

to make. On the "Purpose of the American University," he says: "First of all it purposes culture, pure and simple, and this, too, for its own sake. All other objects are sunk from view. It assumes that learning is the highest and noblest of temporal pursuits, that it is even removed from the common range of temporalities, and linked by a mysterious process to the ineffable and eternal. Hence, it aims to present learning in the guise of a fair and beautiful maiden to whom youths are invited to pay their court, as to one who will hold sweet and delightful converse with them and never deceive them or lead them astray." With no purpose or desire of raising a personal issue, we use this simply as a fair exponent of the views now held by those highest in authority and influence in the field of education.

Culture, we admit, is indispensable; but is the real object and end of culture for its own sake? Is it not rather for some greater good it will gain for self and for others? If we strive for the pure and simple culture, with "all other objects sunk from view," wherein is the individual or the world benefited? What is culture, thus limited, but unproductive capital, and why is not this as unwise in intellectual as in political economy? A horse trainer exercises his young horse regularly and judiciously; but does he do it simply to make a trained horse of his beast? Does he not rather do it because he knows a well trained horse will be of more service to him than an ill or untrained horse? Gymnastic exercises tend to the development of physical strength, but do we consider him remarkably wise who has the ultimate end in view simply to gain the organic strength? And does not this limited idea of culture make it mere intellectual gymnastics? If one is more brilliant and instructive in conversation, stronger for any work in which he may be engaged, a more efficient and better friend, neighbor, or citizen, his culture has its use. But genuine culture may still exist if it accomplish none of these things. The possessor of it may be honored in the training school, but on his entrance into active life, he is staggered by the question: "What can you do?" and may fail to answer it all his future life. He is like the good gymnast who would insist that he is qualified for any manual or physical employment because he possesses strong and well developed muscles.

The shortsighted policy of giving attention to nothing that has not an immediate and remunerative money value—the penny wise and pound foolish policy—and that which can be influenced by no higher consideration than a pecuniary one, we most heartily despise. But if its end and aim and the final result are not beneficial in some way, we are forced to urge the unpopular and vulgar query: What is the use—*cui bono*? Most Science has practical value because it tends to enrich and benefit mankind. Some is called pure science, and is fascinating to its disciples for the very reason that it is "removed from the common range of temporalities," and is entirely uncontaminated with anything of a practical nature. A learned Professor of Zoology in a famous institution not a thousand miles from New York, at the close of an exhaustive lecture on some of the cranial nerves, gave a good illustration of this, in reply to a question as to the office of these nerves, by saying he could not tell, as he had no interest in knowing their use, and suggested that a physician had to do with such questions. Such topics as these contribute to general culture in its purity, and it is said by the really wise (!) that none but the worldlywise and shortsighted would interdict them. Many questions of interest to the student arise in the progress of public scientific undertakings, as State geological and natural history surveys, which do not directly benefit the people who authorize these surveys. And in one of our Western States, the legislators had the wonderful providence to direct their State Geologist to exclude theories from his report, and to record only facts. We can hardly conceive of any question connected with the laws of Nature which must not be, either at present or ultimately, of benefit to mankind in one way or another; but if it could be shown that such exists, we ask, in all candor, why not leave it, and give the attention to such investigations as have other recommendation besides the fact that they merely contribute to pure culture?

There may be something defective in the notions of those who desire only the practical in education; and on the other hand, there may be a little error in the ideas of those who ridicule this course. One seeking the purely practical may be unsymmetrical, or a one idea man, from studying only what he wants to use; while by the opposite course he may be a bookworm, or, in his efforts to embrace the whole field of learning for the sake of culture, be necessarily a mere smatterer in all. If the age of Methuselah were ours, it might be reasonable to expect proficiency in an extended range of subjects; but in our short lives, we can reasonably look for the result by pursuing the line of study that is most congenial. In other lines one labors at a disadvantage which is as unwise in intellectual as in physical pursuits. We can see no good reason why that division of intellectual labor, which will give to each the work at which he can accomplish most, is not as wise as a similar division of physical labor. There is no great wisdom in working at a disadvantage, either with the hand or the head, when this can be avoided. The toil we hate is the more fatiguing and less improving in one case as well as in the other. And since the opportunities for research on any one subject are unlimited, and a thorough knowledge of one necessitates a general knowledge, at least, of all allied subjects, who shall say that just as much culture and breadth of mental power cannot be acquired by pursuing only those studies which bear directly on one's chosen object of pursuit? A blacksmith or farmer has no need of resorting to gymnastics to gain strength and skill for his productive work; and cannot a student gain the requisite strength of mind for his life work, in his chosen field as well as out of

