

Emmure Blair

The Collegian.

A MAGAZINE DEVOTED TO THE INTERESTS OF THE METHODIST COLLEGE AND THE METHODIST SCHOOLS OF THE ISLAND.

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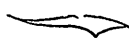
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THE COLLEGIAN.

VOL. 2.

MARCH.

No. 3.

NOTES FOR MARCH

*This Month's issue does not contain the complete class lists. It does not seem to us necessary to publish full lists in every issue. Such lists will again appear in April. The names of the first ten in class and general examinations appear every month. It must be remembered that it is of more importance to obtain a good place in a *general* examination than in one where competition is limited to one class. It is a good guide to notice how many took the paper.*

AMONGST our list of such examination results appears one in History. Papers by children in History are generally unsatisfactory, and low marks are the rule. This is because excellence in such a paper requires qualities much in advance of knowledge. The writer must be able to judge what is required by the question; he must then have common sense enough to choose such parts from his knowledge of the subject as answer the question properly. Bad composition is the rule, and the difficulty that young children find in putting on their paper what they mean makes the subject a hard one. Yet the oftener such papers are written the greater becomes the facility of expression. A History paper is always an exercise in Composition; each answer is a short essay.

As an examination subject History does not pay. This does not prevent us from including it in our school course, nor would we even think of dropping so important a sub-

ject simply because something else paid better. Over 15 of our pupils, Associates, Seniors and Juniors, have been studying chemistry this winter; but only 7 are taking it as an examination subject.

IN the present number we are giving considerable space to the interests of our outport teachers. Some of them, at least, would find it hard, without text-book, to get up the work required by the syllabus in "School-management." Recognizing this, we have asked help from Dr. Milligan, Mr. Hillyard and Mr. Whiteway. Their notes appear on another page. We hope to include some such notes in each number up to May.

ONE progressive teacher writes us that "he does not get enough Collegian." We hope this number will give him some useful hints.

THE coming May examination will be the 4th under the auspices of the Council of H. E., and some figures show that, year by year, the scope of its usefulness is extending. The number of centres this year is 40,—amongst the new ones we notice the Presbyterian College, Centenary Hall, Hant's Harbor.

THE number of applications for examination is about 1100.

It is likely that the suggestions of the Council as to the appointment of Supervising Officers will be carried out this year. Of course, it is of the first importance that everybody—teachers, parents and pupils, should feel the utmost confidence in the fairness of the conduct of the examinations. The step, if carried out, will cost money.

WE still hope, however, that there will be something left for prizes. We think that it is very desirable that, at least, the moneys received as fees should form a prize fund. Two of the largest St. John's schools have, between them, paid in, this year, over \$215.

THE Principal's lectures are now drawing to a close. The members of the class have been most attentive, and most of them, exceedingly regular. We hope they have profited as much as they deserve. Of course, only excursions have been made into the vast domain of Chemistry, and no attempt has been made to conquer any one portion of it. If interest has been excited, further progress must be made by the study of good text-books, and by careful experiments where possible.

THE following subjects have been taken up since the time when the 7th lecture was noticed in our last issue. The volumetric analysis of a Copper ore—the result in this case came within one-tenth of one per cent of the theoretical value,—a very close result.

Silver, Lead and Mercury. These were all treated in one lecture because of the properties they possessed in common. They are all precipitated from their solutions by Hydrochloric acid. The methods of separating the three chlorides if present in one solution were explained and carried out. Many other characteristic experiments were added.

The extraction of Metallic Lead from its common ore—Galena—was explained theoretically. Many of the class also attended at a special meeting and saw the actual assay.

On another occasion the button of lead, produced as above, was submitted to the interesting operation of cupellation. A brilliant button of metallic silver was the result.

THE examination of Water for Domestic Purposes, occupied the greater part of two evenings. After explaining the method of obtaining total insoluble and their total soluble residue, the important matter of Chlorine was studied. The St. John's supply was tested by a volumetric process, using Nitrate of Silver as precipitant, and Monochromate of Potassium as indicator. In this particular, at any rate, our water is satisfactory. It contains less than $1\frac{1}{2}$ grains of Chlorine to the gallon. Some other rough tests were referred to. The following is probably a valuable test for the presence of Sewage in water.

