

EDUCATIONAL COLUMN

NOTES ABOUT SCHOOLS AND THEIR MANAGEMENT.

How to Pursue the Study of Science—Best Method of Teaching Languages—Monument to the Honor of Dr. Burrows—News and Notes.

Natural Science.

Through the study of science the habit of investigation is acquired. As soon as one begins to explore by the methods of natural science (and a pupil in the primary school is not too young to begin), a person feels a strong impulse to investigate further. He finds that his field of knowledge has been extremely small, and that he has been entertaining fantastic ideas concerning that which lies outside of his little circle. Scientific truth is absolutely open to the world. There is no such thing about it as an inner secret. Through the study of science the habit of observing relations is also required. Scientific observation is always organized observation. It relates one thing to another, lighting up one fact by another.

The study of science is valuable for the purpose of developing a constructive imagination. The scientific imagination is similar to that which enables a sculptor to see a statue in a block of marble, or that which enables a painter to imagine to himself the picture he is to make upon the canvas, or that which enables the architect to form an idea of the building he is to construct. Through the microscope one sees only minute parts of an object at one time. The constructive imagination needed to form a conception of the whole is slowly developed by working with the microscope. By laboratory experiments we illustrate in a small way the great phenomena of nature—phenomena which are too large to be presented as a whole to our observation. A constructive imagination is needed to make the transition from the laboratory experiment to the natural phenomenon. For the purpose of developing a constructive imagination, illustrated experiments have a high value and should be mingled with all quantitative work.

A person who has acquired the habit of making use of scientific investigation, scientific observation, and scientific imagination will surely become well informed. Most of us are ignorant when we might be wise if we would give attention to the phenomena which are daily presented on every hand. Science teaches conservatism in making and accepting conclusions. It begets a desire to examine the evidence for everything. It propagates a wholesome skepticism in a word which has a passion for being hoaxed. If the scientific mind were cultivated more widely, newspapers would not find falsifying so profitable, advertisements would not be so palpably untrue, and history would not need to deal with exaggerations in order to be readable. Science is largely a matter of common honesty. The first thing a person has to do when he wishes to begin to be an honest man is to take an inventory of his stock of knowledge, or what he has considered knowledge, and throw much of it overboard, following the advice of the eminent sage who said: "It is better not to know so much than to know so many things that are not so."

"Common sense is not a natural heritage—it is acquired." To this end the study of science may be made a most potent agency. The study of science should develop the capacity for earning a living. It should act as moral ballast. Its devotees are not subject to petty vices. It cannot be said of them that "they are more afraid of doing things conventionally wrong than of doing things morally wrong." The study of science furnishes a basis for religion. "True science and true religion," says Professor Huxley, "are twin sisters, and the separation of either from the other is sure to prove the death of both. Science prospers exactly in proportion as it is religious; and religion flourishes to the scientific depth and firmness of its basis." The study of science is humanitarian. Professor Brinton says: "The aims of science are distinctly beneficent. Its spirit is that of charity and human kindness. Its mission is noble, inspiring, consolatory, lifting the mind above the gross contacts of life, preserving aims which are at once practical, humanitarian, and spiritually elevating."

The scientific mind enthrones reason above authority. The world has suffered too much from authority. Ignorant and unreasonable authority has forced into submission an ignorant and unscientific world, and thus retarded the progress of truth. Even a child has an inalienable right to an explanation whenever any course he is required to pursue seems unreasonable to him. It is tyranny to require implicit obedience whenever an explanation is possible.—*Journal of Education.*

How Are Languages Best Taught?

Which is the best method of teaching a foreign language— orally or by the printed book? This question, metaphorically as old as the hills, seems yet far from settlement. Prof. John Stuart Blackie believes the "natural" method, the oral, the best. Writing on "The Method of Studying Languages," for "The Contemporary Review," he argues that instead of using books and grammar rules, the linguistic teacher should commence with giving foreign names to objects; that it is the things themselves, and not the dead symbols of things, with which the linguistic faculty of the learner is called to correspond; that books and grammar have their use in the study of languages, but always in a secondary way, as a supplement to what direct commerce with the object is inadequate to provide, but never as a substitute. From the moment that the student has learned the names of things, up to the point of the study of grammar and the

general laws of comparative philology. In this connection he says:

"That the dramatic or imitation element has worked powerfully in the formation of human speech will be plain enough from the inspection of any dictionary; such words as *hush, smash* and *dash*, could never be invented to signify their contraries, the outlay of smooth and fluid and gentle forces. Closely allied to the vocal expression of outward forces is the expression of inward feelings by the same medium; there is evidently a certain dramatic propriety in the words *groan* and *howl*, and *roar*, and *wheeze*, as vocalizing the upward feelings whose presence they indicate. Then when expressions of the simplest form are created in this fashion, the teacher can show how a fair family of kindred sounds will grow from them as naturally as the branches from the stem, and the blossoms from the buds of the trees."

