HINTS

ON THE

CONNEXION OF LABOUR WITH STUDY,

AS A PREVENTIVE OF

DISEASES PECULIAR TO STUDENTS;

AND ALSO AS THE BEST EXPEDIENT FOR PLACING A GOOD EDUCATION WITHIN THE REACH OF THE POOR;

TO WHICH IS APPENDED,

THE SUBSTANCE OF AN INTRODUCTORY LECTURE, ON MEDICAL EDUCATION,

Delivered in October, 1831.

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PREFACE.

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The brief sketch, now submitted to the public, is designed to excite attention to the important subject of *Manual Labour Education.* Very little has been attempted in this matter in the valley of the Mississippi; although abundant experience, in several of the eastern states, has placed the utility of this plan, beyond the pale of controversy. The very eloquent address, recently delivered in this city, by Mr. Weld, who was educated in the Manual Labour school of Oneida, in the state of New York, was the occasion of this hum-

ble effort. It lays no claim to originality, but is, professedly, an appeal to the good sense of the community, in a concern of vital interest. No apology, therefore, is deemed necessary, on account of the general style, nor for defects in physiological precision, which may meet the eye of a medical critic.

The author believes what he has written, to be strictly true, and, as such, he feels some degree of solicitude for an extensive circulation of the essay. In this desire, he is uninfluenced by motives growing out of pecuniary interest, as he relinquishes any profits that might accrue to him from the sale, to the special use of the Manual Labour School, which forms a part of the *Cincinnati Lane Seminary*.

MANUAL LABOUR EDUCATION.

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The writer of the desultory remarks which follow, is desirous of exciting public attention to a most interesting topic. When we look around us, on the individuals who have passed through all the toils and cares of a protracted course of collegiate study, we discover only here and there, one, whose healthful glow indicates, that the God of nature had given him a constitution, of a firmer texture than his companions possessed, and which, in despite of all the noxious tendencies associated with the midnight lamp, is still the memento of manly vigour. These cases, while they are themes of gratitude, are few and far between. A single glance at the long catalogue of profes-

sional men, cannot fail to present convincing proof, that the prevailing systems of academic education, are destructive of health, and fatal to the brightest prospects of usefulness.—Among our young divines, and those who are now in preparation for the ministry, how few are there, who do not labour under the unutterable tortures of dyspepsia, or the wasting ravages of pulmonary consumption, or of both? And who cannot, in a moment, call to his recollection, very promising physicians, who entered into business under the pressure of one or other of these forms of disease, and, in a few years, have been laid in the narrow house. I attended, recently, at the examination of the dead body of a medical acquaintance, who had been disabled, for nearly three years, by pulmonary disease. The friend, who made the examination, observed, that he and the deceased had studied medicine, with several others, in the same room, and that he had now examined the corpse of the *third* individual of the group, and all of them had died of pulmonary consumption.

That any system can be devised, to prevent men from "going the way of all flesh," is not pretended. But when we remember the great expenditure of time and money that is called for, in order to prepare young men for professional life, and also the destruction of health that is so prevalent an accompaniment of hard study, it behoves us, as patriots, and philanthropists, to make an effort, to arrest the existing evil, and to establish a better order of things.

That something can be done in the business of education, to prevent, in a great degree, the ravages of disease, and at the same time, to extend the advantages of learning more widely among our fellow citizens, is not a questionable topic, but one which has been determined by actual experiment. To accomplish these desirable results, is the aim of those institutions, which are styled *Manual Labour Schools*. They blend active, vigorous, regular exercise, in the workshop or on the farm, with the highest and best devised systems of study. They have given positive proof, that good

scholars can be made of boys, just as they find them, without, in the smallest degree, impairing their health, but the very reverse. As yet, the number of those schools is not large, but it is believed, that the public mind needs only to be enlightened on the philosophy of the system, in order to render it universal. The remarks to be offered, are designed to give a fair, concise, and intelligible view of the subject, so entirely divested of technicalities, as to be comprehended by every man and woman, blest with an ordinary share of good common sense.

That the *Manual Labour system*, is not an invention of yesterday, might easily be shown by reference to ancient history, where its essential features can be discerned at a glance. But, it may serve our purpose better, to adduce some evidence to satisfy the sceptical, that it is not a novelty, even in our own beloved country. And to make it apparent, that the project is not peculiar to the Presbyterian church, and therefore, that it is not one of her original schemes for aggrandizement, it

is proper to say, that one of the earliest advocates of the plan in the United States of America, was the late Professor Rush. That great man was an Episcopalian, but he was also a philanthropist of the first rank. About the year 1790, he published a paper in one of the existing periodicals, "*On the mode of Education proper in a republic*," in which we find the following language. "To assist in rendering religious, moral and political instruction more effectual upon the minds of our youth, it will be necessary to subject their bodies to *physical* discipline. To obviate the inconveniences of their studious and sedentary mode of life, they should live upon a *temperate diet*, consisting chiefly of *broths*, *milk* and *vegetables*. The black broth of Sparta, and the barley broth of Scotland, have been alike celebrated for their beneficial effects upon the minds of young people. They should avoid tasting *spirituous liquors*. They should be accustomed occasionally to *work with their hands*, in the intervals of study, and in the busy seasons of the year in the country."

From a letter addressed by the same illustrious individual, to George Climer, Esq. a distinguished citizen of Pennsylvania, we gather additional evidence of the estimation in which this system of education was held by the writer. The letter bears date, August 20th, 1790, Philadelphia. We extract the following remarks, as having peculiar force. "I would propose that the amusements of our youth, at school, should consist of such exercises as will be most subservient to their future employment in life. These are, 1st *Agriculture;* 2d *Mechanical accupations;* and 3d the business of the learned professions. There is a variety in the employments of agriculture, which may be readily suited to the genius, taste and strength of young people. An experiment has been made of the efficacy of these employments, as amusements, in the *Methodist College at Abington, in Maryland,* and, I have been informed, with the happiest effects. A large lot is divided between the scholars, and premiums are adjudged to those who produce the most vegetables from their grounds, or who keep them in the best order."

"As the employments of agriculture cannot afford amusement at all seasons of the year, or in cities, I would propose, that children should be allured to seek amusement in such of the *mechanical arts*, as are suited to their strength and capacities. Where is the boy who does not delight in the use of a hammer, a chisel, or a saw? And who has not enjoyed a high degree of pleasure in his youth, in constructing a miniature house? How amusing are the machines which are employed in the manufactory of clothing of all kinds, and how full of various entertainment are the mixtures which take place in the chemical arts! Each of these might be contrived on such a scale, as not only to amuse young people, but to afford a *profit* to their parents or masters. The Moravians, at Bethlehem, in our state, have proved that this proposition is not a chimerical one. All the amusements of their children are derived from their performing the subordinate parts of several of the mechanical arts; and a considerable portion of the *wealth* of that worthy and happy society, is the product of the labour of their *little* hands."

"If, in these amusements, an appeal should be made to that spirit of competition which is so common among young people, it would be the means of producing more pleasure to the children, and more profit to all who are connected with them. The wealth of those manufacturing towns in England, which employ the children of poor people, is a proof of what might be expected from connecting amusement and labour together, in all our schools. The product from the labour obtained in this way, from all the schools in the United States, would amount to a sum which would almost exceed calculation.

"To train the youth who are intended for the learned professions, or for merchandize, to the duties of their future employments, by means of useful amusements, which are *related directly* to those employments, will be impracticable; but their amusements may be derived from cultivating a spot of ground; for where is the lawyer, the physician, or the divine, or the merchant, who has not indulged or felt a passion, in some part of his life, for rural

improvements? Indeed, I conceive the seeds of knowledge in agriculture, will be most productive, when they are planted in the minds of this class of scholars."

"I have only to add under this head, that the *common amusements* of scholars, have no connexion with their future occupations.—Many of them injure their clothing, some waste the strength and impair the health, and all prove more or less, the occasion of noise and angry passions, which are calculated to beget vulgar manners. For these reasons, the Methodists, (already spoken of,) have wisely banished every species of play from their college." In another part of the same letter, the writer notices the injurious effects of too long confinement to study, and concludes thus: "to obviate these evils, scholars should be permitted, after they have said their lessons, to amuse themselves in the open air, in some of the *useful* and *agreeable exercises* which have been mentioned. Their *minds will be strengthened*, as well as their bodies relieved by them."

