

of God to say again, as the prophets and poets have always said, that the spiritual world is the only real world in the sense that it is the only world in which men really live; that that world incloses us on all sides and presses upon us so closely that we can ignore it only by wilfully becoming deaf and blind; that work, tools, material, wealth, and power are valuable only as they stand for character and are used for spiritual ends; that to be great is not to be rich, but to be strong; that to be successful is not to acquire, but to bestow; that failure is not missing the goals, but mistaking the path; that freedom is the most rigorous kind of self-government; and that a nation takes rank, not because of the things it does with its hands, but because of the things it fashions with its spirit."

THE A. & M. COLLEGE FARMERS' CONVENTION.

We are printing this week the official call for a State farmers' convention to be held at the A. & M. College here July 20, 21 and 22. The call is signed by Governor Aycock, Commissioner Patterson, President Winston, and Dr. Burkett; by an oversight the name of Mr. Patterson was omitted on page 2.

We hope that this convention will be largely attended. It will be to North Carolina, it is hoped, what the East Tennessee Farmers' Convention which met in Knoxville last week, is to the eastern half of Tennessee—a great annual conference of progressive farmers held for the sole purpose of fostering better methods of farming; a sort of general, three-days farmers' institute. It will be a purely voluntary association; it is not held to aid any existing farmers' organization or to form a new one, and so must be distinguished from the meeting of the Farmers' Protective Association called for July 29, 30 and 31. The idea is an excellent one, and we happen to know that Dr. Winston has been working toward it for more than two years. The program will appear soon, and will indicate better than any expression of ours, the real aim of the meeting. Meanwhile, we hope that a large number of our readers will begin planning to attend. As the official call puts it: "Let all farmers who can do so, come and bring their wives, making the occasion a pleasant family holiday as well as a means of instruction."

PAMPHLETS AND MAGAZINES.

The current issue of Southern Education, published at Knoxville, Tenn., is a North Carolina number and is literally packed with facts and figures that should be familiar to all friends of the movement for better public schools in our State. It is in fact a campaign book for educators. If interested, write for a copy.

John Wanamaker has sold Everybody's Magazine to the Ridgway-Thayer Co., which seems to have made considerable improvement in the June number, and promises even longer strides forward for succeeding issues. The magazine has been materially enlarged, but the price remains the same—\$1 a year; 10 cents a copy.

We are glad to see that Mr. Francis Nash, of the Hillsboro bar, has brought out in pamphlet form his series of articles on "Hillsboro: Colonial and Revolutionary," originally published in the Charlotte Observer. So much history of State-wide interest has been enacted about old Hillsboro, and Mr. Nash has set it down with so much charm, that persons from all sections of the State will be interested in his booklet. It retails, we believe, for 25 cents.

We have received a handsome pamphlet "The Formal Opening of Trinity College Library, February 23, 1903." It contains the vigorous, thought-provoking dedicatory address by Dr. Walter H. Page, the address of presentation by Judge Burwell, and Dr. Kilgo's fitting speech of acceptance. It is enough to say that these efforts are worthy of the handsome and enduring form into which they have been put.

THE FOUR FUNDAMENTAL OBJECTS OF EDUCATIONAL TRAINING.

The Pupil Should Learn, Says President Eliot, "To Observe Accurately, Record Correctly, Infer Justly, and Express Results Cogently."

Let me present here in some detail the main processes or operations of the mind which systematic education should develop and improve in an individual in order to increase his general intelligence and train his reasoning power. The first of these processes or operations is observation; that is to say, the alert, intent, and accurate use of all the senses. Whoever wishes to ascertain a present fact, must do it through the exercise of this power of observation, whether the fact lie in the animal, vegetable, or mineral kingdom; whether it be a fact of physics, physiology, sociology, or politics. Facts, diligently sought for and firmly established, are the only foundations of sound reasoning. The savage has abundant practice in observation; for he gets his daily food only by the keenest exercise of this power. The civilized man, whose food is brought to him on a railroad, is not forced by these elementary necessities to keep his observational powers keen and quick, and many of his occupations call for only a limited use of the observing organs; so that systematic education must provide in his case against the atrophy of these faculties. For the training of this power of observation it does not matter what subject the child studies, so that he study something thoroughly in an observational method. If the method be right, it does not matter, among the numerous subjects well fitted to develop this important faculty, which he choose, or which be chosen for him. The study of any branch of natural history, chemistry, or physics, any well-conducted work with tools or machines, and many of the sports of children and adults, such as sailing, fishing, and hunting, will develop this power, provided thorough exercise of the observational powers be secured. For the purpose we have now in view, it is vastly better that he study one subject thoroughly than several superficially. The field within which the power is exercised may be narrow or special; but these words do not apply to the power. During this training in accurate observation, the youth should learn how hard it is to determine with certainty even an apparently simple fact. He should learn to distrust the evidence of his own senses, to repeat, corroborate, and verify his observations, and to mark the profound distinction between the fact and any influence, however obvious, from the fact.