Professor Blackie alludes to the remark of a certain professor, that the prominence given to living dialogues in all very well in the case of living languages, which are studied for the sake of pleasant intercourse with the living, but that in the case of dead languages, when we have neither a Cicero nor a Demosthenes to hear speaking or to speak to, we learn for the sake of reading books, and with books we must begin and end. In answer to this Professor Blackie says:

"This observation from a classical teacher in our great English schools may seem natural enough; but it is nothing the less false. The words which we read in old Greek and Latin books are no doubt dead symbols, but they are symbols of sound, and to feel their force fully we must give them voice. If they are not alive now as living organs of national expression, we must make them alive; we cannot read them with mutual intelligence without making them alive; a Ciceronian sentence will lose all its grand swell and stately dignity if not pronounced; and if they must be spoken, all the arguments in favor of the conversational method in the case of living languages apply equally to the dead. By speaking them they become more intimately a part of ourselves; we handle them as a workman handles his tools, and shake hands with them as friend shakes hands with friend. In studying Hebrew or Sanskrit, if I could find no man to speak to, I would speak to myself; as indeed I did when studying Latin at Aberdeen some seventy years ago as a raw lad. No man spoke to me in Latin, not even the learned Dr. Melvie in learned Marischal College; but I declaimed Cicero to myself in my own room, and hurled forth his eloquent denunciation against conspiracy and treason with as much point and precision as if I had a very Catinella bodily before me. To this excellent habit of self-instruction in rhetoric I attribute, in no small degree, the complete mastery of that tongue of lawyers and rulers which I achieved at an early period of my life."

In Honor of Doctor Burrows.
A massive black marble tablet in honor of the late Dr. Thomas Henry Burrows has arrived at Lancaster, and will be placed in a conspicuous place in St. James' Protestant Episcopal Church. The tablet is a token from the educators of the State in recognition of his great services to the cause in Pennsylvania.

An inscription in gold gives a brief summary of his educational work. It states that he put into successful operation the common school system, was twice Superintendent of Public Instruction, organized the system of soldiers' orphans' schools, wrote the normal school law, founded the Pennsylvania School Journal, and was for thirty years conspicuous above all others in the educational councils of the State.—*Educational News, Philadelphia.*

Women Eager to Learn.
Prof. Max Muller confesses that at first he had been opposed to the girls' colleges; but they are, he said, a great success; and it is a real pleasure to me to see the young girls so eager to learn. Young men do as little as they can; young women do as much as they can—too much, indeed. Again, they work more systematically, and their knowledge is better arranged. It tends wonderfully to the improvement of the whole of their character. I wish the men could be shamed and spurred on to further effort.—*Christian Register.*

Educational Topics.
The Detroit School Board asks for \$1,632,333 to run its business another year.

The School Board at Ann Arbor, Mich., will abolish the "fraternities" among the high school pupils in that city.

Work has been commenced at East Lake, Ind., near Chicago, on the grounds for the Western Presbyterian Chautauque.

It is estimated that the total cost of the first twelve new buildings of Columbia College will be \$3,100,000, an average of over \$258,000 each.

Miss Sarah McLennan Hardy, of Chicago, fellow in political economy at the University of Chicago, has been elected instructor in political economy in Wellesley College.

Governor General Lord Aberdeen and the ministers of the Dominion Cabinet have signed the remedial order which is the primary set for the re-establishing in Manitoba separate schools, which were abolished by the provincial statute of 1890.

The committee of Harvard graduates having charge of the proposed memorial to the Rev. Dr. Andrew Peabody has decided to expend a small portion of the money subscribed for an appropriate tablet to be placed in Appoquin Chapel, and to have the balance as a fund for needy students or for other purposes.