These quotations are adduced to show, that

one of the most eminent physicians, that ever lived, not only advocated the *Manual Labour system* of education, nearly forty years ago, but that he was probably the first in this country, who suggested the introduction of the *mechanical* arts into that system. Dr. Rush was pre-eminently a thinking man, as all his writings amply testify; and his objections to the modes of educating youth, that prevailed in his time, as well as the improvements he proposed, resulted from close reflection and a rational, philosophical view of the entire subject. He contemplated man, as a grand whole, composed of parts, the healthful condition of which was essential, to a state of perfect vigour. He knew that the full developement of these parts was carried on in youth, and that the impressions made on them, prior to the age of maturity were lasting, and fixed, almost unalterably, the physical and mental character of the individual.

The brain, stomach and lungs, are among the more important organs of the human system, and they are associated by ties that

nothing can sever, but the extinction of life. Between them, there is a constant sympathy, or exchange of feeling, so marked and uniform, that the derangement of the one, is a signal for the response of the other. Who does not know, that intense exercise of the mental powers, impairs the appetite, or that the presence of certain articles in the stomach, throws the brain into a tumult, giving rise to headache, or even to apoplexy? These are familiar to all men of observation, and show most conclusively, that every organ has its appropriate task to perform, and that upon the rightful discharge of the several duties imposed by nature on the various organs, depends the condition of the entire machine. Let any one be forced to double duty, and while it will necessarily succumb under the direct action of inordinate pressure, other organs will, indirectly, feel the effects of this unnatural state of things. The provisions of nature for effecting the perfect growth and securing the legitimate action of every organ, are remarkably conspicuous in the infantile

constitution. Thus, the stomach is endowed with the faculty of converting, into substantial nutriment, the milk of the mother, but is inadequate to the due preparation of solid food, or any article materially different from milk, for the uses of the animal economy. We further see, that the infant is instinctively impelled, to seek from the mother the appropriate nourishment, and that the quantity taken in, at any one period, is just equal to present exigency. The stomach craves a regular supply, and that being granted, its desires are satisfied. So exact and felicitous is this arrangement, that, but for the insalubrious quality of the mother's fluids, her offspring would almost invariably be healthful. The fulness of the infantile stomach invites to repose, and the hours of sleep, thus occasioned, favour the perfect digestion of the nutriment, and thus produce a repetition of the natural appetite. Even the cries of a new born child, if it be not diseased, are a necessary preparative to perfect respiration, and the complete developement of the important organs contained in

the chest. The apparent distress of the infant, in its first acts of breathing, is only a faithful response to the pressing calls of nature. She raises her voice, and makes known her necessities; the responding cry is but a proof of the wisdom and goodness of the God of nature.

When children are first sent to school, more or less of violence is generally done to their delicate constitutions. The transition from active movements in the open air, to a precise posture of the body for hours, in a circumscribed spot, the atmosphere of which is loaded with the exhalations from fifty or more lungs, is an insufferable evil, which, although formerly very general, is likely to be frowned out of civil society. The *infant school system*, as it is called, promises great things for the early and philosophical education of our children. It preserves, in a great measure, those habits of bodily activity, which are peculiar to the growing child, and which nature sternly demands.

But when our young men are sent to college,

all the rules of propriety, which the infantile state proclaims, as essential to health, are violated or forgotten. The student, born and brought up in the farm house, pursues a common course with him who has been nurtured in the lap of affluence. Ambitious of excelling, all the ordinary hours of study are devoted to intense reflection, and

"Tir'd nature's sweet restorer, balmy sleep,"

is robbed of more than half her due. If any relaxation be had from the labour of thought, it is in the dull, sauntering and listless stroll up and down the village, or across the fields, which instead of refreshing the system, seldom fails to augment the debility, already existing. The hardy youth, whose days, until now, were spent in the toils of the farm, has parted with his vigour, and already groans under the inexpressible uneasiness of Dyspepsia. Six months ago, he was full of health and sprightliness, and could endure the fatigues and enjoy the pleasures of agriculture. He could even then, at the close of the day, enter into animated discussions at the fire-side, or take a share in

the debates of the spouting club, in the neighbouring town. Nay, more, fondness for reading useful books was gratified, by stealing every leisure hour, in the perusal of the best works in the village library. Such a man I knew, and the country at large knew him well. He had not enjoyed the advantages of a liberal education. His tuition was circumscribed by the narrow limits of a single year, and at a country school. But he had a vigorous mind, and a vigorous body too. The more he read, the more he wished to read, and when stopping in the field to allow himself and his horses a little repose, beneath the wide-spreading oak, the passing moments were spent in reading some favourite author, which he was wont to carry in his pocket, or in his hat. Thus he read more than any ten men of wealth and leisure in his neighbourhood, and, as a matter of course, acquired a larger stock of useful knowledge. The legislature of his native state, and both housses of Congress, have often witnessed the powers of this self-taught individual. He excelled his neighbours, in

usefulness, because he cultivated his mind, while engaged in tilling the ground; and his frame did not sink beneath the pressure of intense mental application, because he blended active manual labour, with study. Let such an individual be taken from his farm, and all its salutary tendencies, and with a soul panting after literary pre-eminence or professional fame enter the walls of a college, and enrol his name on the list of its inmates. He has now bid adieu to all the invigorating charms of rustic life, and has placed his feet on an unbeaten path, to make an experiment, which is to involve life and future usefulness, in its issue. He commences his exercise, is studious to excess, charmed with novelty, and burning for higher attainments. The whole energies of the man are concentrated in a single point. To solve a problem, he will forego the regular meal, and that, not once in a month, but very frequently. He sits half bent over his book, at midnight, and after having reluctantly turned into his bed, the theme of his last study haunts his imagination,

and dreams obtrude upon his scanty moments of repose. Once, he could have fallen on a bed of straw, and quickly lost himself in deep slumber, and slept most soundly till the day dawned; but those happy times are gone. When he rises, he feels unrefreshed, and the bell that calls him to his meal, has no charm in its sound. View him at the table, and compare him with himself, as he was when the year began, and you are forced to the conclusion, that nature has already received a shock, from the effects of which, there is scarcely a ground of hope, that restoration is possible. He has no relish for food, and what he takes, adds to his uneasiness. A sense of weight in his stomach, flying pains in that organ, more or less intense, disagreeable eructations, and a host of nameless things follow in mournful train, to make him a subject of *Dyspepsia*. So certain is this result, under the circumstances supposed, that young men are sometimes silly enough to think they cannot merit the title of *students*, unless they are possessed by this *bane* of students; and they seem

to court at least a slight acquaintance with it, vainly calculating on the native vigour of their constitutions, for final immunity. A robust and healthful youth, who had never, on his native hills, heard the name of this disease, went to an eastern theological seminary, to prepare for future usefulness. He had been there but a week or two, when he learned, that those around him, with perhaps an exception here and there, were labouring under a morbid condition, of which he had heretofore been ignorant, and whose very name had a sound so novel, that he found some difficulty in catching it. At the end of the third or fourth week, in reply to the usual salutations, he declared, that he really believed, he was getting, what they called *Spepsy*. The poor fellow was not wrong in his judgment, in this matter, as the result made manifest. Disease fastened on his lungs and stomach, and debility took possession of a frame, that was once full of energy and vigour. The rest of his history is easily told, for in less than three years, the grave-stone guarded his mouldering dust.

If such are the tendencies of close study, apart from daily vigorous exercise, in young men, whose early habits have been well fitted to "brace their nerves," and to infuse energy into their muscles, what can be expected of those, who having been dandled in the lap of ease, have no inherent energies, to resist the fearful inroads, which long continued mental exercises make upon the tenement of clay? The wonder is, not so much that they fall beneath a burden, which they have no power to sustain, as that they do not sooner fall.

