have been considering is the increase of general cultivation among the women of this country and the apparent decrease of cultivation among the men. President Thwing gives some interesting statistics. He says that in every New England state except New Hampshire, in every southern state except North Carolina and Alabama, and in every western state except Idaho, the number of girls in public and private schools is greater than the number of boys. He adds the still more significant statement that the proportion of

girls who, after graduating from these schools, go on to the higher education afforded by the college, increases faster than the proportion of male graduates. The natural result of this state of things will, as he says, make of woman as a whole an educated class and of men collectively an uneducated class. Professor Munsterberg, while agreeing with these opinions of President Thwing, goes even further and declares that the predicted result is not merely certain, but that it has already come to pass.

The real defect in our present system is not an educational defect at all. It is rather to be found in the unnatural separation of interests between man and woman which forms so striking a feature of our social and domestic life. In France, in Germany, in England—everywhere, indeed, in the western world outside of the United States—a woman does not view her husband's life work as segregated from her own interest. In our country, however, a very different and very unnatural state of things prevails. Henry James has very well described it in his epigram to the effect that the only thing which an American woman knows about her husband's business is that it doesn't signify. For all this, our men are primarily responsible. It is a matter of honor with them that their women shall have no cares, no anxieties, and few responsibilities. The man bears his burdens all alone in order that the woman may be light of heart. He sits in his stuffy office throughout the summer so that she may have he cottage in the country or her voyage to Europe. He holds his nose perpetually upon the grindstone and becomes narrow and limited and rather dull, in order that she may be free to learn and to observe and to enjoy. It is magnificent, but it is not common sense ; and it is responsible more than aught else for the conditions which both President Thwing and Professor Munsterberg have noted and deplored. Not in formal education, but in a reversion to more natural relations between the sexes, must be found the solution to this perplexing problem. When the man and the woman learn to lead one life instead of two, when the man learns to look upon the woman as something more than a pretty picture or a household ornament, and when the woman learns to view the man as something better and nearer than a walking checkbook or a superior valet de place, then all this talk about disillusionment and lack of sympathy will end. Each will give to the other of the best that he or she posesses. The man will teach the woman strength and seriousness ; the woman will refine and spiritualize the man.

Commercial Advertiser.

---

*ADVANCED READING.

'Teach your boys to read." In this short sentence issued as the consequence of the lack of ability of our freshmen, our "modern methods in reading" have received severest censure. As so large a percentage of college students

* (Paper read by Edith A. Scott, Prin. Training Dept., State Normal School, Moorehead, Minn., at N.W. Minn. Educational Association, 1900.)

come from the public schools of our country, the cause for this lamentable statement can be traced, primarily, to but one source—the public school system.

Let us think for a moment of the reading classes with which we are, probably, intimately acquainted. The reading period comes the last hour in the afternoon when children, being tired, can do but "light work;" whenever an hour is to be dropped for stress of time, it is the reading hour! John can be excused from school at 3.10 without a pang on the part of either boy or teacher as to his loss of work, because reading comes the last period; home work is required for other studies and pupils are held accountable for its preparation, but do they ever feel that there is something definite to do in the preparation of their reading lesson? Is not the reading but an opportunity for castle building where the boy feels that all that is required of him is that he "knows the place?"

Watch the average seventh grade boy as he confronts a reading class. He pulls out his book lazily from the desk, with purposeless f et he passes to class, dropping down into his seat, he begins to turn the pages of his book, may be a page at a time, in aimless quest of to-day's lesson. How different is all this from the eager little fellow who in the first primary is reading, "Our bunny can hop."

To our seventh grade boy, reading is an old story—all the incentive has gone from it—it is a necessary ordeal. Surely this lethargic state of affairs proves conclusively that we have not been able to meet and defeat the obstacles that arise in and are peculiar to the adolescent period.

We all know of at least one person who thoroughly believes in his work, and who was first inspired to that work by a teacher who, because of his own enthusiasm, could "draw all men unto him." The first necessity then for inciting interest in the reading class, is a teacher who believes in reading and who, therefore, thinks it as important, yea, even more important than any other subject in the curriculum.

Having found such a teacher, her first query is, "What shall we read?" Let the teacher ask the pupils and hear some of the replies: "I like to read if it is historical and interesting, things that happened long ago, like history.'

"I like to read because by reading I get information about what is happening now and what happened years ago. I like to read history and the Jungle Stories."

"I like to read lives of other men."

"I like to read because it is a pastime and I am interested in the things I read. Stories of mysteries and adventures are stories I like best."

"I like to read comical stories, adventures and myths, because they help a person to be happy when he is lonely."