FANCIES OF FASHION.

GREAT VARIETY IN THE STYLES FOR THIS SEASON.

The Day Has Passed When a Fashion Will Be Tolerated After It Becomes Ungraceful—Spring Styles in Sleeves—Fronts Droop Over the Belt.

New York Fashions.

Washington correspondence.

SPRING finds the sleeves of fashionable gowns about stepping down off the shoulders. Puffs have in some cases slipped below the round of the shoulder, which is fitted skin tight. The puff appears from this point to just below the elbow. In case this effect is not definitely produced by cut of sleeve, then caps or epaulettes are fitted to the shoulders, pushing down the fulness of the puffs. This fashion is not yet generally accepted, and if it should be, it will then be promptly exaggerated, and next be given over as promptly. The day has passed when a fashion will be tolerated after it becomes ungraceful. The woman with distinctly square shoulders cannot adopt this style without lack of grace, but she can get the same effect by starting the puff of her sleeve at the base of her collar. The fulness can be laid in a smooth, flat fold till it reaches the edge of the shoulder, and then it can widen and take its graceful downward sweep from the round of the shoulder. This method of draping will, of course, produce the desired long slanting slope

from the start of the neck to the tip of the shoulder. If a woman's neck be short, she cannot avail herself of this device.

Another useful device to render square, almost manly shoulders graceful is the wide stiffened epaulettes, and sometimes a deep collar produces the same result. This trick is employed in the gown shown in the small picture at the head of the column, which is made of pearly-white satin, its plain wide skirt laid in three organ-pipe folds in back. On the bodice loose jacket fronts open over a gathered vest of white crepon, and the ornamentation consists of a deep collar of turquoise velours showing appliqued guipure lace, a pretty bow of white chiffon with embroidered edges and a draped belt of the blue velours. The loose fronts are faced with turquoise-blue moire and the sleeves are of white satin.

But wide shoulders need not count for much just now, for with the prevailing modes in bodices any woman with a well-formed back and a clever dressmaker can pass for a good figure with little else. This is because so many gowns are made with bag-front bodices. All the ready-made shirt waists have it, and nearly all imported gowns. Indeed, gowns and bodices of the handsomest material and cut, but without this special characteristic, are selling dirt cheap in the stores. The wise woman buys, and either wears them as they are, if she has a pretty figure, or arranges an applique bag and is happy. For the modern woman it does not suffice to be clothed in something pretty and becoming; she must be in

something that proves itself new, too. The dressy waist of the second picture fully answers all these requirements. It is from lavender silk, with the fashionable full front and fitted seamless back of bias material. It is artistically trimmed with a Saint Andrews cross of heavy white guipure laid over white satin, and the same ornamentation appears on the sleeves. White satin with the overlapping edge faced with velours gives the standing collar. The waist looks invitingly on the side and

is worn with a moderately wide skirt of lavender silk.

This pronounced liking for fronts that droop over the belt has even attacked the linen shirt fronts. Alas for the girl who rejoiced in the stiff correctness of a real boiled shirt! All the summer shirts have been robbed of every bit of masculine suggestion. All of them are loose and only that looseness is the fashion, would be called baggy, yet, unduly. Still they will be comfortable in hot weather, and if they don't invite, here's a rig that

should. As presented by the next illustration, the plain skirt hangs in three godet skirts and, like the jacket bodice, is of tan covert cloth. A vest of white chiffon with high collar and band of guipure ornaments the front, and there is also a deep collar forming trimmer in front and piped with moss reversing. The sleeves are full, extending to a little below the elbow, where they are met by deep cuffs. The jacket is belted in front by a band of the goods to keep it from flying open. Machine stitching may be used in place of the trimming on the collar, or a shirt waist can be worn instead of the vest if the weather does not object to the padding bag effect.

Quite a different sort of jacket from that last mentioned follows it in the artist's depiction; indeed, it is much more an effect than a garment. It comes in a gown of old blue woolen goods, the bodice having a fitted vest of the woolen stuff, garnished with a pointed plastron of white guipure which is edged with a puff of black silk. The latter is used for the sleeves and for the loose fronts, which are let into the side seams. A large guipure collar completes the trimming. Below this there is a perfectly plain godet skirt finished on the inside with a pinked frill of the material.

