Lectures.

THE MAN AS DOCTOR.

AN ORATION DELIVERED AT THE ANNUAL MEETING OF THE SOUTH MIDDLESEX MEDICAL SOCIETY, APRIL 19, 1882.

BY EDWARD WALDO EMERSON, M. D.

THE learned Professor Meynert, of Vienna, I have been told by one of his pupils, after years spent with patience well nigh past belief in unraveling the complex, matted nerve fibres, and tracing them to their origins in the encephalon, came to this belief: that thought and action were mere reflex phenomena, automatic results of the data, namely, the outward circumstances and the given quality and arrangement of the ganglia and fibres; in short, that free will was not. If, then, fate rules our every act, not, as the Greek thought, from afar, but seated in the very brain, with short hold on the bridle, those subtle white reins that we cannot choose but obey, to inspect ourselves were but an idle amusement. Yet surely this zealous Austrian worker in ordinary moments cannot but feel that *he* chooses and decides, and we, the ninety and nine that have not come to this view, please ourselves rightly or wrongly with the belief that while we are influenced by wind and currents, and even the variation of the compass, and the tricks played by the mirage with the coast and sea-marks, yet that *we* stand at the helm, and may change our course, or even put the ship about at will. Hence it has seemed to me worth while to consider how far we, as men, are changed, by becoming doctors, for good or for ill, and this is the matter which I venture to bring before you, my colleagues, to-day.

The man who has practiced but a few years will hardly make question of the fact that he is other than he can believe he would have been had he surveyed lands, engaged in trade, or modeled statues. It is surely well to look to it what manner of man he is becoming. Granted that the personal equation controls the result, may not the influences of the profession, minutely varying, be broadly viewed as a constant? These silent forces that do what they may with the doctor, constant comrades in his chaise, at his elbow, by the bedside or operating-table, punctual messmates at the family board, of what kind are they? Like the fair and swarthy riders that join the huntsman in Bürger's wild ballad, they, though manifold, work either for or against his larger hopes and interests. They work on all his faculties, intellectual, spiritual, physical, with power to loose or to bind.

If, now, we accept for this whole triple human structure the usual statement with regard to its physical element, that absolute health there is none, only coarse and transient approximations to balance in the ever-flowing and ebbing processes, yet all that tends to preserve the nicest equilibrium in morals and intellect that the fineness of our perceptions will allow us to get is worth the striving for. A rocking boat is worth a hundred capsized ones.

The doctor's patients often pity him, — he sometimes pities himself, — for leading a life so irregular, so anxious, so exposed. We all know that these words describe the life, and yet physicians, as a class, are healthy and cheerful men. Varied activity, the meeting decidedly more trusting and grateful faces than hostile

ones, the washing out the last dismal or irritating impression with what oxygen is to be met in riding three miles against a stiff nor'wester, these help to keep him sound. Experience rapidly teaches him that if he would be a shining example of the survival of the fittest he must feed his engines well. The north wind will keep the draughts clear, and also teach him to diminish radiation and store up heat by wearing two coats. The stout and canny Major Dugald Dalgetty spoke for us, as well as for soldiers, when he said that "it was the duty of every commander of a fortress, on all occasions which offer, to secure as much munitions and vivers as his magazines can possibly hold, not knowing when they may have to sustain a siege or blockade." It is our constant reproach that we do as we would not let others do. Very good, my blanched and nervous friend, but if you will live my life for six months you will be in condition to eat pie and drink coffee and sleep sound after them, bidding them "fight it out among themselves." As Thoreau said to the clergyman who reproved him for Sabbath-breaking, relating the dire mishaps that he had known to befall such offenders, "They forget that it is their own guilty consciences that trip them up, and not the Lord."

Among the faculties of the mind called for and strengthened by daily use in our profession stands rightly first, observation. Here lies the sick man with urgent trouble; what he says may be entirely misleading; the friends stand around, anxious spectators; we are called into the sick-room as if into the arena; time presses; the stakes are the patient's comfort and safety, the family's peace of mind, our own reputation. We learn to note rapidly in this delicate machine the evidences of broken springs, or only broken wheels, clogging dust that can be removed, deep rust, or a whole structure worn out past repair. Next, the most careless person who lives by our craft must of necessity learn method in his examination in mercy to himself, if not to the patient. One of the best instructions to a medical class that I remember was that of the late Dr. Edward Dalton, who said, "After careful and repeated auscultation, percussion, palpation, and even auscultation of the patient for twenty minutes, you may not be very tired. He is."

The winnowing out the mass of worthless evidence that the patient and his friends throw in with what is really valuable, the balancing the indications for exercise against the need of rest, the decision whether to give the potent drug that has its clear danger, but may turn the wavering scale of life, the making up the mind how much of the dismal truth to speak out or withhold, — from these duties comes the formation of the judicial habit in our minds. That court must hold hourly session. Rash though we be, we learn to put on, piece by piece, the armor of caution. A learned and philanthropic lady once, in my hearing, pushed a philosopher hard to admit that the teaching of Socrates, of whom he was discoursing, really sanctioned the Kindergarten scheme, of which she was an apostle. "Possibly, partially," was his reply. He was a physician and had learned to keep his rear open.