Physiologists, or those who study the laws of the animal economy, know, that all the healthy motions of the human system, are dependent, more or less, on the regular and equal distribution of nervous power. If the nerves going to any organ be cut, or injured by a wound or other cause, so that the nervous influence, whatever be its nature, is impeded wholly or in part, the organ will either cease to perform its appropriate function, or it will act feebly and imperfectly. A state of equi-

librium in the nervous power is, therefore, essential to that condition, which is denominated, health. The devoted student acts upon the presumption, that strength and vigour of intellect, are proportioned to the quantity of nervous power accumulated in the organ of thought. He appears to be indifferent about the abstraction from other organs, of their due quantum of nervous energy, until the effects admonish him, of the dangers by which he is surrounded. In thus concentrating the nervous power in the seat of the mind, he destroys the healthful equilibrium, to which I have already adverted; and as the stomach is, ordinarily, the first organ to sympathize with, or to feel the effects of, this derangement, so the injury it sustains, is correspondingly great. This organ is unfitted for the end, for which it was originally designed, when, from any cause, its due proportion of nervous power is not employed, in carrying on its functions. Under these circumstances, the solvent liquor, usually called gastric juice, is not secreted, as it should be, and the food is not digested, in a proper manner, if at all.

There is some analogy between this concentration of nervous power in the seat of the mind, and the accumulation of energy in the muscular system. Thus, porters, who carry very heavy burthens in their hands, or on their arms, acquire facility in their business, gradually. After habit or use has infused additional power into their muscles, they can raise, with ease, a weight, which it would have been impossible for them to have moved, before they engaged in their present occupation. Rope dancers, jumpers and others, by long continued custom, are enabled to perform muscular feats, which excite surprise in the beholder. Now as all these results are independent of the new creation of a single additional muscular fibre, it is plain, that the energy acquired by degrees, must be borrowed from the grand sources of nervous influence. To such a state of perfection, is this education of the muscles carried, that the individual is said to be *all* muscle; by which is meant, that all the force or energy of the man, is concentrated in his muscular system. If such an one be carefully examined,

it will be found, that, in point of intellect, he is imbecile, or at all events, very limited in mental capacity. Doubtless, there are exceptions to this rule.

Again; we see a hard student, alive to the dangers of his condition, throw aside his books, and make a temporary escape to the country. Even the ride, though it be a few miles, invigorates him a little. His next meal is received with a relish that amazes him, and he is conscious, that the gentle exercise of riding has been beneficial. But he resolves to go into the garden or on the farm, and to labour, to the extent of his feeble powers, in the hope of being still further improved. His first efforts are like those of a child, and he is obliged to rest frequently, and to quit the field long before the sun goes down. The next day he works more actively, realises less fatigue, and is conscious that his appetite is keener. Day after day, he becomes more and more habituated to the toil, and when the hour for repose arrives, he finds it an easy thing to sleep, and rises from his bed, refreshed and invigorated.

In this way, the diseases peculiar to hard students have been occasionally cured, or so far mitigated, as to be the occasion of very little inconvenience.

In strict accordance with these views, are the following remarks of one of the most interesting writers of the present age.* "It is well known," says he, "that one impression, whether mental or corporeal, will often supersede, or at least weaken another. This principle is sometimes available in the cure of dyspepsia and hypochondriasis, especially when resulting from moral causes. If the patient's circumstances will permit him to engage in any pursuit that can occupy his attention and *exercise his body*, it will prove one of the most powerful means of counteracting the original cause, as well as of removing its effects. Unfortunately there are but few, comparatively speaking, whose circumstances will permit of the embarkation in any new pursuit. Yet it is in the power of a great many, to engage in

*Dr. Johnson on the Morbid Sensibility of the stomach and bowels.

a *systematic exercise of the body*, in some mode or other, if they will only summon resolution to make the experiment. The debility and exhaustion which supervene on the most trifling exertion, deter most people from persevering, and, therefore, the corporeal exercise must be commenced on the lowest possible scale, and very gradually increased. Thus, a person whose sedentary occupations confine him to the house, might begin by going once to the top of the stairs the first day, twice the second day, and so on, till he could run up and down the same path, some hundreds of times in each day. It is wonderful what may be accomplished in this way by perseverance. I have known people who could not go up a flight of steps without palpitation and breathlessness, acquire, in a month, the power of running up to the top of the house, one hundred times in the space of an hour, with scarcely any acceleration of the pulse or respiration. If the exercise can be taken in the open air, it will be still better, and the quantity may be daily increased. This task, which should be repre-

sented as an infallible remedy in the end, must be performed, at first, when the stomach is nearly empty; and when an increase of muscular power is acquired, it may be performed at any time, even immediately after dinner. By this systematic exertion of the body, with very spare diet, most cases of dyspepsia might be completely cured among the middling and lower classes of society."

The same writer, in noticing the salutary effects of travelling, as an important species of exercise, for the removal of dyspeptic affections, relates instances of the most astonishing changes brought about in a very short time. "The descent," says he, "on the Martigny side of the mountain, was the hardest day's labour I ever endured in my life, yet there were three or four invalids with us, whose lives were scarcely worth a year's purchase when they left England, and who went through this laborious and somewhat hazardous descent, sliding, tumbling, and rolling over rocks and through mud, without the slightest ultimate injury. When we got to the goat-

herds' sheds in the valley below, the heat was tropical, and we all threw ourselves on the ground and slept soundly for two hours, rising refreshed to pursue our journey."

These remarks, it will be seen, relate to the salutary influence of exercise as a *remedy* for dyspepsia and its concomitants; and the inference seems to force itself on the mind, that if such be the operation of this agent, as a means of *cure*, it must be equally proper as a *preventive*. To the latter department of medical science, I have always been partial, and owe this feeling, perhaps, to a favorite maxim of my worthy preceptor,* that *an ounce of prevention was better than a pound of cure*.

The *manual labor system* has no special affinity with the *remedial* treatment of the physician, but aims at the preservation of that equipoise of all the functions of health, which is essential to the rare but attainable condition, denominated, "a sound mind in a sound and vigorous body." It contemplates man, as an active being, made of parts, each of which

*Joseph Parrish, M. D. of Philadelphia.

must be preserved in its appropriate state, to the end that the whole may exhibit regularity and order. Hence, it proposes that the brain shall be allowed frequent respites from its labours, and that the energies of the student shall be, for a season, accumulated in his muscles. In this way, active exercise proves an agreeable relaxation, and the mind resumes its task with augmented vigour. The balance of nervous power is thus restored to the entire machine, and hence, we see, as an uniform result of exercise, a gradual return of all the functions to a healthful state.

We have already hinted at the defect of nervous influence in the stomach and lungs of hard students, as the real cause of their peculiar diseases. It is not the design of these remarks, to decide which of these morbid affections usually attacks the system first, or whether the one may not induce the other. It is enough for present purposes to know, that the most accurate physiological experiments have rendered it certain, that these diseases are actually dependent on a failure

of nervous influence. "We have seen," says Dr. Philips,* "that withdrawing a considerable part of the nervous influence from the stomach and lungs, deranges the digestive powers, and produces great difficulty of breathing." And if this proposition be accredited, as it unquestionably must, where shall we look for positive evidence of this *withdrawing of nervous power*, if not to the secluded apartment of the student, who seems determined on making his brain the grand focus of *all* his powers? His habits are destined to rend the ties which associate the principal organs, in harmonious action, and to derange that peaceful equilibrium of his nervous energy, the loss of which is the unfailing signal of war, among the "elements of his constitution."

How then does regular exercise on every week day, protect the student who is a stranger to fixed disease, from the ordinary, baneful consequences of hard study? I answer, precisely on the same principle, which makes exercise salutary to the man already labouring

*See his Experimental Inquiry.

under the effects of protracted mental labour. In the former case, there is a transient abstraction of nervous power from the stomach and lungs, as the necessary result of close study for one, two, or three hours; and exercise in the shop or field, observed with the same regularity and precision that is evinced in relation to the season for mental application, brings back the lost nervous influence, restores the equilibrium, and guarantees to the student, the privilege of eating and drinking and breathing as freely as necessity requires, and, at the same time, of urging his delightful course, up the hill of literature and science.