Place the suspected water in a 5 ounce stoppered flask, add 10 grains of crystallised white sugar, and place on shelf near the kitchen stove, (a temperature of 80° is the best). On examining after about two hours, white floating specks will be observed if sewage be present. These become more numerous and change in form as time goes on. The test is known as *Heisch's sugar test*.

ONE lecture was devoted to Gold,—Its estimation when present in quartz or other rock,—its characteristic tests in the wet way, and some of its uses.

A few photographic prints were toned before the class to illustrate the wonderful covering power of gold, and experiments were performed to show the solubility of Silver haloids in Hyposulphite of Soda,—the rationale of *Ficing*.

OUR last issue numbered over 400 copies, and there are very few parts of the Island which they have not reached.

It is refreshing to know that we can now write some necessary words with their correct spelling such as: Röntgen, employé, ampère, resumé, dépôt. We may even be able now to print a specimen of a French examination paper.

NOTES OF GRAMMAR LESSON.

CASES OF THE NOUN.

THE aim of the lesson is to show relation of the verb to the subject and object, and hence Nominative and Objective cases. It is presumed that the class has already some knowledge of the noun and verb.

I. SUBJECT—NOMINATIVE CASE.

Write on the blackboard three or four *intransitive* verbs expressing simple actions most familiar to the scholars as,—“runs,” “flies,” “jumps,” “swims.” Review definition of verb, dwelling particularly on the fact that verbs generally express action. (Morrison's definition, —*A word that tells what anything does, etc., preferable.*)

Elicit from the class nouns which may stand for the

doer of the action expressed by the verb. The verbs selected will almost at once suggest appropriate nouns, but if different ones are given select most suitable and write before verbs as:—

The boy runs. The bird flies.

The cat jumps. The fish swims.

Emphasize by asking the question "Who?" or "What?" before each verb, when answers will readily be given. Give short definitions as:—(1) *The noun that stands for the doer of the action expressed by the verb is said to be the SUBJECT of the verb.*

(2) *When a noun is the SUBJECT of the verb it is said to be in the NOMINATIVE CASE.*

As a supplementary school or home lesson give class a list of verbs to supply subjects, and also a list of subjects to supply verbs. When this lesson is brought in, drill by going over from the beginning.

II. OBJECT—OBJECTIVE CASE.

Write sentences used in first lesson in a list on blackboard. Write opposite a second list using *transitive* verbs but leaving Object to be supplied as:—"The cat kills," "The boy throws," "John strikes," etc. Drill again on the relation in these sentences between the *subject* and the *verb*. Review facts relating to *transitive* and *intransitive* verbs. From previous knowledge class will at once see that verbs in second column not only have *subjects*, but that the action must pass over to some *object* in order to complete the sense. This may be made plain by asking the question "What?" after the verb. Complete the sentences by writing, "The cat kills the mouse," "The boy throws the ball." etc. Emphasize that a simple verb may always have a *subject*, but that when the verb is *transitive* it will have an *object* as well.

Give definition.—*When a noun is the OBJECT of a transitive verb it is said to be in the OBJECTIVE CASE.*

As a connecting link between both lessons, take such a sentence as,—*"The dog chased the cat,"* and drill on relation of the verb to the *subject* and *object* by asking the

question "What?" *before* and *after* the verb. Show that the steps are—(1) Find the verb; (2) put "What" *before* it to find the subject; (3) put "What" *after* it to find the object. Write the above sentence in this form:—

SUBJECT	VERB	OBJECT
<i>The dog</i>	<i>chased</i>	<i>the cat.</i>
Nominative C.		Objective C.

Give class additional sentences to arrange similarly.

A subsequent step would be to show that the Nominative and Objective Cases of the noun are alike in form, and can be recognized only by their position in relation to the verb. Illustrate by taking two such sentences,—“The dog chased the cat,” and “The cat scratched the dog.” Arrange as above, dwelling upon the fact that “dog” is in the Nominative Case in the first sentence, and in the Objective in the second, while “cat” also changes its case in the two sentences. The Objective Case after prepositions could next be taken up.

N.B.—Only the simplest relations of the verb and noun have been taken, in order to avoid confusion to beginners; more complex combinations would require additional explanation,

A teacher has suggested that it would be useful to him and others if we printed occasionally the examination papers set in our college classes. In accordance with this suggestion, we print the latest History papers set.—Senior and Junior.

