

guage, or with unusual complications in spelling. The all-important thing is that the child shall know how to perform the processes, that he shall have sufficient practice in the doing to make it certain that he will be able to do the work well for a long time to come, and that he do it rhythmically or without appreciable effort.

CONFERENCE WITH TEACHERS.

[Mr. Winship will be pleased to receive questions upon school discipline, administration, methods of teaching, etc., and will answer the same personally or secure answers from experts. Teachers will please write their names and addresses, not for publication, but that answers may be given by letter, if not of general interest. Will teachers ask questions with the pen as freely as with the voice?]

337. Please name ten books that would be a desirable first purchase for a high school library. The school owns only an encyclopedia.

PRINCIPAL OF HIGH SCHOOL, Pennsylvania.

If this should be answered by any two people, however expert, they would inevitably differ. Not only so, but if any man was to answer it two days in succession, there would be some differences, such is the wealth of material for which to choose. But the following books are good, even if they are not absolutely the best. They are selected merely as a nucleus.

Ten Reference Books.

Alibone's Dictionary of Authors, (3 vols.)
Hady's Dictionary of Dates.
Crabbe's English Synonyms.
Roget's Thesaurus of English Words.
Lippincott's Pronouncing Gazetteer.
General Atlas (Rand, McNally).
Ridpath's General History.
Edwards' Words, Facts, and Phrases.

Ten Subject Reference Books.

Ganot's Physics.
Dana's Manual of Geology.
Dana's Mineralogy.
Gray's or Wood's Manual of Botany.
Anna L. Dawes' How are we Governed.
Ball's Study of the Heavens.
Meiklejohn's English Language.
Handbook of Poetics.
Brewer's Historic Note Book.
Earle's Philology of the English Tongue.

Ten General Books.

Bryce's American Commonwealth.
Bolles' Land of the Lingering Snow.
Wright's Our Great Scientists.
Parton's Captains of Industry.
Cooper's American Politics.
Green's Shorter History of the English People.
White's Eighteen Christian Centuries.
Guest's Epochs of History.
Curtis' From the Easy Chair.
Warner's As we were Saying.

Ten Inexpensive Books.

Russell's Native Trees (30 cents).
World's Almanac (25 cents).
Everybody's Writing Desk Book.
Don't.
How to Do It.—E. E. Hale.
Power Through Repose (Annie Payson Call).

Mr. Editor:—I was interested in your reply to "M. C. C." as to what studies best develop the imagination. I believe that the question deserves an answer of more than seven lines. The cultivation of the imagination is one of the most important undertakings of the school. Even our best teachers are too apt to look upon the imagination as "something vague and intangible." We are apt to confound imagination with fancy; whereas the truth is it is "creative power of the mind." Fancy is the boat adrift; imagination is the boat under the control of the pilot. Imagination creates our ideals out of our previously acquired ideas. All improvement is the result of imagination. All literature, inventions, advances in government and civilization, are directly dependent upon the imagination.

Undoubtedly literature holds a first place in the training of the imagination, as it presents ideals of others and leads the child to recreate them for himself. Then comes his own attempts in language and composition. Kindergarten work and its grammar school supplements, molding, and drawing follow, while geography and history, properly taught, hold a prominent place.

The child should be led to make as many new combinations as possible. I have seen teachers who trained the imagination by using arithmetic, in leading the child to make most of his own problems.

The following is a list by Dr. Brooks of Philadelphia showing the comparative value of studies in training the imagination:

Language, composition and literature, 10; drawing, molding, music, elocution, reading, 9; geography and history, 8; botany, zoölogy, physiology, physics, 7; algebra, arithmetic, geometry, 5.

If I might be allowed to differ with so eminent an authority, I should say that for the grammar school, music and elocution are too high, and geometry, well taught, too low.

ELMER L. CURTISS.

THE ACQUISITION OF GENERAL IDEAS.

BY PROFESSOR JOSIAH ROYCE.

[Reported for the JOURNAL.]

HARVARD LECTURES ON TOPICS OF PSYCHOLOGY OF INTEREST TO TEACHERS.—(VI.)