If we turn our attention for a few moments to the Indians of North America, and to the earliest settlers of our country, at a time when ardent spirits did not curse the land, we shall discover that dyspepsia and pulmonary consumption were unknown. Now the principal occupations of those individuals consisted in fishing, hunting, the labor of "subduing the earth," felling forests, erecting suitable dwellings for their families and cattle, and making

distant journeys in all kinds of weather, all which had a direct tendency, to maintain that state of equilibrium, which is essential to health. Will it be said, that the native Indians and the early settlers, were strangers to the exercise of mind? I grant that for the most part, the evidence is in favor of this position. But who has forgotten the fame of Logan's eloquence, or the proofs of manly intellect furnished in the person of Daniel Boone?

Let us further inquire into the history of ship and house carpenters, farmers, smiths, sailors and soldiers, and all those artificers whose business requires great exertions of strength in the open air, in all seasons of the year, and the result will convince us, that these classes of men are, generally, strangers to dyspeptic and pulmonary affections. Contrast their condition, with the sallow, cadaverous look of tailors and shoemakers, who have plied their respective trades for ten, twenty or thirty years. You find the latter groaning under the distresses incident to consumption

and indigestion, and they will tell you, that their trades have destroyed their constitutions. They will even boast of the vigorous frames of their parents, and assure you, that none of the evils of which they complain, are hereditary. Close confinement, an unnatural posture, and a variety of irregularities which war with the healthful actions of the human system, have been the occasion of all their distress. Turn from this picture to the other description of working men, and you will discover that the laborious exercise of all their muscles, in the open air, has not simply preserved the just balance of their animal powers, but counteracted successfully, the native tendency to disease, to which some of them seemed to be destined, by the laws of hereditary predisposition.

But the Manual Labour System has already proved all that I am contending for. I know a youth who entered an institution, based on this system, with sad forebodings as to the issue. A cough of long continuance, imperfect digestion, and general debility combined to

fill his anxious parents with alarm. The school was opened, and the excellencies of the plan were strongly urged upon him, and "hoping against hope," he became one of its inmates. With all the zeal that novelty sometimes inspires, he entered the workshop, at the appointed hours, or toiled on the farm, as inclination invited. He made good advances in his studies and rapidly improved in health; and on visiting the Institution some six or nine months after his admission within its walls, I heard the pleasing intelligence from his own lips, that he was quite well. The records of the few *Manual Labour Schools*, now in operation, can furnish ample, living testimony, which is not to be resisted nor gainsayed, of the superiority of the plan which connects active, vigorous exercise, with study. But I ask, with all due respect, for a single case of recovery from the incipient stages of dyspepsia and pulmonary consumption, by the mere removal of a student from one college to another, however distant and eligible its location, provided there was no change in the system of education.

I grant that the effect of new scenery and associates, is calculated to exert a salutary influence, but it is only temporary. The novelty soon subsides; the old routine of study is pursued; the intellect acquires vigor at the expense of the stomach and lungs; and by the time that the education of the mind is finished, the exhausted body is ready to drop into the grave.*

In addition to what has been said in relation to the effects of the Manual Labour System, on health, it has another feature, which commends it to all the friends of our republi-

*Any kind of labour is preferable to the *gymnastic exercises*, that have been appended to some of our seminaries of learning. These are never a source of pecuniary advantage, and hence, they cannot assist the indigent student in defraying the cost of his education. To the sons of the rich, only, can they offer any desirable benefit, not enjoyed in the old-fashioned systems of education The charges are altogether above the reach of the poor, and if all schools were conducted on these principles, a large portion of our youth must needs be excluded from the walks of literature.

The exercises of the gymnasium, are, also, attended with some hazard of personal injury; and not a few instances might be cited of very considerable

can government. It places the advantages of a good education within the reach of thousands, who have been unable to obtain this blessing. The prevailing system requires so large an amount of money, that the youth in the humbler walks of life, are precluded from the benefits which they proffer. The state governments endow colleges with a liberal hand, it is true, but their munificence reaches not to the sons of comparative indigence. The necessary result is, that those who possess the most vigorous health, because unhurt by the luxurious customs of the rich, are doomed to ignorance, or, at all events, are unsupplied with the means of procuring a thorough education. Thus, a broad distinction is kept up

evils, resulting from this feature. There is, besides, no acquisition of physical energy that can be applied to the ordinary concerns of life; no acquaintance formed with the uses of any mechanical or agricultural business, which may be turned to good account, after the student shall have mingled with society and be surrounded by a growing family. These are important argumeuts against the gymnastic schools; and they have already operated so forcibly, as to bring the system into disrepute.

between the rich and the poor, which is foreign to the spirit of our happy government, and which ought to be excluded with all possible speed, as a bane to the peace and prosperity of our common country.

The Manual Labour System of education comes in most opportunely, to obviate the existing evils. It opens the door so wide, that all may find admittance, who are willing to employ the powers which a kind Providence has bestowed, in precisely such a manner as comports with their best interests. *The Manual Labour System is, emphatically, the poor man's friend.* It places him on an equality with his wealthy neighbour, and in a sense vastly more important, than that which arises from considerations of a pecuniary character. It elevates him to the level of mind, which seemed to be the prerogative of money, and now and then, it carries him above that level.

But to deal in terms more directly in point, let it be known, that the Manual Labour System of education, requires of every student, at least three hours of industrious labour, ei-

ther in a workshop attached to the school, or on the farm which constitutes a part of the institution. This requisition is universal, so that no distinction is made between the sons of rich and poor men. All must labour, because active exercise is essentially necessary to counteract the fatal tendencies of close study. It is a small matter, in the view of this system, to develope the mental powers, irrespective of the physical energies. It regards a well furnished, vigorous mind, and a prostrated, worn-out body, as an unequal yoking together of things, discordant in their very nature. It sets too high an estimate on time, to allow it to be wasted in the improvement of a mind, which must owe its lustre, to the wreck of all the powers of the tabernacle in which it is located.

But although every student must work with his hands, for a given time in each day of the week, and as a necessary consequence will realise a developement of bodily vigour, correspondent to the improvement of his mind, yet all are not obliged to make the same appropri-

ation of the avails of their labour. For, independently of the gain from active exercise in the shop or field, in point of health, an accurate register of the quality and quantity of the work accomplished by each student, is faithfully preserved; and in some instances, the sum total is sufficient to cover all the expenses of tuition, boarding, books and part of the necessary clothing; while in the majority of cases, a considerable portion of the whole expenses of the student is actually defrayed, by his own personal exertions. The result will, as a matter of course, depend very much on the native talents of the individual, his inclinations, the activity of his movements, and a variety of considerations, which it is needless to enumerate. A lad, who has a fondness for the tools of a carpenter, or for the implements of husbandry, and who is possessed of that towering ambition which young men sometimes evince, will realise no difficulty in meeting all his necessary expenses. In this way, the parent, who has not pecuniary resources sufficient for the complete

education of his sons, is furnished with an opportunity of advancing them to eminence; and society is thus blessed with useful members, who but for this instrumentality, would have been unknown and unprofitable, if not ruinous to the community.

Although the sons of the affluent, may not choose to receive the avails of their labour in money, they actually gain that which wealth is too poor to purchase. They acquire correct moral sentiments, which are to give them character and weight in society, and to make them respectable citizens. By laboring at the side of the poor man's son, day after day, for one, two, or three years, they forget, by the very laws of habit, those ridiculous distinctions between the mechanic and the gentleman, which polluted their youthful minds, in former times. And by thus becoming identified with the working-man, and actually pleased with his toils, they are the better prepared to mingle with the labouring classes, after their term of study has terminated. In this way, they acquire habits and feelings

which incorporate them with society, so that they feel a oneness with the community around them, and an identity of interest, which is seldom experienced by the wealthy youth, who has trode the halls of a college, based on the old plan of education.

In every aspect, in which we regard the *Manual Labour System*, it rises in real dignity and importance. It is destined to preserve our country from the disastrous consequences of those odious distinctions which money creates, and to make us an enlightened, free and happy people. It is yet to be the great fountain of knowledge; the perennial source, whence gospel heralds shall be sent forth to all lands, and science flow to bless the world. It comes not to the public with the glare of pageantry, but in simplicity and plainness. It courts investigation, it solicits inquiry. It calls upon parents to have a jealous care of their sons. It appeals to humanity, and while weeping over the wreck of constitutions sacrificed on the altar of prejudice and error, it proffers a rational and certain remedy.