SENIORS.—(*Tudor and Stuart Periods.*)

1. Name the Sovereigns of the Tudor and Stuart periods, with the dates of their accession. Mention any of them who were known by different names previous to their accession.
2. What circumstances made the earlier years of Henry VII's reign specially liable to be troubled by imposters? Name any such, with their fate.
3. Give an account of some of the effects of Henry VIII's quarrel with the Pope.

4. Give an account of the public career of Northumberland in Edward VI and Mary's reigns.
5. Note any advances in Elizabeth's reign with respect to (1) treatment of the poor; (2) Literature.
6. Write a few lines about each of the following :—"The Hampton Court Conference"—"Thirty Years War"—"The Petition of Right"—"The Long Parliament"—"The Star Chamber."
7. Explain carefully Lady Jane Grey's claim to the throne, or, James I's claim.
8. Name the chief battles of the Stuart period, with dates, positions, combatants and victors.

The above paper was taken by 44 pupils. The following are the first 20 in order of merit. Of these 14 are girls, including the first 5.

Bowdridge, M	Woods, I	Collins, W
Ash, E	Soper, A	{ Payn, M
Stick, M	Squires, A	{ Noseworthy, E
Adrain, E	Noseworthy, I	{ Inkpen, B
James, M	Blatch, H	{ Campbell, M
{ English, E	Blair, F	{ Pincock, B
{ Simpson, W	Rodger, H	

JUNIORS.—(*Earliest Times—End of Stephen.*)

1. Give the dates of the Roman invasions of Briton. When did they finally leave? Why? Name five ways in which the Roman occupation was a benefit to the people.
2. Name four advantages conferred upon the Britons by the introduction of Christianity. What incident directed the attention of Pope Gregory to the British heathen?—date.
3. Name in order, the Saxon Kingdoms which possessed the chief power in England. Name the Kings of the last two of these with the dates of their accession.
4. In whose reign did the Danes first appear? Why did they come? What arrangement did Alfred make with them at Wedmore?
5. Name the three Danish Kings of England with the dates of their accession.
6. "Many things helped William." Name three of these circumstances which helped William of Normandy in his Conquest of England.

7. "Henry I. had been born in England, and wished to reign as an English King." Name four acts of Henry to bring this about.

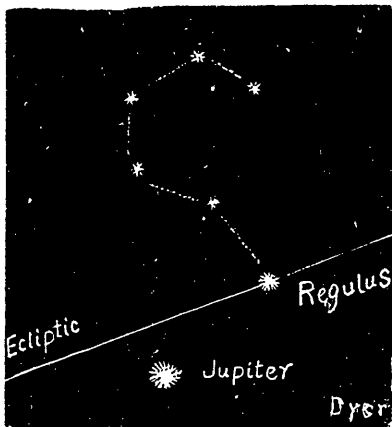
This paper was taken by 104 Juniors. Below are the names, in order of merit, of the first 22—about half girls and half boys.

{ Dickinson, V
 { Woods, M
 Mews, A
 Tucker, J
 { Atwill, F
 { Holloway, E
 { Foote, M
 { Jardine, E

{ Jones, A
 { Miller, A
 { Knight, W
 { Lorway, E
 Macpherson, E
 Kendall, G
 Boone, E

{ Percy, W
 Green, H
 Squires, B
 Story, H
 Gaze, H
 { Ayre, H
 { Chaplin, L

Viewed from the College steps at 7.30 p.m. on March 3, Jupiter occupied the position shewn in the following diagram:



Look carefully above the blazing planet Jupiter, and you will soon pick out the six stars which form the "Sickle." There is no mistaking them. They are known to astronomers as "*The Sickie in Leo.*" All the stars in the neighbourhood belong to the constellation of Leo (the Lion). The brightest of the six, the one in the tip of the handle, is *Regulus*. The straight line passing

through *Regulus* is the *Ecliptic*—the line which marks the path of the Sun in his annual journey. Have a good look at this part of the sky on the first clear night, and you will be able to identify this combination (the Sickie in Leo) as long as you live.

As the days go on, the position of Jupiter will gradually change; but the change will be slow, and the Diagram will still fairly well represent the relative positions of planet and stars.

The stars forming the Sickle will always have the same relative positions to each other ; but at different times of the year the sickle as a whole will be tilted at different angles.