Though skirts are generally entirely plain, richly embroidered ones like that of the final sketch are permissible, for the rule now is to make the gown of the handsomest material to be found. You must cut holes in it to show a still handsomer material under it, and then cover the perforated material all over with braiding, spangles, embroidery

or anything else you can think of. After that is done, then put lace, fringe, ribbon or something else on the edge. The idea is to start with as pretty a stuff as can be had and then overlay it with other pretty things. In this instance, blue satin is the starting fabric, and it is draped with white chiffon. The skirt shows a rich embroidery in blue and gold done on the chiffon, and is bordered with a festooned lace ruffle around the bottom. The satin of the waist is fitted, only the chiffon being full to give the blouse effect. Balloon sleeves held with fancy buckles and a lace bertha are added.

Cropon has been overdone. Except for very rich wear and in expensive style it is not to be worn. The trouble with the American woman is that directly something becomes the correct style she must put it on and take all correctness out of it by wearing it everywhere. In the street cars, at all times of day, to market, down town to shop, to church, to school, everywhere. It was thus with velvet cloaks and capes last winter. They were so freely worn by this promiscuous wear that now no velvet cloak that is not of the most irreproachable material, cut and elegance, may escape vulgarity. It is the same with black crepon skirts. They are seen everywhere. The result is that if a woman is particular, she must wear them only upon the most exclusive occasions, and have them only of the very finest quality. There has been a great fall off in the sale of cropons in spring wools, but the weave is immensely popular in wash and silk goods. There is hardly any new cotton that does not show some trace of the magic weave and wrinkle.

The newest hats are noticeable for their extreme width.

RAPID SHORTHAND REPORTING.
Some of the Wonderful Stories Are Exaggerated.

"A great deal of nonsense appears in the newspapers from time to time concerning rapid shorthand writing," said a leading court reporter in New York the other day. "Instances of stenographers who are able to write at a speed varying all the way from 300 to 400 words a minute are mentioned, apparently, merely to call attention to the development of the stenographic art, and the impression is given that such rapid work is so common as to excite no particular comment. As a matter of fact, however, the stenographer in constant practice who is able to keep up a speed of 225 words a minute for any considerable length of time is a remarkably clever man, and it is perfectly safe to say that not one court reporter in a dozen is capable of verbatim reporting at the rate of 200 words a minute. To understand what the writing of 300 words a minute means let anyone count out that number of words of ordinary matter and then undertake to read it aloud in one minute's time, pronouncing each word distinctly as it would be necessary to do if a stenographer were taking it down. Estimating an average of two syllables to a word, it will be necessary to enunciate clearly about 600 syllables in one minute, or ten syllables a second. The reporting style of shorthand writing has many expedients for running words together into phrases, so that three or four words are often written quite as rapidly as they can be spoken, and contracted signs are frequently used for the longer words. Still the writing of 300 words a minute in the briefest style of shorthand, would require the formation of considerably over 200 signs—about four every second—and these signs must be accurate enough in form to be readily deciphered by the writer. Chicago has long claimed to have the fastest shorthand writer in the world, and while this individual has given some wonderful exhibitions of speed, it is doubtful if he ever wrote anything near 250 words in a single minute that would pass inspection. A few years ago, at a public exhibition he took notes of legal testimony read at the rate of about 200 words a minute for five minutes. His notes were so illegible, as a result of the speed at which they were written, that even the most expert stenographers could make nothing out of them, and when compared with the matter dictated it was found that at least a dozen words had been altogether omitted. It is upon such imperfect work as this that the preposterous claims of 300 words or more a minute are based."—*New York Sun.*



A JACKET FAINTLY OUTLINED.

Turning Questions Aside.
The art of changing the subject of a conversation which has become distasteful to you is one worth cultivating; a little practice will make you an adept in it. Then when the retailer of nauseous news accosts you and forces disagreeable topics upon your unwilling and pained ear—or when the busy-body questions intrusively as to your private affairs, or worse still, as to the affairs or circumstances of your near friends—then you are already skilled and accomplished in simply avoiding the impertinent pressure by a dignified change of theme. Should the baffled news-hunter return to the charge, then you can give the rebuke by a chilling silence, repelling the lesson that no information you do not choose to give is to be had from you. Never answer a fool according to his folly, never apologize for not replying. The apologist puts himself on a level with the thief, the would-be thief, who would surprise and steal his secrets. Remember, your affairs are your own; and the more personal dignity you have in refusing to be the tool of curious or prying folks, to be hypnotized into answering solely because you are asked, the more respect even such prying people will have for you.