The next function, or operation which education should develop in the individual is the function of making a correct record of things observed. The record may be either mental only, that is, stamped on the memory, or it may be reduced to writing or print. The savage transmits orally to his children or his tribe such records as his brain contains of nature's lore and of his experience in war and the chase; but civilized man makes continuous and cumulative records of sifted, sorted, and grouped facts of observation and experience, and on these records the progress of the race depends. Hence the supreme importance that every child be instructed and drilled at every stage of his education in the art of making an accurate and vivid record of things seen, heard, felt, done, or suffered. This power of accurate description or recording is identical in all fields of inquiry. The child may describe what it sees in a columbine, or in the constellation of Orion, or on the wharves, or in the market, or in the Children's Hospital, and its power of description may be exercised in speech or in writing; but for the benefit of the community, as distinguished from the satisfaction of the individual and the benefit of his family or associates, the faculty should be abundantly exercised in writing as well as speech.

In this constant drill the conscience cannot fail to be refined and instructed; for to make a scrupulously accurate statement of a fact observed, with all needed qualifications and limitations, is as good a training of the consciousness as secular education can furnish.

The next mental function which education should develop, if it is to increase reasoning power and general intelligence, is the faculty of drawing correct inferences from recorded observations, a faculty which is almost identical with the faculty of grouping or co-ordinating kindred facts, comparing one group with another or with all the others, and then drawing an inference which is sure in proportion to the number of cases, instances, or experiences on which it is based. This power is developed by practice in induction. It is often a long way from the patent fact to the just inference. For centuries the Phoenician and Roman navigators had seen the hulls of vessels disappearing below the blue horizon of the Mediterranean while their sails were visible; but they never drew the inference that the earth was round. On any particular topic or subject it may take generations or centuries to accumulate facts enough to establish a just inference or generalization—the earlier accumulations may be insufficient, the first grouping wrong, or the first samplings deceptive—and so the first general inference may be incorrect; but the method, rightly understood and practised, leads straight to truth. It is the patient, candid, impartial, universal method of modern science.

Fourthly, education should cultivate the power of expressing one's thoughts clearly, concisely, and cogently. This power is to be procured only by much practice in the mother tongue, and this practice should make part of every child's education from beginning to end. So far as a good style can be said to be formed or created at all, it is ordinarily formed by constant practice under judicious criticism. If this practice and criticism are supplied, it is unimportant whether the student write an historical narrative, or a translation from Xenophon, or a laboratory note-book, or an account of a case of hypnotism or typhoid fever, or a law-brief, or a thesis on comparative religion; the subject-matter is comparatively indifferent, so far as the cultivation of accurate and forcible speech or writing is concerned. In cultivating any field of knowledge this power of expression can be won if the right means be used, and if these means be neglected it will not be won in any field. For cultivating the habit of reasoning justly, however, there is one kind of practice in expressing one's thoughts which has special importance, namely, practice in argumentative composition—in the logical and persuasive development of an argument, starting from well-selected premises and brought to a just conclusion.

These, then, are the four things in which the individual youth should be thoroughly trained, if his judgment and reasoning power are to be systematically developed: observing accurately; recording correctly; comparing, grouping, and inferring justly, and expressing cogently the results of these mental operations. These are the things in which the population as a mass must be trained in youth, if its judgment and reasoning power are to be systematically developed.—President Charles W. Eliot, of Harvard University, in "American Contributions to Civilization and Other Essays." (The Century Co., New York.)

It is not what he has, nor even what he does, which expresses the worth of man; but what he is.—Amiel.

Honor comes by diligence; riches spring from economy.—J. F. Davis.