The importance of a good education to professional men, cannot be fully estimated. That any should ever be permitted to enter into the *learned* avocations, as they are often called, *without learning*, is indeed a paradox, which seems to be a peculiarity of this Western country. And yet, when pleading for a sound preliminary education, as essentially necessary to those who desire to prosecute medical studies, I have been met with the strange, and I had almost said, imbecile objection, "that owing to the sparseness of population, it is impossible for young men to be initiated into the elementary principles of a *common English education*, in the wilderness of the West." Yes, this plea for ignorance has been made once and again, as though it were not better for society to be without doctors, than to have men imposed upon the community, as accomplished and learned, merely because their diplomas make such affirmations, while in honest truth, they cannot translate the lines on their parchments, nor spell the words correctly, after they have been anglicised. Let

it not be supposed, that I am dealing out slander by wholesale against the profession. I know there are honourable exceptions, but it is matter of regret, that they are, comparatively, few in number.

That difficulties may have existed to prevent the acquisition of a good education, I think is quite probable, but those times have gone by, and the man who now intends his son for professional life, and yet suffers him to remain in ignorance, even of his own native tongue, is unworthy the name of a patriot, a philanthropist, or a good citizen. The *Manual Labour System* throws itself in the chasm, between barbarous ignorance, and classic learning, and he who will not avail himself of its advantages, ought to be permitted to grovel in the dust; and the roll of no profession whatever, should be disgraced with his name. It is high time for a revolution in these matters. Ignorant men have been honoured by degrees from respectable colleges, so frequently, that custom seems to have established a law, that none shall be refused their honours, on ac-

count of a defective *English* education. As to *classical* learning, that has long since been laid on the shelf, as unimportant, or useless.

The period has at length arrived, when young men, who offer themselves as students of medicine, can no longer plead, the want of opportunity to improve their minds. Even the poorest youth, whose aspirations tend to the temple of Esculapius, may obtain, in a Manual Labour School, such an education as will not only qualify him for the duties of professional life, but prepare the way for eminence in a calling, in which none can be conspicuous, who attempt to rise on a foundation of sand and stubble.

Let it not be imagined, merely because it was *in my line* thus to write, that these remarks are applicable only to physicians. They bear with equal force, to say the least, upon the bar and the pulpit, and apply to the case of every man who would presume to teach in any department, affecting the present or future well being of society; or who would offer his services, as a conservator of the property,

peace and comfort of his fellow-men. It is because of my better personal acquaintance with the modern history of my own profession, that I have ventured to handle it with some severity, and have resigned to others whose position would make the task more becoming, the application of the same truths to the other learned professions.

Should these hints fall into the hands of any who have sons, destined by parental partiality, or it may be, by sad mistake, to enter one of the learned professions, let me entreat them as they value the future characters and reputation of their offspring, to place them, early, within the happy precincts of a *Manual Labour School.* They will thus give them a treasure, far more valuable than houses or lands, and their memory will be cherished with the fondest affection, when their dust shall be identified with the clods of the valley.

In the CONCLUSION of this essay, I propose to offer a few plain suggestions touching the several species of Manual Labour proper for students, and the manner in which their working exercises should be regulated.

These species have very naturally divided themselves into two grand classes, growing out of the fact that apart from what is strictly called the professions, no greater scope was admissible. The various mechanical arts and the pursuits of agriculture, constitute the daily occupation of a large majority of our fellow citizens; and as many of the former, and the whole range of the latter, may be advantageously incorporated with the mass of information acquired by students, there is a fitness in selecting from these, such as may be most useful in the daily walks of life. It is probable that the trade of the carpenter has a greater adaptedness to the wants of society than almost any other, and hence its introduction into Manual Labour Schools, generally. Every one knows, that the facility acquired in the use of edged tools, by those who successfully attend to this mechanic art, gives a peculiar fitness to engage, in a greater or less degree, in many other occupations that require the use of tools. Thus the transition from making pine boxes, to coopering, is not so abrupt that an individual

may not successfully make it; and localities offer in which the manufacture of barrels is more productive to the student, as a source of revenue to meet the expenses of tuition, than almost any other business.* The lad who has become familiar with planes, and saws, chissels, hatchets, and gimblets, in the formation of various articles of carpentery, will easily learn the use of those tools in other departments of the mechanic arts. But it is not only on these accounts that the trade of the carpenter is an advisable appendage to a Manual Labour School, although these are important. Students are destined to be heads of families, and may be placed in circumstances, in after life, where a knowledge of the use of tools may be of great advantage. Thus, a man who has received his education at one of these improved seminaries, may see his way clear, to add to the thousands who are removing to the great Valley of the Mississippi. He may, in the course of Providence,

*The institution near Rochester, New York, is proof of this.

be directed to a spot in the wilderness, so far remote from the comforts and luxuries of refined society, that he will instantly perceive, that his own family circle, must for a while, be the centre and circumference of all his worldly desires. He is impelled by dire necessity, to put forth his own energies, and under such circumstances, how fervently will he bless God, that his lot in early life, was cast in a *Manual Labour School*, where he learned how to wield the axe and the jackplane, as well as the best methods of making the soil yield its increase.

Moreover, the professional man is liable to a variety of misfortune, by which he is unable to obtain the means of supplying a family. It may be, that a sad mistake has been committed by his parents or guardians, in placing him in a shhere for which nature never designed him; and hence, be his efforts never so great, he is altogether unsuccessful. So, also, the dispensations of Providence may oppose insuperable barriers in the way of professional advancement. I know an individual, who

was admitted to the bar, with fair prospects, and who actually acquired a respectable share of business, and never dreamed of a reverse in fortune. But presently he lost his sense of hearing, to such an extent as to be wholly unfitted for the practice of the law, and yet his general health was vigorous, and he in the prime of life. What was to be done? He had a family looking to him for support, yet conscious that the prop, on which their hopes had rested, was gone. The unhappy man resorted to his pen, but, alas! nature had not cast him in the mould of authors; and he is destined to pine away, beneath the pressure of mortified pride and the scorpion sting of disappointment. Would that this picture presented an anomaly in the history of professional men? alas! alas! its tragical features are so often witnessed, that but for occasional varieties in delineation, one might suppose it had been stereotyped.

Over all such educational defects, the Manual Labour System has gained a victory, and it is destined to fill the land with men whose phy-

sical resources shall give energy and impulse to their mental efforts, and make them useful in society, in any region, and under all circumstances. These remarks are, of course, predicated of men, who practice the duties enjoined by the gospel, or who are, in common parlance, men of virtue and uprightness. Let such persons learn by sad experience, that they are out of place, whether in the pulpit, at the bar, or in medicine, and they will find a happy refuge in the toils of a farm, or if needs be, in the use of tools which were familiar to their boyhood. They learned to labour with their hands, in youth, and have felt what it is to earn bread by the sweat of the brow; and therefore, they recall with joy and gratitude, the peaceful seasons, when labour and study sweetly alternated with each other, were preparing them for vicissitudes, which the providence of God had in store.

A question is often propounded, in relation to the choice of labor, to be blended with study, and I grant that it is an important prelimi-

nary in the arrangement of every Manual Labor School. It is one, moreover, about which there is not a uniformity of opinion; some preferring mechanical occupations, and others, the business of agriculture, or horticulture, which is virtually the same thing. Agreeably to the views I entertain of the whole subject, I am decidedly of the opinion, that every institution of the kind should be located on a farm, within convenient distance of a town or village, where produce would find a market. This arrangement could not fail to lessen the actual expenses of the establisement, for it would have within itself many sources of supply, for which the full market price must be given by those schools which embrace no species of labour, but that which is connected with the mechanic arts, and which require less than an acre of ground for their convenience. The farm should be entrusted, chiefly, to the direction of a practical agriculturist, who, besides his ability to work the land to the best advantage, should have the tact of instructing others in the same business. A surplus of produce

could always be disposed of, in such a way, as to bring more or less of actual gain to the concern.