The following show the results of some recent examinations. The first ten are given in order of merit.

MR. HOLLOWAY'S CLASS.

Scripture History Simpson, W Collins, W	Whitemarsh, C	Chancey, H
	Hatcher, R	Hill, C
	Rodger, H	McNelly, J
	King, A	

MISS ALLISON'S CLASSES.

Arithmetic. SENIOR. { James, } Bowdridge, Noseworthy, E Noseworthy, J Hill, { Ash, } Soper, { Woods, J } English, Pittman, M JUNIORS. Macpherson, E Holloway,	Kendall, Woods, M Morison, Gould, McRae, Lorway, Snowden, Boone. Algebra. SENIOR. { Ash, } Campbell, { Hill, } Bowdridge, { Crocker,	{ Noseworthy, J } Noseworthy, E { Soper, } Adraln, } Pincoek. JUNIOR. Macpherson, E { Woods, M } Holloway, McRae, Morison, Gould, W Foote, Lorway, Kendall, Snowden,
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MISS MARCH'S CLASSES.

GIRLS (H.) Geography (Asia.) Chaplin, M Tuck, N Inkpen, W Barbour, M Blatch, J White, M Martin, B Sutherland, L Atwill, M Miller, J	Domestic Economy. Henderson, J Chaplin, M Irving, E Henderson, E White, M Giles, M Atwill, M Frew, F Blatch, J Miller, J	Classics ('The Armada.') Atwill, M Blatch, J { Inkpen, W } Tuck, N. Frew, F Dickinson, V Chaplin, M Henderson, E Noseworthy, L { Young, M } Milley, M
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MR. WHITEWAY'S CLASSES.

Arithmetic and Algebra. Godden, Drover, Gibbons, Ayre, Hudson	Park, H Weeks, Rodger, Macpherson, Herder, W Hudson, History.	Drover, Gibbons, Cox, Godden, Park, H Rodger.
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For ordinary boarders \$165.00 for each year divided into three, viz., from September to December; January to April; April to July; this amount includes board, washing, text books, College fees, seat rents in church; payment of the term charges is required strictly in advance.

A discount of ten per cent is allowed in cases where there are two or more from one family.

A private bed room may be had on payment of ten dollars extra per term.

Pupils can enter at any time, but, if possible should do so at the beginning of the term.

The Home affords exceptional facilities for the proper oversight and training of young people of both sexes in pursuit of a good education. . is heated throughout with hot water, and has been fitted with all the hygienic appliances to secure the health and comfort of its inmates.

The Dormitories are lofty and well ventilated, while the study rooms are adapted to secure successful preparation of home lessons.

Special attention is given to the spiritual and moral as well as mental training and general deportment.

A separate bed is provided for each pupil unless it is otherwise ordered.

READING.

THE following remarks in concise form are intended to be helpful to teachers, expecting to be examined for Junior or Third Grade, in the absence of a duly authorized book.

1. The art of reading is acquired as a means of getting or of conveying knowledge.

2. Pupils should be taught reading, and accurately to distinguish words, and to express them with fluency and due regard to expression, keeping in mind clear and distinct utterance, right pronunciation, proper inflection of voice and becoming emphasis.

3. Teachers, by use of familiar objects, alphabet and reading cards, illustrated properly, graded text-books and blackboard exercises, should interest and instruct pupils in simple terms from the very first, adapting exercises to their full understanding.

4. A reading lesson should include a model for imitation, explanation of principles, and correction of errors, in utterance, tone or pace. The reading matter or text should be fairly within the reach of pupils—neither too easy nor too difficult. Facts stated or ideas conveyed by words, should be presented in language and style, sufficiently simple to arrest attention and afford pleasure.

5. Qualities of good reading will embrace the following:—

(a) Pure enunciation of words by careful attention to vowels, aspirates and vocal letters.

(b) Proper accent of words on particular syllables.

(c) Expression. This must be obtained by due regard to:

1. Pace or time in which a passage is read, which must be modified according to sentiment expressed;

2. Pauses, whether marked by ordinary stops or purely rhetorical, suggested and regulated by the sense of the passage and entering into what is called style;

3. Tone and pitch. Reading should not be too low to

be indistinct nor too loud, to be noisy. Voice culture gives great compass and charm to style, and admits of such variety of cadence and force, as will fitly express joy, grief, anger, love or other emotions ;

4. Emphasis. This is the forceful utterance of distinct or contrasted words, to make obvious the meaning of the text, and can only be rightly used when the reader perfectly understands the sentiment of the author.