Attention makes clear to the mind mental facts that would otherwise be observed. The native strength or feeling of the fact is not altered, but its significance for consciousness is vastly increased. The question for educators is that of developing and training the attentive processes. According to Herbart, there is never a case of voluntary, strained attention long continued, nor is this useful for the teacher. What is wanted is an involuntary interest, an attentive readiness to attain an addition to one's present stock of general ideas. The great problem of education is how to attain this involuntary attention. All interest is primitive, or apperceptive. The apperceptive, or derived, is by far the most important, and depends upon the primitive. Acquisition of knowledge means a process of learning by means of ideas won in the past. The old experience, the established nervous habits, render it easier to follow the new masses of experience. Hence comes the enormous practical importance of involuntary attention. It gives rise to all derived interest. We understand the new in terms of the old, and so delight to do so.

Apperception as a term has had a far too various technical significance. For Herbart and the educational psychologists it is not the mere act of attention in itself, but the active attention considered with reference to the mechanism by which a clear idea is brought to pass. The new fact is assimilated into the old group of ideas. We may perceive a novel experience, but it is not apperception until there are old terms in which to realize it. For Herbart, our old ideas lie in masses in the recesses of our mind unconsciously, until they are called to our aid when we have something new to do. Novelities are perceived by means of this apperceptive mass of ideas. To ourselves, these masses of general ideas represent the old and typical. Every one has his mass of well-knit ideas representing the old-fashioned winter. These bear no relation whatever to the facts of nature, but concern solely the constitution of the human mind.

The true order of teaching is from the concrete to the abstract. We are to secure such apperceptive masses of facts by which to perceive, realize them, and arrange them in order. The first step is to quicken in the learner's mind whatever apperceptive masses are already there. When the apperceptive basis is well laid, then the new work is to begin. This is Herbart's practical doctrine, and there can be no doubt of its profound significance. We now know as he could not, however, that apperception is something far more complex than he understood it.

Apperception is a real, universally present factor in our mental life. The new does interest us by means of the old. We see nothing in the utterly novel. But this by no means explains all the workings of the human mind. It presents an actual inadequacy. Its terms have obviously a good deal of the mythical. Our ideas are not stored away in masses. The processes are real, but the facts to which Herbart's processes refer are not so to be explained. The process as we know it is the formation, retention, and easy re-excitement of well-knit, habitual ideas. It is not the merely familiar as such. We learn to adjust ourselves to certain things inasmuch as others of our fellows have been interested in them. Many of the most important interests of the child are such as he gets because they are interests of those whom he loves. He fails to assimilate very many of these, but he keeps on trying when he cannot understand or associate them at all. Many a child's mind thrives in a thrilling interest in the unknown. The child wants to be in with men and to imitate them. He learns first and understands later. It is the teacher's business to help him differentiate such of his ideas.

NOTES.—Herbart's *Text Book in Psychology*, translated by Margaret K. Smith, is published by Appleton (1891). Compare Karl Lange's monograph *Ueber Apperception* (Plauen, 1879), of which a forthcoming translation has recently been announced. The Herbartian System of Pedagogy has been expounded by Professor De Garmo in the first volume of the *Educational Review* (1890-91). The psychology of attention is well set forth in the highly popular monograph of M. Ribot.

Professor Royce summarized thus the

THESES CONCERNING GENERAL IDEAS MAINTAINED IN THE PRESENT COURSE.

1. Mental Life does not begin with Ideas of Individual Things, but with General Ideas.
2. These Primitive General Ideas are unconsciously, or unintentionally, Abstract.
3. Rational General Ideas differ from the primitive general ideas by being Consciously and Intentionally Abstract. Their ultimate purpose is the Attainment of Genuine Insight into the Nature of Individual Things.
4. All General Ideas are the mental aspects of Habits of Response in presence of those general Characters of things to which the ideas in question relate. Without Motor Habits no Ideas. Intellect and Will are Distinguishable but Inseparable Aspects of Mental Life.
5. Consciously General Ideas are the Mental Aspects of Deliberately formed Habits of Response to the general characters of things; and for that very reason are modifiable in definite ways, and are, accordingly, more or less successfully adjustable to decidedly Novel Conditions. Of such deliberate Habits of Response the Processes of Language are a familiar example.
6. These attributes of Deliberateness and Modifiability are in general due to the Influence of the Imitative Function. For Imitation, although founded on instinct, implies for its development Deliberateness and Plasticity of adjustment. Rational General Ideas are therefore, on the whole, Products of Imitation, are the mental aspects of imitative motor habits of response to the socially recognized general aspects of things.
7. Originality shows itself in constructive Thought, as in constructive Art: (a) In the selection of the Imitative Rapport, which varies with every individual, and determines for each person his social interests, faith, calling, and, in the end, his destiny; (b) In the individual Coloring and independent Organization given to functions that are in detail

rimarily Imitative (Ex's.: Individuality in handwriting, literary style, novel combination of thoughts, etc.).