In close proximity to the school-house, there should be erected one or more commodious workshops, sufficiently large to give a bench to every student; and a superintendent should direct all the operations therein, and give the necessary instructions. He should exert a careful vigilance over the younger students, and cause them to become familiar with the less dangerous tools, until by experience, they might be able to judge for themselves.

It is plain, that in every school, that species of mechanical art should be introduced, the products of which would yield the largest amount of clear profit, and this will depend very much on the location of the school, and various contingencies, the due observance of which, will always fall within the province of the Board of Directors. It may occasionally happen, however, that a youth may enter the school who has a peculiar fondnes for a particular branch of the mechanic arts, and who

had already made some good proficiency. In such an instance, individual predilection should be gratified, for it almost invariably argues well for final success. By thus following out the native mechanical propensity, a degree of perfection has been sometimes attained, which dull, plodding industry seldom realizes.

Every one is aware, that agriculture is an occupation, whose pursuit is directly affected by changes of weather. Thus, in the season for planting corn or potatoes, the labour is suspended by a fall of rain, and in the event of a succession of wet days for a week or longer period, the student would be deprived of the salutary benefits, as well as the pecuniary advantages of toil in the field. Not the farmer only, but every citizen will perceive the applicability of these remarks, and the solid objection they offer to the introduction of agriculture into the manual labour system, exclusive of mechanical operations. The latter can be attended to in all seasons, and in all conditions of the weather, and with perfect regularity.

But I prefer, that the student should labour both in the field and the workshop; and many reasons might be assigned for this preference. There are few locations in which the work, actually accomplished by a large number of students, in any of the trades, could find constant and good sale. To cut up wood or other materials merely for the sake of labour, would not comport with the entire design of these institutions. The labour must be of some pecuniary advantage, as well as a means of preserving health. Now it would appear altogether feasible, so to apportion the working hours of the students, as to appropriate to agriculture, very advantageously, those particular seasons, in which there is the least demand for the articles made in the workshops. Thus, by a judicious system of economy in relation to time, a most felicitous alternation of agricultural and mechanical labour might be accomplished.

I think, moreover, that this plan will be found to promote health and vigour, both of body and mind, in a higher degree, than me-

chanical labour, alone, can effect. The workshop is, from necessity, a confined place, and the materials and products are almost constantly of the same kind. It furnishes, to be sure, a change of scenery and occupation, and is very good so far as it goes; but it wants that power to impart energy, buoyancy, and vivacity, which seems to be inherent in the hardy pursuits of agriculture. The field is constantly presenting a new aspect, and every thing around indicates that tendency to maturity, which the exercise of the student is designed to promote in his own system.

Something may also be gained by dividing the labour-hours of each day, into three parts; not that such a division should form an indispensable feature in the discipline of the school, but that it should enter frequently into its arrangement. Thus, in the warm season of the year, an hour might be employed in labour, soon after rising from bed, either in the shop, field, or garden. I know from experience, that nothing tends more powerfully to excite an appetite, than the agreeable exer-

cise of gardening; and I venture to recommend it to every professional man, as one of the best expedients for palliating dyspepsia and other affections, so frequently the sad inheritance of the studious.

In like manner, an hour might be appropriated to labour, immediately before the period of dinner, and another in the same way, to precede the call to tea. Thus a relish for the regular repasts would be acquired; and in the winter season, especially, this system might be practised every day. The duties of the workshop have nothing of that urgent character about them, which seems to demand the sacrifice of other engagements, as is the case with agriculture. The saw and the plane may be plied to the last minute of the allotted hour, and the work may be suspended, without loss; but in agriculture it is not so. The harvest field, when the tempest lowers, and the storm is gathering, puts in a claim, which can not be resisted. It would seem, therefore, that in this division of the labour of each day, into three parts, the exercises of the workshop

ought to be preferred, especially if it be limited to the winter months.

In all this, however, much will depend upon the constitution, vigor, and inclination of the student; and it will form no small portion of the duties of the *Principal*, to judge, in view of all the premises, what will best comport with the welfare of each pupil committed to his charge.

But whatever may be the details of these arrangements, let the system itself be persevered in. It is high time, that the experiment were made, throughout our country, and all over the world. Talents of the highest order have been sacrificed long enough at the shrine of custom, and on the altar of prejudice. Let these immolations cease forever; and may our eyes be permitted to behold the cheering exhibition, in every village, of a well conducted *Manual Labour School*.

THE PRELIMINARY EDUCATION

REQUISITE TO THE STUDY OF MEDICINE.

Delivered as an Introductory Lecture, Nov. 1, 1831.*

The practice of opening a course of lectures in a medical school, by a series of introductory addresses, has every where become fashionable. It serves the happy end of forming useful associations between the public at large and the profession, both in its senior and junior aspects. By giving a favorable opportunity for a developement of the medical character, in all its relations, a community of interest is established, an interchange of good feeling is insured, whence results, as a natural consequence, a just estimate of the importance and value of the profession. Were all our collegiate operations cloistered in the lecture room, where none but medical men and

* A principal motive for publishing this lecture, is to correct any erroneous impressions that may have been made by misrepresentations of its true import.

candidates for medical information might associate, the dark designs and half demoniac movements, ascribed in olden time to the order of Esculapius, might still be charged upon us. I rejoice therefore, that, by common consent, the greatest possible publicity is given to the Introductory lectures of our medical institutions. The practice is congenial with the republican spirit of our country, which recognises no lawful reasons for the concealment of truth, but courts its exhibition, and invites it to front the full blaze of the mid-day sun.

An Introductory has usually been regarded as a preface, or exordium to the course of lectnres, of which it seems to be a kind of pioneer; and the lecturer has often felt himself confined to a historical detail of the science, which it is his province to teach. This very circumstance has contributed, not a little, to make introductory addresses, unpopular. A narration of the rise and progress of any branch of medical science, however interesting to professional men, has few, if any charms

for the great mass of society, who necessarily feel a deep interest in the practical application, at least, of the principles of medicine. Hence, arose, that departure from long established usage, which, having acquired the sanction of celebrated men, is our warrant for addressing you to-day, on a theme which has no special relevancy to chemistry, but whose bearing, on all that is embraced in the medical character, must be apparent to every individual in this respectable assembly. There are points involved in our profession, of which every intelligent citizen is a competent judge; in the right decision of which, every one has an interest, broad as his being and momentous as his life.

If it be true, that the Valley of the Mississippi, is to give law to this great empire, is it not of the last importance, that in the flourishing metropolis of that Valley, science should rear her towering crest, and the laws of philosophy exert their salutary influence on all her population? Cincinnati is a sort of central point, to which the philanthropist

the christian, and the patriot, each casts an anxious eye, and from which, streams of weal or woe are destined to pursue their meandering course, and to infuse into unborn millions, their characters for future life. Here the untold posterity of western America, is destined to receive its impress, and if the likeness is to be a faithful copy of the original, how great should be our efforts, at this early period of history, to lay a solid and a sure foundation, and thereon to erect a superstructure, over which the men of after times, may gaze with admiration, and bless the memory of those, who laboured to rear the noble edifice.

I need not tell you, that knowledge is power, for every individual within the sound of my voice, is aware of this important truth. But, that power or influence may be brought to bear efficiently upon the best interests of society, the knowledge which constitutes its basis, should be of the purest and most refined order. All the institutions that have existence among us, as well as those that are

contemplated, should be associated in character and energy, with our highest expectations of the future glory and greatness of the Western States, and of our common country. We should ever remember, that a good education is among the best guarantees of future eminence, and that no people can become truly great, in whose estimation, learning holds an inferior place.

The profession of medicine occupies a conspicuous seat in the catalogue of agencies, by which the prospective glory of our country is to be consummated. Its importance is too highly appreciated, to require any laboured effort on my part, to augment its claims. The presence of so respectable an audience in this house to day, is unanswerable evidence in favour of the value of medical science.* But there are circumstances, closely connected

*What a celebrated jurist once affirmed of the English House of Commons, is equally true of our profession.