Adventure, history and biography, then, are intellectual food to which advanced pupils naturally turn. This must be our basis on which to build their interests. The mere material for interest is not sufficient. Pupils must not feverishly absorb this literature because they enjoy it. It should be handled so that they are directed to the best in it. It is at this

period that the pupil forms his ideal. It begins to take definite form and grows more rapidly than at any other period. Who can estimate the amount to which a boy's ideal might be influenced by the study of the biography of Franklin, the work being directed by a teacher keenly alive to the Revolutionary feeling; to the causes and effects in the life of Franklin; his perseverance, his thrift, his independence of thought and action, his power to do, his leadership among men—and because of all this, his power to shape the destiny of our country at its most crucial period.

After every reading lesson we ought to challenge ourselves with the question, "What have our pupils gotten from this lesson, that is worth while?"

One of the most accessible forms of literature is poetry. Children, though they do not turn to it naturally, cannot afford to lose it from their lines. Children do not enjoy it because they cannot interpret it. Here are some replies to questions, "Do you like poetry?" "When have you enjoyed it most?"

"I do not like to read poetry alone. I like it when there is some one to explain what it means."

"For a change."

"I like to read poetry. I like it best when I am sad."

"I like poetry when it is read to to me."

In poetry almost more than in prose, the teacher must fully appreciate the underlying truth of the lesson. She sits with her class, and they read together that most cosmopolitan poem where Robert Burns tells us that "For a' that and a' that, a man's a man for a' that.' The class know Burns the man—they have talked about and seen pictures of Scottish scenery, in their preparation period, they have looked up the meanings of the words and phrases that they did not understand. The class fairly breathing the atmosphere of "bonny Scotland," read silently the first complete thought.

Wisely, the teacher may ask a question if there is any fear of obscurity of meaning; and the pupil stands, and from his soul he reads that the rank is but the guinea's stamp. "The man's the gowd for a' that." He has read; he is a better boy for having expressed soulfully a noble thought. May be he has not interpreted the full thought—he may even have mispronounced a word; shall a teacher or a pupil break the effect of the boy's interpretation by a remark or a raised hand? Quietly the teacher may pronounce the word as it should be, then, turning to the next unity, carry the lesson sympathetically along. The poem has been read. Perhaps some pupil who can read well, has read it all—or may be the class has read it together. The teacher asks, "What does Robert Burns think is worth while in a man?" Is not this training a pupil how to read? Sombody says, "But you have taken twenty-five minutes to read but six stanzas." I say, "I have taken but twenty-five minutes to show my pupils that a great poet believed that a man's worth is what he is, and not what he wears." It is not how much, but how well.

When teachers of advanced pupils realize the full content of the word reading—when they ap-

preciate that they are placing within the reach of the boy that which will be to him a higher life —the time will have gone by when they will have to be urged to teach their boys to read.

Intelligence.

BOOKS AND MAGAZINES.

The lady whose nom de plume is "Zack" contributes a short story, "Benjamin Parrot's Fancy" to the August number of Scribner's Magazine. It is marked by the same insight in a certain class of rural human nature that was a characteristic of her first stories which were published in Blackwood's Magazine. The main feature of Scribner's this month, however, is a story by Mr. Richard Harding Davis, called "The Derelict," which is illustrated by Walter Appleton Clark. Both writer and illustrator have succeeded in assuming the manner of a modern sophisticated stage villian, which is apparently Mr. Davis' fondest admiration. A new serial, "The Pines of Lory," by Mr. J. A. Mitchell, the author of "Amos Judel," is begun in the August number.

The Atlantic Monthly for August contains a poem, considerably longer than the average poem appearing in a magazine, by Mr. Arthur Stringer. It is entitled "Hephaestus," and belongs to the same class of imaginative writing as Tennyson's Oenone. Mr. Stringer's strong feeling for beauty both in thought and expression is admirably shown in this, the most ambitious piece of work of his which has yet appeared. It is too soon yet to say that Mr. Stringer should remember that beauty is not the only characteristic of poetry. His work has so far been marked by an advance mainly in the powers of expression, rather than in a deepening of thought, but that is the natural course of development in a writer of his temperament.

The last serial to begin in the St. Nicholas, "A Boy of a Thousand Years ago," by Harriet. I. Comstock, has for its hero King Alfred, whose burnt cakes have been one of the standard incidents for the entertainment of youth for many generations. The illustrations by George Varian are extremely attractive.