it? The mental stimulus which accompanies work in the direction of one's interests tends to greater success in this way than can be gained, under ordinary circumstances, when the attention is called to topics which suggest no definite object besides that of general culture. If culture is the first and highest object, it would seem consistent with this view to make those studies, which are considered most conducive to culture, compulsory in the curriculum, regardless of any practical benefit. But, instead of this, there is a marked and growing disposition to increase the ratio of elective to required studies in the graduating courses of our best colleges. Unless the student is guilty of the unmanly practice of choosing a study simply because it will gain for him the highest "mark" with the least possible effort, he is likely to enter with more zest upon chosen work, in which he has a definite object, than when he has no clearly defined purpose in view. For instance, one will study more closely—and hence gain from it greater culture—something he intends to teach, to use in conversation, for the platform or the press, or to put to some other definite use; and his interest and mental activity will be excited, as a rule, just in proportion to his estimate of the practical benefit resulting from it in the future, to himself or to others. The reason why so many are graduated from our institutions of learning, with comparatively little or no knowledge of the subject over which they have passed, is doubtless that, having no definite object for study, aside from the name of being a graduate, the results of general culture are too visionary and uncertain to afford stimulus to sustained and successful efforts. Hence we claim that, since all are by nature averse to labor, every stimulus that is laudable should be furnished to aid the student to the largest endeavors. A favored few may find sufficient incentive in the mere desire to know; but even in this case, mental activity and success will be increased if, in addition to this praiseworthy desire, there is also a clear perception of some beneficial result which will follow the fact of knowing.

Is it strictly correct to assume that learning is the highest and noblest of all temporal pursuits? If, to make it thus, it must be removed from temporalities, and linked to the ineffable and eternal, it would seem to be no more a temporal pursuit than heart culture, and is not the latter higher and nobler than head culture? There seems to be a natural order of development in the objects which, at different periods, have been held in highest esteem by mankind: from muscular power, through wealth, to intellectual attainments; and we trust the time may dawn ere long, when one with the highest and purest motives, other things being equal, will be looked upon as having attained a higher and nobler object of pursuit than physical strength, wealth, or mental culture.

The idea of presenting learning in the guise of a fair and beautiful maiden to whom youths are invited to pay their court, and with whom they may hold sweet and delightful converse, is a very beautiful and attractive one; and yet, if this is for its own sake, what is it but elevated and innocent pleasure-seeking—a sort of butterfly existence? There is pleasure in gymnastics or physical culture, so there is in mental culture; but if either is sought simply for the pleasure it affords, why is the seeker of mere pleasure in this particular way so much more exalted than the pleasure-seeker in any other way?

It probably will not be denied in theory, however much it may be in practice, that the highest ideal of life is that "no man liveth to himself," and that he is noblest of all who does most for others. The best servant is the greatest. With this truth accepted, it is evident that the primary object of education, and of all effort, is to qualify one's self for the greatest and most effective service to mankind, and to succeed in the performance of this service. This will necessarily bring all desirable secondary objects with it.

SPIRIT RIFLE PRACTICE.

The papers contain an account of a so-called elaborate investigation of a materialized spirit, which recently took place in St. Louis, Mo. The medium was one W. C. Clark, who pretends that he has a band of thirty-two disembodied spirits about him, some of which he can materialize by the odic or mesmeric force in him. During this materialization, the medium was tied up in a closet, and the room darkened; when, after a little while, a curtain was withdrawn, exposing a part of the interior of the closet, in which then the ghost or materialized spirit was seen. As it was suspected that, in this case, the same kind of deception was employed as in the Katie King affair, namely, that a real person of flesh and blood acted the rôle of the spirit, it was suggested that a crucial test would be to fire at the spirit with a loaded musket, as a real spirit could not be hurt by such an experiment. Mr. Clark having asserted that his materialized spirits were no deceptions, but real spirits, and could stand such a test, he received from an able marksman the following formal challenge:

St. Louis, Aug. 4, 1875.

MR. CLARK: Dear Sir:—Having attended a *séance* given by you, and having seen the wonderful materializations, I will give you fifty dollars to produce one face at the aperture, if you will let me, or any person I may name, fire a shot at it with a rifle. If it is a spirit face it cannot hurt it, and it will satisfy me it is not you with a mask on your face. My conditions are that you will disrobe yourself and put on clothes I shall produce, and permit me to fasten you to the bottom of the cabinet. Yours, respectfully, HENRY TIMKENS.