PRACTICE OF TEACHERS IN ELEMENTARY SCHOOLS.

Convenience suggests reading as a basis of easy classification. With our graded text-books, pupils in alphabet primer and No. 1 may represent Standard I; those in R. 2, R. 3, R. 4, &c., similar or corresponding standards. Standard I, and any other requiring this, may be divided into three sections. Each standard will have exercises in reading, spelling, writing (or printing), figures, &c., adapted to each, in order to give variety, suitable employment according to time-table, and healthy all-round gradual development.

Method—Kindergarten modes of teaching children, from objects and in a manner according with child-life, are prized highly and recommended.

In Alphabet, teacher, by use of letter-cards or blackboard, may direct attention of class to letters, with the names or sounds of which they are familiar, or whose forms are simple and striking. Such are O, I, A, U, T, G, P, S, X, and to help memory, they should be taught to print them on slates or blackboard. Do not attempt too much in any one lesson, so as to weary. Teach little by little; but, by needful repetition and review, keep in mind, what is worth doing, is worth doing well.

Easy words—Read and then spell is the order preferred. Note, the teacher should read slowly, a short and pleasing sentence, from illustrated sheets, cards, or blackboard; and require class to repeat words after him in turn, or together. These should express simple ideas or thoughts about ob-

jects, with which they are acquainted, such as *top*, *pit*, *dog*, *cat*, and containing letters, which they have already learned, at least in part. In this way, a few words and letters of which they are composed, will be readily got. Nothing encourages progress like success. Pursue such a course till class is able to read Primer, R. 1 and R. 2, varying exercises and securing accuracy and ease, by practising the class to read, or to read and spell, word about or line about rapidly, and then giving them some idea of style, by being wary of drawl, and by example, teaching them good expression. Pupils should be taught to criticise the reading of one another, and required to repeat, spell, or transcribe, words about which mistakes have been made. At this stage, pupils should be trained to look at any word in the text, and spell it from memory. Good spelling will accompany good reading, and the habit of observing closely the connection of letters in words, in elementary books, will serve admirably in the more advanced classes to get a mastery of our copious and peculiar language.

Readers 3, 4, &c.—Pupils will be now prepared for more difficult, but graded text-books. Reading must be both intelligent and intelligible. Nothing aids more in the direction of style, than accurate comprehension of thought, expressed by words. Hence teacher should give in outline, if class be unable to do so, the subject matter of the paragraph or piece selected for the lesson. He should call special attention to new terms or phrases, and by question or explanation, orally or on the blackboard, have them fully understood. Now practise, kindly and patiently, course prescribed, or hints given, respecting qualities of good reading in the above remarks; and finally encourage pupils by occasional recitation of suitable passages in prose or poetry to acquire the elocutionary power of impersonating the author, or of expressing ideas, feelings or sentiments, as if originating them. Hereby a little perseverance will prepare in reading for examination for even Second or First Grade.

GEORGE S. MILLIGAN.

LECTURES ON X-RAY PHENOMENA.

In the College Laboratory.

*(Continued.)***Experiments.**

1. The tube was enclosed in a large wooden box so that all ordinary light was completely excluded. A fluorescent screen was placed outside the box. The current was then passed and the room darkened, when the screen shone out where the X-rays impinged upon it.

This fluorescent screen consists of a piece of paper or cardboard thickly covered with an expensive chemical called Potassio-platinic-cyanide. It has the peculiar and important property of shining out when the X-rays fall upon it.

2. A large Book—in this case Prowse's History—contained a fifty-cent piece. The rays penetrated the book, and threw a shadow of the coin on the fluorescent screen.

3. A parcel was made up for the post, marked "photos only." On subjecting this parcel to the searching X-rays, the black shadow of a watch was distinctly seen. When this parcel was put inside a padded tea-cosy the shadow of the watch seemed as clear as before.

