

stains found on a knife acknowledged to be his property, were from a lamb which he had killed the day before. The microscope was brought to bear upon the instrument by men known to be ignorant of the circumstances of the case. The blood-stains were not only found to be those of a human being, but the microscope revealed on the blade, what had been imperceptible to the naked eye, a secretion peculiar to the glands of the throat. Stranger still, it pointed to cotton fibres on the blade of the instrument. "The knife," said the microscopists in their report, "has been used in cutting through cotton into the neck of a human body." Now listen, and wonder at the power of this wonderful silent witness: The murdered man had been found with his throat cut through the neck band of his cotton shirt. The evidence was as conclusive as though a voice from the clouds had proclaimed in tones of thunder: "Thou art the man."

A few years ago, a man under trial for murder in Western New York asserted that blood-stains on an axe found in his possession were from a dog which he had killed. The case was referred to Prof. Hadley, of Buffalo, who was purposely kept in ignorance of the circumstances.—Submitting the blood stains to the microscopic inspection, he decided that they were from a dog, thus confirming the poor man's testimony.

You remember how you were startled, a few years since, by a voice from the scientific world, claiming that the microscope could detect the image of the murderer on the retina of the victim's eye, thus referring the matter to a witness that cannot be bribed—to a judge that would not hesitate to condemn the duke in the heart of his duchy, or the king in his purple.

The microscope is a peace maker, a settler of disputes. Some hundred years since, it was asserted by a learned savant of France, in contradiction to history and tradition, that the wrappings of the Egyptian mummies were of cotton. From this sprang a curious and voluminous discussion pro and con. In the midst of these philosophical discussions, some man conceived the idea of appealing to the microscope, when the question was forever settled. It was then discovered that the fibres of the cotton was composed of transparent tubes, while those of the flax were jointed like cane. The fibre of the mummy cloths were shown to be jointed as in the flax of the present day.

IV. Papers on Practical Education.

1. ADVANTAGE OF A PUBLIC EDUCATION.

The good effects and great utility of early instruction are universally allowed; but we often meet with a difference of opinion, whether public or private education is the most beneficial. This subject has employed the pens of many ingenious writers, ancient and modern; and although much has been said in recommendation of private tuition, as being best adapted to form youth to virtuous habits, yet it is certain that the various passions and affections of human nature, as they begin very early to exert and display themselves, will, if not authoritatively restrained and directed, have a fatal and unconquerable influence over the whole tenor of future life. The influence of parental affection and authority does not always succeed; and then propensities of self-will take so deep a root as never to be extirpated; and the youth, from indulgence, is too often made lastingly unhappy. Liberty unreasonably obtained is commonly intemperately used. Milton, in his "Treatise of Education," very elegantly says, "Come with me, and I will conduct you to a hill-side, where I will point out to you the right path of a virtuous and noble education; laborious, indeed, at the first ascent, but on every side so smooth, so green, so full of goodly prospect and melodious sounds, that the harp of Orpheus was not more charming."

In public schools, the nature and affections of the soul have the fairest exercise; equality is felt, friendships are formed, and literary improvement is pursued with most success; the powers are called forth into exertion from the influence of example, and idleness is avoided by the fear of disgrace and shame; the careless and obstinate heart is led into willing obedience; and it is here youth are inspired with hopes of becoming worthy and distinguished members of society. Sir Joshua Reynolds, in his Discourses, says, that it is generally found that a youth more easily receives instruction from the companions of his studies, whose minds are nearly on a level with his own, than from those who are much his superiors; and it is from his equals only that he catches the fire of emulation, which will not a little contribute to his advancement. With proper guides to direct him, he travels through the most beautiful and fruitful regions of knowledge, the mind meanwhile gradually acquiring freedom, openness, and extent; and if he sometimes find the way difficult, it is beguiled by having fellow travellers, who keep an

even pace with him; for each light dispenses a brighter lustre by mixing its social rays with those of others.

"And thus the youth whom Education leads
Through Wisdom's paths, and Virtue's peaceful meads;
Though in his tender years he thoughtless play,
Nor think his flow'ry Spring will pass away;
Though trifling scenes and trifling toys amuse,
Yet still his course progressive he pursues:
Fresh streams of knowledge all their stores impart,
Wealth to his mind, and goodness to his heart;
The inspiring force of excellence confest,
Blest in himself he renders others blest."

A discerning youth perceives that courage, generosity, and gratitude, command the esteem and applause of all his companions; he cherishes, therefore, these qualities in his breast, and endeavors to connect himself in friendship with those who possess them. He sees, on the other hand, that meanness of spirit, ingratitude, and perfidy, are the objects of detestation. He shuns, therefore, those near him who display these odious qualities, and finds that the true sources of gratification are the respect and affection of his teachers. Here he is necessitated to decide and to act for himself: his reputation among his companions depends solely on his own conduct. This gradually strengthens his mind, inspires firmness and a certain manliness of character.

It is of great importance, as Quintilian observes, that those who are destined to occupy superior stations in society should enjoy the benefits of an enlarged and liberal education; that they should be furnished with every substantial and ornamental accomplishment; and that those who are intended for any particular profession or employment, should be principally directed to such studies as are appropriate to their future position; and, in every rank of life, an attention to the morals of youth should be a primary object; for it is by an amiable disposition, united with cultivated talents, that we secure the affection of our relatives, and the respect and esteem of the world. May we not therefore conclude, that a young man will most assuredly become wiser, and probably more virtuous, by public than by private education? For virtue flourishes in action and in trial. Accordingly, it has been the opinion of successful teachers, from Quintilian to Arnold, that young people attain to a better knowledge, both of themselves and the world, in free and populous schools, than when confined to private tuition in retired life, where we too often see contracted an awkward timidity, or an important self-conceit, for which there is no other apology than the want of experience. To advise a man, unaccustomed to the eyes of the multitude, to mount a tribunal without perturbation; or tell him whose life has passed in the shades of contemplation, that he must not be disconcerted in receiving or returning the compliments of a splendid assembly; is to reason, and to endeavor to communicate by precept, that which only time and habit can bestow.

These truths were poignantly felt by Cowper, who freely owns, in his Letters, "that the want of resolution and manly confidence was a severe check to his progress in life, and prevented his talents being called into action by a conspicuous and honourable appointment."—*W. M. Magazine.*

2. CHARACTERISTICS OF A GOOD COMMON SCHOOL TEACHER.

Communicated to the Journal of Education.

Never slovenly in his appearance; should keep the school house and the ground around it always clean and neat. A teacher certainly deserves to be much censured who neglects his duty in this respect. Is it not altogether likely he will be just as negligent in teaching and drilling his pupils? Also, should be free from all disgusting habits, and if possible from any deformities of body. Nothing should ever appear in a teacher's dress or manner which would lead his pupils or others to lightly esteem or secretly despise him.

Not austere. Should not make his scholars feel afraid to ask him questions; but on the contrary, should rather encourage them so to do. Kind and courteous to friends, enemies, parents, children, neighbors and all. Though politeness costs comparatively nothing, yet it is almost indispensable to a teacher's success. This characteristic will secure the esteem both of the ignorant and intelligent.

Cautious and sensible; possesses a good knowledge of human nature, especially that of children; knows when to praise and when to censure them; knows how to regulate their passions, affections, ambitions, &c.; and also how to manage the opinions, prejudices, &c., of more elderly persons. Works to obtain the good will of all, for "a good name is rather to be chosen than great riches."

At his school, either before or exactly at the time; never late, if there are any means of avoiding it. How can a teacher expect his pupils to be punctual when he himself is not on hand to open the school at the proper time.