8. The Primary Function for the teacher to appeal to is, accordingly, in general, the Imitative Function. Imitations of Natural Truth are in general secondary to imitations of Persons (Ex., Dependence of Thought on Language). The Imitative Function is not something over and above the rest of the Intelligence; but, in general, All Intelligence is Imitative.

9. It is true that Thought is greatly, although not wholly, dependent on Language; but this is due not to any peculiar magic in language, but rather to the importance of the latter as a socially Imitative Function.

EDITORIAL MENTION.

"University Extension" will have a great summer meeting in Philadelphia from July 5 to Aug. 2.

The New England Conference of Educational Workers will meet at the English High School Building, June 3.

The State of Wisconsin is doing many things of great value to the profession beyond her borders. This is specially true of a recent work by Supt. O. E. Wells upon Architecture, Ventilation and the Furnishing of School Houses. It contains elaborate plans for various cost school houses, showing elevations, floor plans, etc. It ably discusses, using detailed diagrams, all the problems of heating, ventilation, etc.

Mr. Frank A. Hill of the English High School, Cambridge, is to be offered the principalship of the new Mechanics' Art High School of Boston at a salary of \$3,800. This is as high a complement as the city can offer one of its teaching force, and he is specially qualified for making the school the best in the country. The committee has canvassed the entire country for several months, has searched out men and sized them up, and has at last, with great unanimity, settled upon Mr. Hill as the man in point of scholarship, administrative wisdom, and personality, best fitted for their needs.

In the death of General S. C. Armstrong philanthropic education loses its most noted character and the "races" their most efficient educational champion. He was the founder of the Normal Institute at Hampton, Va., and to him was due the financial success, educational standing, and the national reputation of the institution. He was fifty-five years of age at his death. He was born in the Hawaiian Islands; was the son of a missionary; his early education was at the islands; he earned the money to get a college education; entered Williams, junior class, at twenty-one; graduated in 1862; enlisted at once in the army; was made captain; was promoted to major in the field for bravery at Gettysburg, and afterward was made brigadier-general. The institute is now so firmly established, thanks to his wisdom, that it will easily maintain its high rank.

Mr. Edward T. Pierce of the California State Normal School at Chico has been highly honored by being called to the normal school at Los Angeles. This is an honor in many ways. It is a promotion, since the latter school is one of the great institutions in the country, having the entire southern California in its field, and there is none better; it is an honor also, inasmuch as it takes him back to his old camping ground. Mr. Pierce was for some time superintendent at Pasadena, and there made a record upon the strength of which he was called to the Chico schools; now he is called back to southern California to the highest position in the gift of that section of the state. Mr. Pierce is devoted to his profession, is a clear-headed, good-spirited, energetic, hard worker, who has attained his prominence simply on the strength of what he could show for his work. He now has a grand opportunity to utilize all his talent, energy, and experience.

FRIVOLITIES.

BY LAPHSON SMILES.

CYNICAL.

Young Bride—We have furnished almost the whole house in mahogany. Are we not starting out well?

Old Friend—Yes, my dear; but remember that many marriages which begin with mahogany and rosewood end in pine.

SHE SAW.

Mrs. Wickwire—Why do they call a woman's expenses "pin money?"

Mr. Wickwire—Because her husband is stuck for them. Do you see the point?—Indianapolis Journal.

AT THE HARDWARE STORE.

"What have you in spring goods?"

"I have some nice rat-traps, ma'am."

A GOOD LIKENESS.

Photographer—Your son ordered this likeness from me.

"It is certainly very much like him. Has he paid for it?"

"Not yet."

"That is still more like him."—Yankee Blade.

TO THE WORLD'S FAIR.

On the present basis, the rates to the World's Fair at Chicago, round trip tickets, will be as follows:—

Trains taking more than thirty-five hours between Boston and Chicago:

Fitchburg & West Shore,	\$32.00
Fitchburg (Erie & Boston Line),	30.40
Fitchburg via Montreal,	29.60

Trains making the run in thirty-five hours or less:

Fitchburg & West Shore,	40.00
Fitchburg (Erie & Boston Line),	38.00
Fitchburg via Montreal,	37.00