The generalizing power and keen sight that recognizes in the particular case merely a cunningly muffled member of a well-known band of cut-throats is a brilliant gift that experience may bring us. But all the conditions must be observed if we would not, in striving for this, do injustice to our patients and ourselves. We must try not to be dazzled, then, by the

tale that the bystander so often tells, *apropos* of the careful examination we are making, of some old doctor, in a remote part of Maine, "probably you've heard tell of him," who, the instant he entered the door of the sick-room, would say, "That man's got rheumatism of the stomach and won't live but just two hours," and he did n't.

What spiritual gifts has the demi-god Æsculapius for his sons? It has been said that cowardice is ignorance. Imagination holds up her mirror and doubles the terror. Now our privilege is to become familiar with the worst forms that affright the race; to learn what we can do, and what cannot be done. It is no mean blessing to know our limitations, the *thus far* where our responsibility ends. Cowards will not remain cowards if they survive being driven to stand at bay once or twice. Our profession is a daily school of bravery of a certain sort. The watchword in a rude old ballad,

"Make courage for life to be capitaine chief,"

might well be ours. The courage of Fabius the Delayer is as often called for as that of Scipio the Sword of Rome. By hard lessons we are all taught, in some sort, promptness, decision and self-reliance. The necessity of keeping at least an outward show of cheerfulness is good and helps to form a habit of philosophic cheer under stormy skies.

Tonic to the physician's moral fibre is the duty of keeping sacred the confidences of his patients, an astringent tonic puckering up his mouth, perhaps.

The well-known reproach of an earlier age, disclaimed in the sixteenth century by our kindly and quaint brother, Sir Thomas Brown, "*Ubi tres medici, ibi duo athei*," may, perhaps, be thought nearer the truth for our day than for his; but atheism, in any proper sense, will seldom be the goal reached by the man before whose eyes the mysterious sacraments of birth and of death and all sad and tender relations of humanity daily occur, or who, by strong lens, extends his view into the hidden region where cells wander and divide, and crystallize form. He will, it is far more likely, be a good pantheist, if he cannot do like those who,

"When age, disease, and sorrow strike 'em,
Incline to think there is a God or something very like him."

"No man is a hero to his *valet-de-chambre*," said Madame Cornuel. Perhaps because the observer has the soul of a *valet-de-chambre*. We likewise see the race in undress, but, I believe, think well of the race, probably better than the lawyer or even the minister. A sick-room does away with shams; for every weakness calls forth some strength; one poltroon may be the occasion of the appearance of heroes and heroines; one selfish imbecile opens in the family a mine of quiet strength. The moan of a sick child may call an ideal family into being. If we become rude and brusque outwardly, many sick-rooms put us on our best behavior. A child can't be courted and won by haste or bearishness.

I must not dwell longer on the good that may be wrought in us by virtue of our calling. We often do not know of these influences and often miss of them. It is more to my purpose to review the risks that we run; as it were, to put up Tyndall's viscid plates, and hastily, with a low power of the microscope, run over the field, and report the spores that doctors especially, from their calling, breathe in, that pervert our three-fold nutrition, and warp us away from our growth to the full stature and symmetry of man.

What physical harm may we take? To be as systematic and unsatisfactory as a "system of medicine" with chapters assigned to different great specialists whose assembled monographs are like a great net with large meshes that let much slip through, I will say that the doctor starts like other men, with locomotor, circulatory, respiratory, digestive, and nervous systems. The first of these he usually supplements with a horse and buggy, through the use or abuse of which artificial aids his own inferior extremities usually atrophy, and frequently are fractured; his superior extremities are well exercised, and his torso is said by the irreverent laity to gradually telescope by long and constant jolting on the roads, the head sinking into the thorax, like a tortoise's, and the thorax into the pelvis, like a toy cup-and-ball. His circulation and respiration are more often helped than harmed by his mode of life if he has reasonable discretion. His digestion is apt to be his strong point in spite of irregular and often hasty meals. He reaches the land of Euepsia, to be sure, by a different route from the one he directs his patients to follow. Cannot China, then, be reached as surely by traveling eastward, though most persons go thither *via* the overland route?

Brain and nerves must be in daily hard use, and well for the physician if they are only kept in perfect function by wise use in his calling, not worn and untuned. Loss of sleep, the strong tension of self-command required in dealing with the nervous invalid or the terrified family, worst of all the habit or worrying and the sudden misgiving with regard to his bolder measures that startles the doctor when the tide of brave confidence ebbs, as the sudden sight of a sharp, black ledge between the long waves appalls the sailor, — these must leave their marks somewhere on the hardest.

Lastly, the diphtheritic membrane coughed into his very mouth, the malignant blood ferment, or the unsuspected, subtle taint from filth and crime entering by a mere scratch on his finger, the apparent duty to rise and face cold and fatigue when sick himself, — such things may fill out the catalogue of bodily ills that may come to our lot. Every lot has ills as bad. These happen to be ours.

Dr. Cotting, that keen censor of the ways of medical men, in two addresses delivered years apart before the Massachusetts Medical Society, threw strong light on the weak points in the intellectual armor of physicians through the centuries, namely, want of proper logic, jumping conclusions, believing and claiming that the patient's recovery was our cure, when we had never seen how disease, let alone, would behave. To remedy this failing he inculcates a healthy skepticism, and urges physicians to study the natural history of disease.