"If we look for antiquity, it is most ancient; if for dignity, it is most honorable; if for jurisdiction, it is most extensive."

with the profession, which press upon my mind with so great force, that I yield to a sense of duty, in laying them before you on this occasion. When we ponder on the influence which may be exerted by a single physician, and then, by simple arithmetical calculation, estimate the effects which the great mass of medical men, may have on the community, in all its concerns, whether social, civil, political or religious, I feel a conviction, altogether apart from doubt, that you will join me in the general remark, that physicians ought to be well educated men. To some, this language may seem not a little paradoxical, since many presume that a physician and a man of education are synonymous terms. I regret, however, the necessity which compels me to affirm, that this presumption is contrary to evidence, and that many who have received the nominal honours of medical colleges, are grossly deficient, even in the elementary branches of an English education. What is the character of the empiric, in this respect, every one knows. He is generally as igno-

rant of letters, as of medicine, and although ignorance on either subject, should be to him matter of shame, it is the climax of his degradation, to glory in that shame.

The topic here presented to my audience, is full of importance to all ranks and conditions of men. In its consequences, the monarch and the peasant, the affluent and the child of penury, are alike interested; and I am happy to be favoured with so good an opportunity of presenting my views, and of suggesting such measures, as the circumstances seem to require. In prosecuting this work, it is my purpose to employ great plainness of speech, that all who hear may understand, and that those who feel the keenness of reproof, may be induced to enter upon the work of reformation, without delay.

The first position which I shall attempt to enforce is, *that uneducated individuals should never be received into a physician's study, with a view to the profession of medicine.* I regard this as the starting point in the business of medical education, and therefore, as a subject

of immense moment. I place it first, because in the correction of every evil, I prefer the use of the axe at the root, rather than the application of the knife to the excrescent branches. The source of all our errors on the subject of medical education, has its dawn at the very moment, when a young man takes his seat, for the first time, in a physician's study. There is the fountain, and if it be tainted, the streams will convey impurity and disgrace through all their course, and society must be contaminated accordingly.

I am aware of a difficulty that has, no doubt, occurred to some of my hearers, in this incipient view of the position, now before us. It is based on the well known fact, arising from the errors of by-gone years, that very many physicians are incompetent to decide on the literary pretensions of those, who are desirous of entering upon medical studies. But are there not individuals in every village, town and city, who are amply qualified to act in this important concern, and whose regard for society and for professional respectability,

would be motives, sufficiently strong, to insure their vigilant and faithful services? Let every doubtful case be subjected to the scrutiny of impartial and competent citizens, and let a prohibitory statute exclude every unqualified candidate, and in a very little while, the fruits of reformation would be apparent.

The query has doubtless arisen in the minds of many, what kind or degree of education should a young man have, to qualify him for medical studies? This is an important question, and shall receive particular notice. I have no hesitation in affirming, that a man cannot be too well educated, whatever be the profession of his choice, The more we learn the better, and if, unfortunately, our advantages should not be directed to the best ends, the blame will not attach to education, but to ourselves. There are those who, unable to appreciate the value of learning, are ever and anon decrying its advantages, and with a criminally selfish spirit, seem bent on having all men, on their own stupid level. But I rejoice that this relic of pagan darkness, is fast losing its

influence, that the resplendent light of truth is forcing its way into the dense gloom of ignorance, and that, in a little while, the march of mind, triumphant in its course, shall break down every obstacle, and man resume his lawful standing, and claim to be indeed the noblest work of God. Too much education! it cannot be. What though the powers of Newton, the eloquence of Cicero and Demosthenes, the profound erudition of Locke and Johnson, and the splendid genius of Rush, were all concentrated in a single candidate for the profession of medicine, or any other profession, would these retard his progress, or prevent his future usefulness? No verily; if well directed, they would form a character of which the world might boast, and over whom, when dead, a world might weep and say, "we shall not look upon his like again."

But we ask not for qualifications such as these, nay, we do not even insist on the acquisition of a thorough acquaintance with the dead languages. We have known men who had the reputation of good scholarship in the

classics, who could not, (or did not, which amounts to the same thing,) write the English language correctly. To us, therefore, it is no certain evidence of ability to speak or compose in this language, to know, that an individual is versed in ancient lore. But we are far from objecting to a knowledge of the Latin, Greek or Hebrew; each is valuable, each has its advantages. We do insist, however, that a candidate for medical studies shall have a thorough English education; and that no individual should be permitted to cherish a hope of entrance into the profession, whose qualification in this respect had not been fully ascertained. Nay, further we indulge the hope of being permitted to behold such a change in public sentiment, as shall make a good English education, an essential preliminary to the exercise of every respectable avocation. And here let it be remembered, that a youth of eighteen or twenty is not too old to acquire a knowledge of his native tongue, and that, therefore, what has been criminally neglected in early years, should be amply

made up by laborious exertion at a later period. Who does not now revert to instances of learning acquired after the thirtieth year of life? I could point you to statesmen, who enjoy an enviable share of public regard, whose early days were unblest by the cheering influence of education; but whose persevering efforts, posterior to the dawn of manhood, gave new impulse to their being, and raised them from comparative nothingness, to the heights on which they now repose. Dr. Franklin learned to write a fair and legible hand, after he was thirty years of age. Sir John Pringle corrected a bad hand, after he was sixty; and Macklin, the player, acquired a knowledge of several languages, when he was an old man.

Is there within these walls, a youth, whose fond anticipation, has already placed before his view, the parchment that is to be the charter of his professional rights, and who, to this hour, is a stranger to the structure of the English language? I call upon that youth, to chide his fancy, to repress his high wrought

expectations, to suspend his reading in the books of medicine, and to devote his hours and days, with eagerness and zeal, to the acquisition of elementary learning. Do you resist this wholesome counsel, and by vain comparison of your own acquirements, with those of men, more defective than yourself, become inflated with imaginary powers, and so hug fast the fetters of ignorance which encompass you? Be it so; but from this very hour, abandon your prospects, bid adieu to the profession of medicine forever, for you can neither confer honour upon it, nor receive solid reputation at its hand. Nature has doubtless destined you for a different sphere, for an occupation better suited to your attainments, and in which you may excel. One of her fundamental laws is, that every thing should fill its appropriate niche, and I therefore solemnly call upon you, to be obedient to Nature's voice.

Is there a parent in this house, who, with fond affection, looks forward to the period, when his son shall be invested with the honours of a medical school, and who has deter-

mined to place him under the care of a favourite physician, at an early period, for the purpose of attaining this object? I implore that parent, by his regard for the future welfare of his son, to give him a good education, and to be well assured of his fitness in all respects for the profession of medicine, before a decision be had in the premises. And if a good education cannot be obtained, let that suffice as an infallible indication, that Nature points to a different avocation, and that her mandates should be obeyed. I regret the folly of those misguided parents, who, having acquired wealth, resolve on devoting their sons to professional life, irrespective of qualifications. Such parents there are in every large audience, and therefore, by possibility, there may be such here to-day. It may be that the peculiarly proper season for acquiring useful knowledge was suffered to pass by, and that their sons, though destined to large inheritances, have almost attained to manhood, ignorant of the language which salutes their ear at every step. And in this di-

lemma, we observe one marked out for the law, a second for divinity, and a third for medicine. O my country, what is to become of the rights of our citizens, if jurists made of such materials, are to be the expounders of the law? What shall become of the immortal interests of the people, entrusted to such ministers of the gospel, and who shall arrest the invasions of the fell destroyer, when our lives shall be committed to such physicians? Fathers, mothers, I beseech you, as you regard the best temporal interests of your sons, as you value the peace and happiness of society, do not invert the order of Nature, do not expose your offspring to derision and disgrace. Do you consult their happiness? Give the best proof by abandoning your present views, and directing their energies to the pursuit of such avocations as are within their grasp, and in which they may become respectable and attain to eminence. But dream not, I pray you, that ignorance and stupidity are the sure passports to professional eminence, because you have witnessed the practical success of drones

and clowns in medicine and in the law. Let me have my deliberate choice, and I would rather, far rather, behold my son at the head of a useful mechanic art, honorably and profitably engaged, than see him dragging at the tail of a profession, a mere supernumerary at best, without a prospect of success of any sort, apart from chicanery and trick. Such physicians there are, all over our country, and what are they? I will tell you my hearers. They are mere traders in medicine, as utterly ignorant of the true principles of our science, as is the untutored savage of the refinements of civilized life. Like the parrot or the magpie, they have acquired a slender portion of the imitative faculty, and in very many instances, do not exhibit signs of superior intelligence. With heart-felt pleasure would I add, that this non-descript sort of professional character is equally harmless with the parrot, and even less so than the magpie; but there is an insurmountable difficulty in the way, and that is, the assertion would be void of truth.