4. At the last demonstration a parcel had opportunely arrived by parcel post. It was a wooden box well wrapped in brown paper, and securely tied. It measured six inches cube. It was subjected, still tied up and sealed, to the X-ray. Immediately, a black shadow, about 3 inches long, by half-an-inch wide, appeared on the screen. By turning the parcel round, the same enclosed parcel again appeared: but this time, though its length was still three inches, its width was two inches. These two experiments combined showed that the small enclosed parcel was metal (probably)—3 inches by 2 by $\frac{1}{2}$ inch in dimensions. Its exact position also was known. It turned out that the packet contained thin plates of copper placed one on

another. In a similar way, by looking at a limb from different points of view, a bullet can be accurately located.

5. A large card-board box about 18 inches by 12 by 6 was packed with clothing and towels. The X-rays threw on the screen, shadows of a large watch, a fifty cent piece, and some metal buttons. These objects seemed equally clear when a thick drawing-board was interposed between them and the source of X-rays.

6. A thick plate of glass, one of the articles in a box of weights, threw a shadow almost as dark as if it were metal. This interesting result indicates a simple method for distinguishing true jewels (diamonds and rubies) from paste (glass); for, while the X-rays pass through the genuine stones, they are stopped by the glass, and a shadow is produced, as in the above case.

7. All seemed interested in seeing the bones in their hands. Of course, it is only the *shadows* of the bones that are shown. The X-rays, though they can pass through flesh fairly easily, are stopped by bone. Hence shadows of various density appear on the screen. The thickest parts of the bones show a deep black shadow, the thinner parts as shadows somewhat less dense. Several visitors saw their bones through a drawing-board, and others through a table-top. Ladies who kept their gloves on, saw their bones just as clearly as those who removed them.

MATTHEW ARNOLD.

THE following story of Matthew Arnold is told by a London schoolmaster:—

“One day he had come in to inspect a school, and the teachers crowded round him officiously in a way which he disliked very much. Some men would have told them to move out of the way, but Mr. Matthew Arnold was truly polite. Addressing the class, he said in dry tones: “I will now give you some dictation: ‘I am quite surprised to see so many teachers. How wise they must all

be! and how clever!—to teach little boys and girls to read, write, and cipher.’” There was an uneasy shifting of feet, a flushing of faces, a gnashing of teeth. Then one by one the crowd dispersed.”

I well remember Matthew Arnold, as an Inspector of Schools. It was quite in the early days of these inspections. Mr. Arnold, though we liked him, did not altogether impress us with respect. We did not know of his world-wide fame as a scholar, poet, and critic, and his personal appearance suggested nothing of the sort. Lord Dundreary was then a well-known comic character in the London theatres; and Matthew Arnold resembled him very much in face and manner of speaking. He wore long side-whiskers, and parted his hair in the centre. He looked and spoke in our opinion, like a “swell” or “dandy.”

The above story reminds me of the dictation he set us on the occasion we first saw him. Turning to one of the higher classes he quoted, rolling it as if he enjoyed the poetry of it:—“All thy garments smell of myrrh, and aloes and cassia, out of the ivory palaces whereby they have made thee glad.” Then, almost without pause, he turned to another class and said:—“Kings’ daughters were among her honourable women.”

Later in the day he put some general questions in History to my class. Among others he wanted to know who fought at Flodden Field. I mentioned Marmion (having just finished that poem), and he really seemed better pleased than if I had known more history and less fiction.

Next year when he came in at the school door, he stopped in front of the blackboard and said, “Last year, when I came in, there was a problem in algebra worked out on that board,” and he gave us details of the problem. He had visited, perhaps, over a hundred schools in the course of the year.

Matthew Arnold has made for himself a name which will always shine brightly on the pages of literature.

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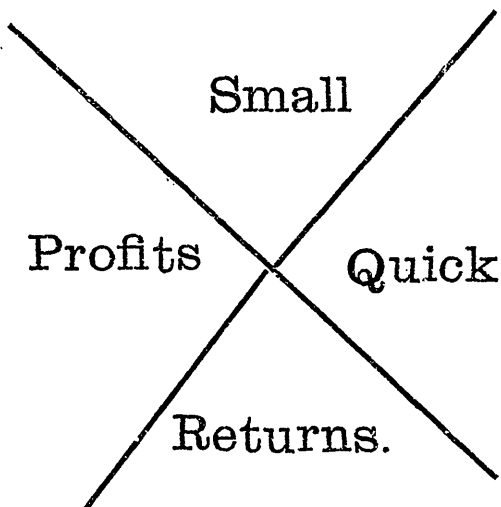
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