Another member of the State Society, Dr. Moore, lately reviewed in a careful and courageous paper, entitled, "*Old School and New School Therapeutics*," the medical field and finds that illogical methods and reasonings are the curse of medicine. He weighs in turn empirical and rational medicine and finds them wanting. Rational medicine is irrational, seldom curative, not even progressive; its theories, founded on sand, will neither secure the safety of the patient nor afford satisfaction to the physician. Empirical medicine has, he claims, accomplished absolutely nothing beyond the accidental discovery of a few clinical facts. These facts have not been set in order and made into a scheme. Our drugs do not deal with the whole disease, they are dangerous,

and we make a mistaken use of them. They only palliate. Since matters are so bad, what better course can he suggest, logical for the physician, curative to the patient? His remedy is this; study drug-action on the healthy and learn it *in its totality*. Study disease let alone, also in its totality, that is, as groups of symptoms, not even slighting the most trivial ones. Then "discover by induction the law that governs the relationship" which, he claims, undoubtedly exists between the two series of phenomena. This, he holds, has been found in homœopathy.

Both these writers, — I have chosen them as in a measure representing two opposite types of mind, — bring the same charge against the doctors, want of logic; but they suggest very different remedies: one would narrow our beliefs, yet hold fast to a few proven things; the other advises shifting ground and adopting a faith truly giving in advance a "substance" to "things hoped for" an "evidence" to "things not seen," and for curatives, so reputed, abandoning much invaluable palliative.

Yes, surely we are often illogical; but why? Because when we would be truly scientific the moral obligation starts up in the way. When the life of a man is trusted to us by his wife and family, few of us are nihilists in medicine enough to hold our hands and watch what Nature alone will do for him or to try an absolutely new course of treatment at a critical moment. It is not a sewing machine but a man with all his idiosyncrasies that is to be repaired; worse than that, we never served our apprenticeship in the work-shop where he was made. We were led blind-fold through that camp. But the sick man can't wait: we must do something and we must usually defer in part to the medical usage of the day, though if we are students of medical history, we have discouraging recollections while doing so of shifting medical fashions and even axioms.

See how the moral necessity interferes with the logical method of study. We believe in the *vis medicatrix Naturæ*, yet we remember a time when the *vis Naturæ* was all exerted in holding an intestinal obstruction in a spasmodic, relentless grasp, torturing the patient and seemingly threatening his life until our opium overcame this natural force, apparently to the signal comfort and saving of the patient; so we dare not wait and see whether Nature, in the end, would have tardily brought the man through by processes with such frightful stages in them. Often we can make out nothing like so clear a case as this of the opium for the use of our drug, or other interference, yet we take the step *because on the whole it recommends itself to us* for reasons that we should hate to be called on to exactly explain and defend before a critical board of censors. The case does wonderfully well, and it is a sore temptation to us to sing the psalm beginning "*Post hoc ergo propter hoc*," in spite of the indignation that we feel when our sometime patients sing the same strain after taking sugar-of-milk pills labeled "Apis" or "Aurum," or after going to a clairvoyant. Yes, we certainly are in danger of too easy a belief.

Yet some of us, on the other hand, draw the other moral from such observations and say "We know that patients were bled and starved and recovered; were, a generation later, stimulated and overfed and recovered, and probably more yet would have lived out their days had they been let alone," and therefore will let a person burn in fever or lie awake coughing, saying, "If he dies, I, at least, shall not have it on my soul that I

hurt him by meddling interference." The pits of credulity and skepticism gape on each side, and the sight of those whose natural bias has made them tumble into one or other perplex the medical wayfarer, as the hobgoblins did Christian in the Pilgrim's Progress as he walked his narrow path.

Is not dogmatism as well as carelessness a mental tendency of the physician as well as of the clergyman, resulting from our encountering other minds that we feel must be borne down and convinced on a field and with weapons chosen by us? Do we not too often look at God's Universe as if it were little more than a hospital and forget that there may be — no, certainly are — more things in heaven and earth than our philosophy dreams of?

Last, what ugly traces may the days as they pass leave on the character of the doctor? As I think of them they may be classed under four heads.

That man, whatever his calling, who holds power unchecked in his hands is in danger. Power is a stimulant; it may be used to intoxication. We must often have implicit obedience, so come to insist on it where intelligent action would have been better for the patient. Sometimes we seem to take Fate into our hands, but there is peril in tampering with the ancient landmarks. Even the laity chafe sometimes that custom should forbid the shortening of lives which are a burden and a horror; oftener urge the prevention of life or a hasty choice of that apparently most desirable when one is endangered. The old metes and bounds are of more worth than they always seem. Do we always feel the weight of suffering that our word "incurable" or "hysterical" may bring with it? With us it is the opinion of a puzzled man; to the family the final verdict of profound science.

The second of these moral hurts is the loss of humane feeling. 'Tis the old stock accusation made against the profession, but I must think it far more apparent than real. Yet there is matter enough in the charge to make it well worth every man's thought. Few of us, I take it, get through our week's work without seeming at least rough, possibly brutal. The doctor looks at the sickness or operation humanely enough, but prosaically. To him it is an affair of every-day routine. The patient and his family see the same thing made great with all grizzly terrors of imagination. Yet this chimera is real to them, consequently when the doctor talks with them it seems as if the parties were at cross purposes, they speaking of the death of an only child, he of a cut finger. I don't pretend to tell you any new thing; we all know it when we consider the matter, but that usually comes, if at all, after leaving the house when the harm has been done, the feelings shocked.