The next point to be noticed is, *that*

gross ignorance of the meaning of words and the structure of language, utterly disqualifies an individual for the profession of medicine. This position has been in some measure, anticipated by the preceding remarks, but is too prolific of reflections, to be disposed of, in so cursory a manner. If it were not a fact of perpetual notoriety, that men are inducted into our profession, who cannot compose, nor even read, nor spell the English language, with accuracy, it would be an insult to the good sense of my audience, to name the proposition now before us. If the remedies already suggested, in relation to students of medicine, were faithfully administered, a very few years would suffice, to give to this position, the title of an *axiom obsolete.* And I have introduced it here, for the express purpose of fastening conviction on the mind, in regard of the points already adverted to. Every one knows, that the profession of medicine, necessarily implies polite intercourse, and that it involves, by common consent of mankind, a variety of responsibilities, among which, literary obliga-

tions hold a conspicuous place. It was well remarked by the celebrated Rush, that every physician was bound to add something to the stock of professional knowledge, and that hence it was his duty to make occasional contributions to the medical literature of the day. This principle receives the practical sanction of almost all our well educated physicians, and the total disregard of it, in any instance, is a reasonable ground of suspicion. But how can a physician aid the cause of medical science, in this way, who is unacquainted with the true import of words, and who, therefore, cannot compose a short sentence, free of gross inaccuracies? There is but one way, and that is, by the exposure of his ignorance. Hence, it occurs, that medical editors are so often compelled to make correct English translations of essays, or to burn the manuscripts. It frequently happens, however, that like the diamond embedded in worthless matter, very useful hints and practical facts are dressed out in a sort of Anglo-Savage dialect; and an editor, anxious, to preserve the wheat although

very small in quantity, compared with the chaff, will devote hours of labour to make a correct analysis.

But further; physicians are compelled by peculiar circumstances, and also on ordinary occasions, to hold epistolary correspondence with learned men of other professions; and they are, not unfrequently, summoned to courts of justice, to give medical testimony. Now it is apparent, that on such occasions, an ignorant, unlettered physician will dishonour, not only himself, but the profession to which he has been, some how or other, appended. Thus you perceive, that the whole profession may be degraded by the stupidity of a few of its members. A medical graduate of the University of Penn. addressed a letter to his friend, in the summer immediately following his graduation, giving a cordial invitation to his house, situated in a pleasant part of New-Jersey. In the enumeration of inducements, the fine fruits of the place were noticed, as apples, pears, plums and peaches, not one of which, though familiar to a school

boy, was spelt correctly. The letter, in all its parts, was such as a New-Jersey or Pittsburgh collier might have written, and yet perhaps no more defective than hundreds of letters, written by physicians, in all parts of our country. But, are such defects in practitioners of medicine, absolutely incurable? Is there any thing in the nature of the case, which renders a recovery from so degraded a condition, utterly impossible? Without a moment's hesitation, I pronounce a negative reply. Every illiterate physician has the remedy within his reach, and nothing can operate as a barrier to his improvement, but want of inclination. Need I tell you of men, whose names grace the most honorable spots on fame's escutcheon, who acquired a knowledge of the English language, after the attainment of manhood? Their names are public property, and belong not only to us, but to our children, and serve as honorable examples for patient imitation. It were easy to name physicians, who commenced the study of the dead languages after they had an offspring

around them, old enough to study the elementary principles of their native tongue, and these physicians now enjoy the rich reward of their midnight toil. Their example, in language that cannot be misunderstood, calls upon every illiterate physician to go and do likewise.

From the remarks already made, the inference seems to be plain, that *a Medical school is a public good or public evil, just in proportion, as it guards the profession from uneducated intruders.*

And here let it be premised, that every medical diploma, is true or false, just as it accords with the qualifications of the graduate. His parchment is in the nature of a certificate, which sets forth his fitness for the discharge of the various duties incident to the profession, and has reference to all the characteristics of an accomplished physician. But if such a certificate be granted to a man, who not only cannot read his diploma, but who is unable to expound the English words employed in a correct translation of it, is it not obvious, that

the instrument, having the name of this individual in it, is a tissue of falsehood, and that the college, whence it proceeds, has affixed its official seal, to most palpable untruths? And yet I appeal to the annual practice of all our medical schools, for evidence to support the charge of these mal-administrations. Herein we see one of the reasons, why professed empirics receive so large a share of patronage. Discerning men are unable to discover any very great difference between the undisguised quack, and the physician over whose ignorance, a diploma has been cast, as a veil to hide his deformities. The empiric, it may be, is a better educated man, and may have stronger natural powers, and therefore often succeeds, while his diplomatic neighbour, almost starves at his side. The public have detected these impositions so frequently, that confidence in a diploma, is almost lost, and hence the man of real merit, often suffers for the defects of others.

Is the art of healing in its purest exercise, a public good? If it be really so, and I be-

lieve that the testimony of the civilized world is affirmative, it follows, that the public welfare is best consulted, when the most rigid care is exercised in the initiation of suitable men, into the practice of medicine. Medical schools are established and endowed by the people, under the firm persuasion, that they are to be engines of good to society; and is their liberality justly requited, by letting loose upon the community, a class of men, furnished with false badges, that they may the more easily impose on the honest and unsuspecting? Are such men ministering angels? is their converse and demeanour suited to dispel the gloom of the chamber, where sore disease is rioting in triumph, where mind is prostrate and the spirits wrapt in dark despair? Oh! may I be preserved in such an hour and at such a season, from the mercenary pander, who counts his visits with a Shylock's care, and feels no dread in all the scene, but that grim death may rob him of a patron.

It is the manifest duty of all medical schools, to act as conscientiously in the graduation of

candidates, as in any of the concerns of life. The foundation of such establishments, implies most forcibly, an obligation, to observe the strictest integrity; and never will they accomplish their legitimate and original design, until their decisions be governed by the unchanging rules of moral honesty. Never will the public be disposed or qualified to make a just distinction between the regular and the empirical practitioner, until our Universities and Colleges shall reject every incompetent candidate, from the deepest conviction, that there is a moral responsibility resting upon them, which cannot be abandoned, but by a sacrifice of conscience. Let it ever be borne in mind, that between the conductors of medical schools and the public, there exists a solemn contract, either absolute or implied, and that the terms of the agreement are violated and contemned, whenever an ignorant and incompetent man, is clothed with the authority which a degree confers.

It is high time to shake off the lethargy, that has paralysed our American energies, in the

important work of medical education. At home and abroad, we are reaping the melancholy fruits of our dispirited efforts; and unless an entire reformation be effected, if we do not rise to the task with an unwavering purpose of accomplishing great things, we may expect to behold on all our institutions, the sad inscription, the glory has departed. To no medical school in this great Republic, are the general remarks that have just been made more applicable, than to that, of which I have the honour to be a representative on this occasion.

From every section of the United States, the eagle eye of Science, is directed to the operations of this institution. Its friends are indulging the fondest expectations, while its enemies are cherishing the hope, that disappointment may follow all our efforts. May the latter realize the hope deferred, that begets nought but disappointment; and, animated by the true spirit of science, may all who teach and all who learn within the walls of our school, resolve on maintaining the dignity

of the profession, and transmitting it to posterity, clothed with the legitimate garb of superior excellence.

And when the boundless contiguity of shade, spread out in this immense and beauteous valley, vieing with the East in the density of its population, shall demand additional schools for medical instruction, may our enterprising pupils from every point in the Western horizon, look to their *Alma Mater* of Cincinnati, as the model Institution, the fairest pattern for future imitation. To this end, let virtue ever move in unity with science, let all our intercourse with society, be based on the principles of stern integrity; let odium and disgrace be every where inscribed on the frontlet of vice, and with the smile of heaven upon our exertions, we must be successful.