The August Century contains the conclusion of Mrs. Frances Hodgson Burnett's novelette, "The Making of a Marchioness." It is a most charming story and an advance, certainly in conception if not in style, on anything that Mrs. Burnett has yet written. The character of Emily Fox Seton, one of the most attractive and convincing women of recent fiction, is whole worlds away from that of the heroine of her most popular novel, "A Lady of Quality." A poem by William Watson, "In City Pent." is published with two very fine decorative illustrations, one by Henry McCarter, and one by Miss Florence Carlyle. The young Canadian artist's work bears well the comparison with that of her senior, Mr. McCarter.

The July Philistine contains eulogies on horses, Ingersoll, Jean Paul Richter, and the high school in Menomonie, Wisconsin, which has been erected and equipped by a citizen of that place at a cost of a quarter of a million.

The July issue of The Studio is as usual a beautiful and interesting number. There are reproductions of several of the more remarkable pictures at the last Academy; and an interesting series of drawings by James Pryde with comments by Charles Hiatt. Mr. Pryde was a partner with Mr. W. Nicholson in the Beggarstaff, whose remarkable posters attracted so much attention a few years ago. "The Work of Stanhope A. Forbes," and "Some Decorative Flowers and Plant Studies" are two of the most valuable contributions to the present number of The Studio.

An entertaining and well-written article on "The Modern Child as a Reader," by Tudor Jenks, appears in the August number of The Book Buyer. "A New Element in Fiction," and "A Dissection of the Female Heart," are two other contributions of considerable interest.

"The Hunt for the Word," which is reproduced in The Living Age for August 3rd from Macmillan's Magazine, is one of the best pieces of criticism on the modern novel and its methods that has yet appeared. Mr. Marriot's "The Column" serves as text, but incidentally Mr. Bernard Capes, Mr. Hewlett, Mr. Munroe, and Mr. Couch are commented upon.

The August number of The Cosmopolitan is a popular number, containing, "My Autobiography" by Ella Wheeler Wilcox, "The Making of an Actress" by Viola Allen, and "The Ideal Husband" by Lavinia Hart.

"My Boarding School for Girls," by Mary Louise Graham, is an account of an educational experiment, partly true and partly fiction, but undoubtedly interesting, which appears in the August number of The Ladies' Home Journal. In a page of selections called "For the Summer Piazza," there is published a letter of valuable advice from Miss Alcott to a young man who wishes to become a writer.

The complete novel in the August number of Lippincott's Magazine is called "The Lifting of a finger." Its author has conceived a more than usually intense love story which doubtless will be popular. Mr. Owen Wister's "Philosophy 4," is a story of Harvard in the College Series.

The contents of the August number of the American Monthly Review of Reviews includes "The Recent Great Railway Combinations," "A Sketch of John Fiske," and "A Great Citizen,—James E. Yeatman."

One of the good stories that so often are to be found in The Youth's Companion appears in the issue for August 8th. A school teacher who had been doing her best to polish the manners of her pupils observed that visitors usually looked puzzled when one boy passed in front of them. She finally had an opportunity of discovering that what he said was not "I beg your pardon," but "baking powder."

The contents for the August Monthly Review include, besides editorial articles, "Mr. Broderick's Lost Opportunities," by Lieut-Col. Maude; "The Tactics of the Submarine"; "The House of Lords," by Earl Nelson; "Famine and its Causes in Italy"; "A Jesuit Plea for Jesuits"; "The Comparative Abilities of Fair and Dark"; "In Praise of Walking," by Leslie Stephen; "The Castello of [illegible]lan"; "Maurus Jokai"; "A Conversation," by G. S. Street; "Lines to Monica Mary Meynell," by Francis Thompson; and an instalment of Anthony Hope's "Tristram of Blent."

Mr. Winston Churchill's first book to attract great attention was Richard Carvell which was published when the historical and revolutionary novel was a fine new thing. Apart from its popularity it was acknowledged by the critics to be the result of great industry and of a thorough appreciation of the work Thackeray had done in "The Virginians." Mr. Churchill's next novel, after an interval of at least a couple of years, is "The Crisis," a story of the American Civil War, and a singularly unprejudiced study considering all the circumstances of the relations between the North and the South. "The Crisis" is a very fine story indeed. Its inspiration is full and even, and it is marked by a freedom from effort, and quickness of life where "Richard Carvel" was studied and unnatural. Mr. Churchill may congratulate himself not only on a great advance, but on an almost unqualified success. The comparison between Abraham Lincoln and the Saviour of the world is ont likely to afford the author much satisfaction after a year or two of consideration. The book is published in Canada by The Copp Clark Company of Toronto.