When the frightened messenger rings our door-bell on a cold night he thinks life and death hangs on our speedy arrival. We don't believe it and take the rôle of counsel for the defendant. It looks savage to the family, however. In this capacity, too, of counsel for ourselves, we are apt to do a good deal of grumbling, which, after all is said, has n't helped matters, and has left a bad taste in our own mouths. We set forth planning to give the patient sulphate of zinc; we probably quiet down in the starlight and it may be no worse than sweet spirits of nitre. The chances really are that the years will strip off some of our armor and make us more vulnerable in our sympathies. It were a pity if it did not prove so.

To witness the great mystery, stand powerless and see a man

"Go through the strait and dreadful pass of death,
Not ever to be questioned any more
Save on the further side," —

is an experience that, however often undergone, brings with it a sense of awe; yet familiarity with the scene robs death of certain terrors. We see some compensations of suffering too; that Nature too has her anæsthetics (excitement, use, fainting), and her children are not often called on to bear more than they can. We look at pains as warnings, as safeguards; see short sufferings cure long ills. There is a beast-like inhumanity: is there not too a god-like inhumanity that we should count one of our gains?

The doctor may often cry with Falstaff, "Lord, Lord, how this world is given to lying," when he hears himself quoted in detail as saying amazing things. Yet he is lucky if he can himself escape the charge. A man of quick wits can elude the point where a dull man must own or lie outright. So, O Public, be not hard in your judgments on a doctor of slow wits whose professional honor is pledged to keep secrets sacred from your most alert and pertinacious questionings. To be thus taught indifference to truth, — mere "formal verity," as the philosophers have it, — is a more real danger to us than a loss of humanity. We often have no right to tell the fact to the patient, the family, the public, yet must stand their examination. Plutarch says, in his essay on Inquisitiveness into Things Impertinent, "It was smartly answered by the Egyptian who, being asked what it was that he carried so closely, replied, it was therefore covered that it might be secret." Such an answer, however, seems seldom to give acute pleasure to the questioner.

The demon spreads a more subtle net when undue praise comes to us and our vanity is pleased by having things come out altogether too well. Every one of us I fear occasionally narrowly escapes playing the charlatan. Our brothers of the city may not consider the strain put on the courage and even the honesty of us, the rustic members of the guild, who are consulted, like oracles, on every branch and specialty of medical knowledge. Since the great growth of medical science in the last thirty years the learning that one man can attain must be spread very thin to cover the field. A doctor who attempts to be what the English sometimes call contemptuously a G. P. (not Grateful Patient, my hearers, but General Practitioner) may be likened to a general atlas, which, from the necessities of the case, must show in some sort the whole world, and so has to have large yellow spaces, like the old maps of Africa with perhaps some "Mountains of the Moon," or "Country of the Ethiopians," or even, as in the oldest maps, representations of monstrous beasts or anthropophagi to fill up with. Not every one is ready to write "Unexplored" on tracts which his friends seek to know about; sometimes, too, a hint of the dangerous beasts that may dwell there may seem expedient for the patient.

To us country doctors this temptation to hardness, to which our position educates us, in assuming and conducting all sorts of grave cases, becomes a source of danger inasmuch as we are only judged by an incompetent public opinion, not by good medical standards. We do what seems to us right and justifiable, but, as we are not intelligently criticised, we may become confident and confirmed in ways which are not scien-

tific or defensible, and still receive ignorant praise for it. Faust, in his reaction against his seemingly barren studies, sets forth this possibility with ghastly force, —

"Here was the medicine, — the patients died.
None asked 'Who took it and remained alive?'
Thus in these mountains, in these valleys wide,
Our cure was than the plague a plague more fierce:
To thousands have I given the poison; — they
Have withered, they are dead and I survive
To hear praise lavished on their murderer."

The doctor's honesty is often tried sorely by his desire, suggested by feelings of honor, kindness, and good taste, not to do or say anything injurious to a brother practitioner. If in his efforts to do this he stumbles over the boundary line of truth, usually he falls into one fault in trying to avoid another. The issue is often forced on him by ignorant persons who suppose that blame of the last doctor is incense to the new comer. But there is one point on which it has sometimes seemed to me that too little courage and frankness was shown; I mean the unnecessary assertion, evidently not felt, that the attending physician had done all that could be done; that he and the consultant were entirely agreed as to the nature of the case, and similar gratuitous over statement. *Esprit de corps* is an excellent thing, but the interests of the patient are what the consultants are paid to consider, and truth is respectable. It is not necessary to emphasize disagreements or disparage the attending practitioner, but courtesy and truth are usually compatible where there is disagreement.

Besides our short-comings in humanity and entire honesty, we may sin against our self-respect. The Patriarch of the land of Uz is recorded to have sat patient and self-poised while the messengers of ill came fast upon each others heels with dire tidings of mischance. Few of us would serve a painter as a study for Job as we sit at the dinner table and the door-bell tolls the knell of our household comfort in troublesome summons to four different scenes of suffering, real or imagined. Our philosophy is shaken. We remember, as we review our conduct on the road that we probably did not appear to advantage to our families. When the physician's flank is turned by sickness at home, the calls of other sick people seem impertinent, and he takes and freely expresses the views of a pessimist.