Canine Red Cross Service.
The intelligent persevering Scotch collie is the dog trained for service in the German army. His equipment consists of a strong collar with a leather pocket for letters, a small waterproof blanket for his rest at night and two pockets containing a small surgeon's outfit, linen, medicines and a small amount of dog biscuit. The entire load is less than ten pounds and can be easily carried by the dog for days. His services are most important in the search for the wounded or dead; he often brings first help to a soldier fallen in brush or underwood and completely hidden from sight; he makes an excellent courier, and runs from hospital to command or vice versa, faithfully delivering messages entrusted to his care as fast as a cavalryman, with much less danger to both courier and message. A large red cross marks each pocket, and designates his connection with the sanitary and relief corps. He also carries a small lantern on his back, to enable the litter bearer to follow him in the darkness of night.

He Slept Two Days.
An interesting tale is told about a young lad who came to a Syracuse hotel early last week and asked if he might do some odd jobs about the place in order that he might earn a place to sleep that night. The boy looked deserving and he was set at work. It was Sunday night, and shortly after 8 o'clock he was given a room in one of the less frequented portions of the house. The lad seemed very tired and went at once to bed. It chanced that no one went to the room the next day, and it was Tuesday night before any one thought of him. Then it was that a tour of investigation was begun. Repeated rapping failed to bring any response and finally the door was forced open. The boy was still in bed and still sleeping soundly. He explained that it was nearly a week since he had had any sleep, but was surprised that he had actually slept two days and two



SATIN OVERLAIN WITH CHIFFON.

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Names of Indian Children.

Every one knows that many queer names are to be found among our Indians, but it may surprise some readers to learn that similar names cling to Indian children, even after they enter the government schools. The following list is furnished the Commissioner by a teacher in one of the government schools in Oklahoma Territory. They are taken from the school register, and while they are not such as to be pleasing to civilized people, the Indian youth are as proud of them as if they were Smith or Brown.

It should be said, also, that the boys and girls are bright, intelligent children, doing good school work, and are as well behaved as their white neighbors. Here are the names:

- Lucy Little Standing Buffalo.
- Atkins White Sall.
- Anna Bull Frog.
- Lee Little Turtle.
- Marie Buffalo Head.
- Clarence Black Hair Horse.
- Jennie Boy Chief.
- Grace Yellow Flower.
- Mary Big Goose.
- John White Eagle.
- Martha Crier Pipe.
- Mary Cries for Ribba.
- Cora Frizzle Head.

Mexican Onyx.

Mexican onyx has suffered a gradual decline in value for many years past. It is generally becoming known that the Mexican onyx is not true onyx, but a species of marble. It is really an aragonite, and is composed of calcium, oxide of iron and magnesium. The presence of these last two elements gives it its beautiful color. It is said the use of African marble and other cheap stones is replacing it.

Mexican onyx is easily worked, and has been used not only for building purposes but for ornamental household articles, such as lamps, table tops, mantels, etc. It is used by the ancient Mexicans for masks, idols, and similar small objects. The price of all such articles has of late considerably decreased. Mexican onyx now sells in the rough at from six dollars to twenty dollars a cubic foot. Very large pieces bring more than this proportional price.

Niagara Falls Hackmen Have Humour
I made an interesting discovery when I was at Niagara Falls, said a tourist. It was that the hackmen there have a strong sense of humor. One afternoon, when I was returning to my hotel with an empty purse and tired out by the importunities of the thousand and one sharks who infest the village, I stopped to light a cigar. Thoughtlessly I struck a match against the wheel of a cab. Immediately the driver came running up to me and yelled:

"Hi, there, that'll cost you half a dollar."

I was so nervous that for a moment I thought he was in earnest and stared blankly at him, and then he added indulgently:

"Well, I will let you off this time."

Then he and the other Jehus standing around burst into laughter. They appreciated their reputation.

Nell—Do you know, I was all alone in the conservatory for ten minutes with that fascinating Charlie Fullerton last evening, and I was so afraid, Belle—so afraid of what? Afraid he was going to propose to you? Nell—No; afraid he wasn't.—*Dumfries Journal.*