It is now some time since Macmillan and Company of New York issued Mr. Hamilton Wright Mabie's volume on Shakespeare, entitled "William Shakespeare, Poet, Dramatist, and Man." Mr. Mabie is a critic of considerable eminence whose works have attained a wider popularity than the writings of a critic often enjoy; the present volume on Shakespeare has been received with even more favour than his work in the past. His object in preparing the book, which consists of more than four hundred pages and is illustrated by many reproductions of old prints and of portraits of Shakespeare and his contemporries, was to "bring the greatest of English poets more distinctly before the minds of some of his readers." This object he certainly has accomplished, for while the book will not be of any great assistance to the student further advanced in the study of Shakespeare, anyone will find pleasure in reading Mr. Mabie's descriptions of the country surrounding Stratford, and a large number of those who have some acquaintance with the works of the great dramatist will find the work a most valuable assistance. The binding and printing of the book are excellent.

Mr. Harrison Robertson's last book "The Inlander," which has been recently published by Wil-

liam Briggs, Toronto, is marked by the same earnestness and careful preparation of subject that has characterised his previous work, such as "Red Blood and Blue." Mr. Harrison writes of the new South and displays a thorough knowledge of the types of character that are being formed there. "The Inlander" is a novel of merit and is written in a more interesting and dramatic style than most of the author's previous work.

Houghton, Mifflin and Company of Boston are continuing their excellent series of books on birds, beautifully illustrated and written by students who have in the observation of bird life and character their daily occupation for years. "Everyday Birds," by Bradford Torrey, is a collection of elementary studies by an author whose work in this particular line is too mature and extraordinary to need any commendation. Mrs. Olive Thorn Miller's "Second Book of Birds," follows the same plan as that of her first volume which was more than usually successful. Those who had the pleasure of reading Mrs. Miller's descriptions of bird expeditions written for The Atlantic Monthly will understand how fortunate a circumstance it is that children should have the advantage both of her style of writing and of her admirable spirit towards nature.

Other Publications Received :—

George Bell and Sons, London: —The Agricola of Tacitus, edited by J. W. E. Pearce. pp. 123, 2s. The Prometheus Vinctus of Aeschylus, edited by C. E. Laurence. pp. 160, 2s.

Moffatt and Page, London :— Milton's Paradise Lost, book iii., edited by T. Page. pp. 60, 15. Cowper's Expostulation, part i, edited by T. Page. pp. 33, 4d. Grey's Poems, part i, edited by T. Page. pp. 38, 4d. French Course, by G. H. Williams. pp. 220, 2s. 6d.

At The University Press, Cambridge:—Le Blocus by Erckmann-Chatrian, edited by A. R. Ropes. pp. 271, 3s. Waterloo by Erckmann-Chatrian, edited by A. R. Ropes. pp. 318, 3s.

Ginn and Company, Boston :— Selectons from Charlotte Niese's Aus Danischer Zeit, edited by L. Fossler. pp. 103. The First Steps in Geometry, by G. A. Wentworth and G. A. Hill. pp. 154. Irving's Sketch Book, edited by Mary E. Litchfield. pp. 489, 70 cents. Wigwam Stories, compiled by Mary C. Judd. pp. 271, 85 cents.

Hammancher, Schlemmer & Co., 209 Bowery, New York, have sent us a copy of their catalogue No. 133, which gives in detail a list of their tools for wood carving, prices, etc., etc. : Cabinet, builders' and piano hardware. Tools for all trades. Orders are executed as promptly as possible and at lowest prices, consistent with quality. This is a house deserving well the patronage of our readers.

Helps for Ambitious Girls by William Drysdale, author of Helps for Boys, etc. Thomas Y. Crowell & Co., New York City.

"No matter where the home is, nor who the home-makers : though the father delve and the

mother dig, their knowledge is incomparably greater than that of the girl fresh from college, and the leader of her class." The above is a quotation from the preface of this book, and in brief indicates the spirit in which Mr. Drysdale deals with the subject in hand.

We commend this volume to young men and women; to youths and maidens; and especially to teachers and parents. The book is full of useful and most timely information bearing upon all kinds of work for women; pre-eminently a book for the family.

School Hygiene in its Mental, Moral and Physical Aspect.—By James Kerr, M.A., M.D., D.P.H., Medical Superintendent to the Bradford School Board.

This is the Howard Medal Prize Essay, reprinted for private circulation from the Journal of the Royal Statistical Society. It is a brief discussion of some of the more important quesiions of School Hygiene —such as the condition of the special senses; the death-rate at school age; the treatment of exceptional and defective children; spurious result work; the growth of children; lighting, heating and ventilation of school-rooms, etc. This pamphlet, though brief, is extremely satisfactory and thorough in the subjects taken up.