Moral ills not of the first magnitude, but, as it were, cutaneous disorders manifested by great irritability, from which few of us are quite free, are certain pettinesses of conduct, first of which I shall name sensitiveness when a patient leaves us for another adviser. To see the unloveliness of this weakness to advantage it is best to study it in another. Then one sees, until his own time of trial shall come, at least, that if one can't help feeling the mortification, the comeliest thing he can do is to put it absolutely out of sight. Surely, we do not own our patients, and if they seek other advice whom do we hurt by not bowing to them? Another evil of this class is worrying about the success of irregular or incompetent practitioners. This may in rare cases do some good and even be our duty, but usually it is safer to keep the contemplation of these absurdities for our private delectation and amusement.

One matter seems proper to mention here; I refer to the false position not infrequently taken by members of the Massachusetts Medical Society in letting themselves be called, without protest, and even calling themselves, "allopathic" physicians, and denouncing others

as quackish because they use certain drugs and doses, not because they take the name of an exclusive school. If our Fellows do this, how can we expect the laity to believe that our objection to homœopathy is more than class-jealousy.

A disease that only those of us escape whom the gods fashioned of a better clay is the losing sight of the metes and bounds of conventional propriety in conversation at home and abroad. This is only one phase of a wider mischief, the losing the man in the doctor, a matter well worth our heed. It is, I believe, customary among army officers to wear citizens' clothes when on leave of absence. It is a symbol which should be a lesson to all professions. The public shares the blame with us if we don't do this, for they will consider us as doctors wherever we may go when off duty. First, man; second, citizen; and then doctor, is the right order. The man is a loser and to be pitied who is merely "doctor" in the eyes of his own wife and children. The town will be better if he feels the responsibility of a citizen that he owes to it. More than that, wider interests and broader views will make him no worse physician. There is something very dismal, though touching and also heroic, in the old age of some brave practitioners who have given themselves so without reserve to their profession that they have no other resource, cannot stop until death give them their release from a work of which they have ceased to feel anything but the hard duties and fatigues which yet have become an iron fate to them.

Yet this is better than that view of our professional life which regards it merely as a livelihood, a view one often hears maintained. Certainly that is a legitimate and healthy consideration; a leading one, if you will, with most of us, but we cannot stop there. The opportunities, the privileges inseparable from our work assert its dignity, and at once claim the attention of every worthy member. Yet we are too prone to forget the higher perquisites of our calling. The poor, from the very conditions of their lives, as we all know, are the persons most liable to accident and disease, which cuts off their earnings when most needed. Yet we sometimes hear physicians speaking as if a personal outrage had been done them when these facts are taken into consideration and a bill abated or excused. Perhaps we should be more grateful than we are that, while others in hard times begin retrenchment in their charity account, we have the privilege of exercising a compulsory charity all the time, and then especially.

"However hard the hardest diagnosis of disease may be," said Traube, of Berlin, to his pupils in the Clinique, "the question what to do about it is yet a harder one." Yet by the terms of our enlistment we are daily called on to assume this office, and since you have placed me here to-day, and I have gone thus far in stating some of the influences that work for our harm, I must not stop here, but do my endeavor to show how we may best oppose them. First, then, how shall we meet the physical ills which are beyond mere exposure, nervous wear and tear, in the strong English of the Bible, "virtue going out from us"?

The first great remedy is, in most cases at least, given with the need for it. That which the doctor may prescribe as an expensive hygienic luxury to his patient is to him, like his pocket-case, a professional necessity, namely, a horse. The prophet said to the faithful, "Blessings, success, and rich gain shall be hung to the forelock of the horse till the day of resur-

rection."¹ Edward, Lord Herbert of Cherbury, said "A good rider on a good horse is as much above himself and others as the world can make him." Ride your horse sometimes, even at the risk of causing a universal hilarity to pervade the village street. It is easier to carry fluid extracts in a holster than it was for the fathers to carry bark and leaves by the pound in their saddle-bags. A small portmanteau behind the saddle will hold forceps and specula. You can go by new and adventurous paths through woods and on turf, instead of being, like a locomotive, a slave to the graded road. When you know how, riding will be easier for the horse and warmer for you than the open buggy, or the sleigh if the snow be deep. If you drive, by no means have a sulky, and, when you can, carry a friend (not a sick one) who is a cheerful talker and good sitter, is well wrapped up, and armed with book or sketching-block. When you emerge from the house of the hysterical patient, and let off the tension of steady and kind professional behavior, and feel with Cullen that "stripes may be occasionally of service in the treatment of the insane," then to have some one with whom you may talk in the sunshine of books, or art, or trees, may save you from suicide. Sometimes leave the highway for the by-ways and go on foot on good days when there is time. The adventurous old doctor is still talked of in this neighborhood who drove on the ice, now on the meadow, now on the river, to the remote farm until he and his horse ran a race with the thaw. His neighbors said that his horses ran away with him; he had never found it out, nor had one that would run faster than he was willing to travel. Once only in a half century he failed to see his patients on account of weather, a day on which his sleigh upset twice in the drifts in the first few rods. He unharnessed, mounted the horse, and set him at the drifts, but slipped over his croup as he plunged in them. Only then did he feel justified in giving up for the day.