This was accepted by Mr. Clark. On the appointed evening, August 8, he was divested of all clothing, and other clothes brought by Mr. Timkens were put on him; he was tied down to the bottom of the cabinet by ropes passed through holes; a black curtain covered a window at which the ghost was to appear; the window was located on one side of the medium; the string to open this curtain was placed within reach of Mr. Clark. The cabinet was closed

and the lights turned down; and after a period of painful stillness, the medium asked the audience to sing, and they did so with a will. After they had finished several songs, a loud knocking was heard, which slowly became more gentle, and then ceased. After three quarters of an hour, during which nothing happened but an occasional spasmodic knock, a painful cry was heard in the cabinet, the black curtain was withdrawn, and a face appeared at the window. It was that of a girl with blue eyes and brown hair. The face was instantly seen by all present, and is described as having fixed features and other characteristics of a mask. "Fire," said the voice of Mr. Clark in the cabinet; and Mr. Timkens, who had before pointed his rifle at the center of the window, pulled the trigger, and the ball passed through the face and lodged in the back partition of the cabinet: while the face remained at the window unmoved for about a minute longer, when it was concealed by the black curtain, which was drawn over the opening.

The account is very minute in details about the inspection of the cabinet, and the ropes with which the medium was tied; and it especially reports all which the latter said concerning his fatigue and the emanations from his own spirit and the other spirits he controls; but no means appear to have been taken to get hold of the mask, which was doubtless the thing used.

The same parties (the Holmes') who exhibited the Katie King materialization in Philadelphia were recently exposed in Brooklyn, where a company of spiritualists themselves found out the deception practised by masks, which were exhibited before a curtained window, as at St. Louis. Such a mask, of course, would not be hurt much by a ball; but there are other more scientific and refined methods of practising these deceptions, such as optical contrivances, which can be made to give images which are perfectly visible and totally intangible.

Any one who has seen the perfect illusions produced by the stereopticon, which is nothing but an improved magic lantern, or with the megascope, by which the perfect image of solid bodies may be thrown on smoke, vapor, or dust, can understand that the so-called materialization trick can be easily performed by such means. Such an image, falling on a black curtain, is invisible; but on a white translucent smoke, its resemblance to a real body is such that it is next to impossible to distinguish it, except by an investigation during the exhibition of the image, the investigator placing his head in the opening, and looking around to see where the machine is, from which the light forming the image proceeds.

Persons unacquainted with these and similar resources of physical science, which are increased in number and improved almost daily, are of course utterly incompetent to investigate the means by which tricks of this kind are practised; and their conclusions as to the absence of any deception are of no account whatsoever. The above is only one of many illustrations of cases where the nature of the deception remains undiscovered, simply from the deficiency of knowledge and acuteness of those witnessing the performance.

THE KEELY MOTOR DECEPTION.

Most of the newspapers in Philadelphia, the home of the pretended New Motor, have refrained from any condemnation of the Deception. The *Public Record* is, however, a notable exception. The proprietors of that journal, which by the way is one of the most widely circulated dailies in the country, have put themselves to considerable trouble in collecting information, which has been presented to their readers in a series of able and exhaustive editorials. The effect of these articles is to place the grossness of the Deception in such a strong light that its aiders and abettors will, to say the least, be rendered uncomfortable. These people confess to having obtained large amounts of money, paid by credulous persons who were made to believe in the verity of the thing. The principals are doubtless liable to indictment and trial for obtaining money under false pretenses, and it will not be very surprising if some of the victims move in the matter before long.

It appears from the researches of the editor of the *Record* that the attempts to procure patents on the Keely motor have failed. In all doubtful cases, the Patent Office has the right to require the applicant to produce a working model or machine; and this was required of Keely, but he could not bring forward the model, and had to abandon his case. But this did not prevent extensive commercial dealings by the Keely people. The *Record* states that the Patent Office books exhibit "no fewer than thirty-four documents relating to the transfer of interests in the following named inventions: "Independent fly wheel," "hydro pneumatic pulsating vacuo engine," "globe motor," "dissipating engine, multiplier, or generator," "automatic water lift." The first assignment is dated July 11, 1871, and the last February 15, 1875. Eighteen different parties have been engaged during this time in buying or selling interests in this invention, and this does not include the subscribers to the stock.

COMMON coal oil is an excellent mosquito bar. Drop a little on a piece of cotton, squeeze as dry as possible, and rub over the exposed portions of the body. The smell of the oil disappears in about five minutes, and no mosquito will alight upon the anointed places. This is said to be better than pennyroyal essence for the same purpose.

DO NOT kill the toads. In Paris, they are sold at fifty cents a dozen, in order to protect vineyards and gardens from insects. A toad will swallow the biggest kind of a tomato worm.