We who live beyond the suburb have on our rounds opportunity that the merchant or lawyer may well envy us, to learn to know, which means to learn to love, Nature. From willow-catkins and alder-tassels we may read, if our eyes are trained, through all the sure almanac of May flower, rhodora, pink azalea, arethusa, red lilies, purple grass, rhexia, fringed gentian, to witch hazel and black-alder berries before white crystals and gleams of ice jewels must take their places. An easier study, in a book printed large on purpose that he who rides fastest may read, is, the forest trees and shrubs. You may learn them by their leaves in summer and in winter their barks will be a nicer test of your observation.

One of our Fellows, eminent both as physician and professor, confessed to the practice of trying whether he could hit refuse tomato cans and bits of coal with his wheel as he drove through the suburbs, — a needed relaxation of the faculties, but happy are they who are out of the zone of perpetual tomato can, and have a lovelier equivalent for mental refreshment furnished them by the pine woods or meadows. To cultivate the love of Nature either from a scientific or artistic point of view is a safeguard to nerves, and heals our tempers between patients. It is, after all, a privilege, if we will so regard it, to know what it is like out of

¹ "Les bénédiction, les bons succès, et un riche butin seront attachés au toupet des chevaux jusqu'au jour de la Résurrection." Mahomet, quoted by Abd-el-Kader in "Les Chevaux du Sahara," by Gen. E. A. Daumas.

doors any hour of every day and night in the year; to know

"Clouds and great stars, thunders and snows,
The blue, sad fields and folds of air."

I have known thus to be acquired a taste for weather as such,—certainly a valuable gift of mind in New England.

It has been shown that the intellectual methods of physicians are open to criticism and I have earlier presented the two extreme views that different classes of mind may reach through contemplating the gaps in medical knowledge so far unfilled. The man who can hold a middle course will not only take more pleasure in his profession, but will help his patients more, a matter of some importance. Is this an unreasonable position? Because we cannot walk shall we refuse to creep? We have not an exact science like mathematics, but there is all the more room for growth, for genius. The fact is that we must not be so illogical as to try to be strictly logical until more data are found. Till then we will admit that we grope, but not without gleams of light on our way, that we believe grow brighter as we advance. Whence come those gleams? Partly from chance bits of touch-wood found by the way. Chiefly from the work-rooms of physiological investigators, to whom our debt is greater than the fox-hunting gentry who are shocked at their work realize. These last would be loth to give up the important knowledge these men have honestly found should tetanus, heart-failure, many forms of poisoning, occur in their own families, and it seems as if another score of years would give astonishing results from the patient investigation of this class into tuberculosis, diphtheria, typhoid, and other blood poisons, the promising field that inoculation seems to open.

Because the rational method has not enabled us to completely meet and vanquish with a drug each disease, shall we therefore despise it, and look round for a complete system and creed to rest, perhaps to slumber, in? Shall the practice of medicine be merely drug practice, and for specifics yet unfound shall we abandon our "mere palliatives," opium, ether, quinine, digitalis, jaborandi, alcohol, the antiseptics? Because the first theories based on studies and experiments in chemistry, physiology, pathology, sciences almost of yesterday, proved crude and not subtle enough, shall we despise the daily waxing light that these are shedding on our work? I am sure I speak for many when I say that each day gives us reason to bless the fathers who proved these "mere alleviations," to feel proud of those, our brothers, who, with sight sharpened and extended by science, push farther into the darkness searching for the causes which our associate, above quoted, despairs of their ever finding. It needs but a moment's thought of the advance in medical science, and medical science *directly contributing to the successful treatment of disease*, to convince us that our chosen profession is no pool of stagnation, no hopeless Babel of contradictory voices, but a calling in which we can find more satisfaction in *curing*, which, rightly read, means *caring for* our patients, comforting their pain, enriching their blood, allaying the consuming fire in their tissues, strengthening their weak wills, freeing them from self-forged chains, widening their range of ideas, building up their hope, than in telling them what is good for sore throat or cures Bright's disease, and if this is the true way and ours the false, then I, for one, say with Cicero, "Rather, by Hercules, would I be in

the wrong in such company than in the right with those men."

But look back, says one, your science and the practice following it has, through the ages, swung hither and thither, now to daring interference, now to cautious expectancy; it shifts like a very weather-cock. Rather, we hope, like the compass needle when the box is shaken; it oscillates, now east, now west, but with shorter excursions each time, and, though medical knowledge may never, like that, rest at last pointing for us one way with absolute certainty, yet each time careful minds in healthy action and reaction go over the same ground, new facts will be found, the checks and limitations more carefully considered and recorded to guide those who come later.

"Nay, never falter; no great deed is done
By falterers who ask for certainty.
No good is certain but the steadfast mind,
The undivided will to seek the good.
'T is that compels the elements and wrings
A human music from the indifferent air."

Let us honestly and humbly admit that we know little so far, but enough to make our calling worthy in our eyes. But rightly to use what we have we must take high ground go to the watch-tower, and sweep the horizon, not look through the office window alone. To see vital phenomena with too much of a drug-dealer's eye is one of our faults. Perhaps Marley's ghost was, as Scrooge thought, merely a bit of undigested potato, but we must look deeper would we explain all spiritual experiences. The final causes may be physiological, but to find them we must look to more than the condition of the *primæ viæ*.

A man's calling, if it be the right one, should confirm his strength and stimulate his growth. What forces shall we call to our side when we fear lest the rushing tides of our busy life wear and sap our moral foundations? To be responsible for his power merely to the community, since they are ignorant of the conditions, will not even satisfy the physician. He must be responsible to himself and to his honored brotherhood down through all the ages.

Should we detect any loss of humanity in ourselves, even in moments, consider that we hold of all others the humane profession; it should be that by the terms of its existence. We can afford no loss there. If the helper is hard and inconsiderate whence shall the help come? Patient then and steady he must be and cultivate the imagination that he may apply the old and safe test, putting himself in the patient's place. Yes, but with a difference too, for by so doing he must endow the sick man with confidence not his own hitherto, and remember but enough of his misgivings to make necessary allowance for weakness, unaltered in his cruelly beneficent purpose as a Fate. He must be well in command of himself to exactly dispense the two grains of sternness to eight of sunshine unalloyed that the case may require. To have gone through in his own person the sickness he treats or the operation he is to perform is a fortunate accident as it may give a tenderness in handling that no other learning can and also sometimes convince him that, were the terrors stripped away from the patient's mind, the real cutting would not be worth a thought.

In smaller matters, if we almost from necessity encase ourselves in a rough coat, this fact in natural history is worth remembering, namely, that, though the porcupine is now acquitted by science of willfully shooting his quills at all who come near him, it is

equally certain that if you touch him they will come off, quite unconsciously on his part, perhaps, but with a fatal facility to pierce the skin they come in contact with. Some material a little rougher than porcupine skin should be chosen for the physician's great coat. "When thou givest a gift, use not uncomfortable words."

The disgust felt at the various petty lies or misrepresentations that he is sure to hear about himself is a healthy influence to the doctor on the side of truth in word and act. Certainly, if it teaches him nothing else, it should teach him with regard to brother physicians the wisdom of the reminder of Ecclesiasticus, "Many times it is a slander and believe not every tale." Sometimes it seems our plainest duty to the patient to withhold the truth, at least for a time. To be non-committal or more may be wise and legitimate, but on the other hand, a habit of mystery may be formed which is dangerous to the physician and makes him much less trusted and depended on than should be his right. It must also be remembered that the tendency to mystery is the time-honored badge of quackery. The "wizards that peep and mutter" cannot, with intelligent patients, stand comparison with the blunt and honest doctor. He holds the strong and dignified position. Fear of being deposed from the throne of infallibility is a strong temptation to petty and unworthy deceit that often overleaps itself. Often it happens that the frank and simple admission of his limitations goes farther to win confidence than any other course could; yes, gives the doubtful case into his hands.

When we come in consultation, or a question arises of a change of medical attendant we can't say too often to ourselves, "remember that the interests of the patient rank before every other consideration."

Speech, kindly, strong, persuasive, is a chief article in the materia medica and it must be used often in very large doses, but the saving discretion where to stop, when to keep silence and how to guard our right to silence is a great gift, hard to come by.

Failures in humanity or honesty must bring in their train loss of self-respect, but this expression in a narrower sense was the fittest I could find to include some of the remaining adverse moral influences that we feel. The only way to steel ourselves against the expression, if not entirely against the feeling, of annoyance at the sure interruption which comes when we fondly make plans for private comfort and amusement, is the daily consideration of the subject in advance and remembering that sudden interruption of a trying and painful character, the disappointment of our hopes, the failure of our measures, even the desertions of our patients, are among the conditions that we accepted at our enlistment and that, if we would not have our conduct daily unbecoming, we must never allow ourselves to be surprised into impatience:—

"He through the heat of conflict keeps the law
In calmness made and sees what he foresaw."

To do this we must take large views, stand apart, like the artist, and follow his rule, — look three times at the figure of the ideal physician to once at our poor copy of him. Seize every opportunity that we can to talk with living masters in other walks of life; sometimes when we meet colleagues let shop-talk go and discuss the humanities. More than all, busy though we be, don't spare to medicine all our reading time. Read about the heroes, — our craft has been rich in them,

"We find in our dull road their shining track"

and forget that we are foot-sore.

How can we teach the breaking-down business man or care-worn housewife the folly of his or her course, wearily getting ready to live until all the years of life are gone, if we don't live ourselves as we go, be men as well as doctors? Keep your personal identity, first of all, in the family. Don't be doctor and not husband and father. Insist on your social rights and refuse to be doctor at tea-parties or dances. Claim your right to a vacation and drop medicine like a hot iron. Your patients may grudge it you, but will reap their gain in it.

Prometheus, forethought, in the myth, was the helper, the hero, before whom Zeus, his tormentor, trembled. Epimetheus, afterthought, was a craven and brought no help to man. When the case where we were not prospered and all our thought and work went for nothing and the tragedy that we fought so hard against came steadily on to its fulfillment, rises before our minds, — look at it, give it just so much thought as it should have to see if there is any new light to use again in time of need, but not one thought more. Even in that extreme case where we question whether our well meant act did not help on, instead of staying, the disaster, ask would you not rather know at the end of a long practice that three persons had died through your active treatment, than feel that you had let forty die through your fear of taking the heavy responsibility on your soul. It was a wise counsel that the prophetess Brynhild, in the Norse epic, gave the hero Sigurd,

"Be wise and cherish thine hope in the freshness of the days
And scatter the seed of thine hand in the field of the people's
praise,
And fair shall it fall in the furrow, and some the earth shall speed,
And the sons of men shall marvel at the blossom of the deed;
And some the earth shall speed not; nay, rather the wind of
Heaven
Shall waft it away from thy longing, and a gift to the Gods hast
thou given,
And a tree for the roof and the wall in the house of the hope that
shall be,
Though it seemeth our very sorrow and the grief of thee and me.

Wilt thou do the deed and repent it? Thou hadst better never
been born.

Wilt thou do the deed and exalt it? Then thy fame shall be out-
worn.

Thou shalt do the deed and abide it and sit on thy throne on high
And look on to-day and to-morrow as those that never die."

Last, consider the privileges of our high calling. We are spared dealing with crime. A fairer side of humanity, through suffering, is shown to us. We are honored with trust, the fullest that our kind can give. The priest and the man of law may be held at arm's length, but sooner or later the doctor crosses every threshold. He may find beggars in lofty chambers and the saints and princes in the hovels and becomes catholic in his ideas, but I think he would not always think it a gain to place them otherwise. He may eat, like Caesar, the anointed asparagus and praise the hospitality so unsavorily expressed. He has eaten of the tree of knowledge of good and evil, but he does not fear the anger of the God.

In the old legends of our race it is recorded that when hero or demigod pitied man's lot and gave him help, whether fire, or letters, or arts, the Gods never forgave it and brought vengeance on the benefactor, — the gifts they could not take back. If then we suffer, that too is one of the privileges of our class, as many have found.

We have enough then to inspire us in our work.

Can we make it worthy? To admit the doubt is the first step toward failure. The motive is all, whether the soldier falls in the first parallel or enters the square of the city in triumph. Let the outward forces and even the outer inside forces of our dual nature do what they can or must against us, but let the inner force, your proper force, be exerted and it will tell too in the resultant, for that force, whatever, whence-ever it be, even the stern materialist must admit, is as valid, as irresistible, to the extent of its co-efficient, as the lightning spark or planetary motion or primal sunlight with which it is convertible.

Original Articles.

CASES OF POISONING FROM DRINKING IMPURE WATER.¹

BY JAMES H. HUTCHINSON, M. D.,

One of the Attending Physicians to the Pennsylvania Hospital.

DURING the past three months I have had under my care at the Pennsylvania Hospital a series of cases, which presented a rather unusual set of symptoms, and which possesses so much interest that I feel justified in taking up your time this evening with a brief account of them.

The patients were all Germans, and were all employed in a large sugar refinery in this city at the foot of Bainbridge Street—on the Delaware River front; where, however, none of them had worked more than two, or at most three, weeks before the occurrence of the attack. The cases so closely resemble one another, that the history of one will suffice for my purpose. I have selected that of the first patient admitted, which was, moreover, much the severest of them all.

CASE I. R. R., aged twenty-one, born in Germany, single, shoemaker, was admitted into the men's medical ward of the Pennsylvania Hospital on January 30, 1882. One of his sisters is said to have died of consumption, but with this exception his family history is good. His own health has always been good until two weeks ago, when, without any apparent cause, he was seized with diarrhoea, attended with a good deal of prostration. He has had as many as ten to fourteen stools a day, and has also had at times nausea and vomiting, but is sure that he never has had fever. Yesterday the diarrhoea ceased, and he has had no passage since. Upon admission the patient is anæmic, and complains of excessive weakness, of vertigo, and of pains in his back and limbs. The tongue is dryish, and coated with a thin whitish fur; the appetite poor, and the pulse slow; the temperature subnormal, 97°; there is no tympany. The examination of the heart, lungs, and urine gives negative results only; he was ordered a pill containing nitrate of silver one third of a grain, and opium one fourth of a grain, three times daily, and placed upon a restricted diet.

February 2d. The patient's bowels have not been moved since his admission; he feels less weak than when admitted; his tongue is also less coated, but his temperature is still subnormal. The use of the pill was discontinued, and he was ordered a teaspoonful of Huxham's tincture three times daily.

February 20th. The bowels are now moved regu-

larly; he does not appear to gain strength; he was, therefore, ordered cod-liver oil.

March 6th. Discharged cured.

I confess that when this case first came under my care, I was puzzled how to explain the symptoms it presented. The presence of excessive prostration with a history of diarrhoea lasting for two weeks, seemed to point to typhoid fever as their most probable cause. Against this hypothesis was the fact that the patient was positive in his assertions that he had not had fever at any time since he was taken sick, that none was present at the time of his admission or subsequently, and that there was no tympany or rose colored spots. His condition called, however, for a supporting treatment, and I thought it best to restrict his diet to liquid articles of food.

The other cases came in rapid succession, and presented the same symptoms as the first case. There were in all of them prostration, slow, compressible and often dicrotic pulse, subnormal temperature, diarrhoea, sometimes accompanied by slight pain in the bowels, and absence of tympany. This similarity of symptoms appeared to indicate an identity of cause, and it was soon discovered that in addition to having been employed in the same refinery, they had been all subjected to an influence which seems to me sufficient to explain the symptoms from which they suffered. It was found upon inquiry that water from the river Delaware is introduced into the refinery for use in cleansing the evaporating pans, and that, after being used for this purpose, is returned to the river above the point although at a considerable distance from that at which it is taken.² The water is distributed throughout the building, and being more accessible to the workmen than the ordinary hydrant water is freely used by them for drinking purposes. The water, although said to be filtered before being put to the use first referred to, is probably from the presence of organic impurities unfit to drink.

There can be but little doubt that the use of the water of the Delaware River, contaminated as it must be opposite Bainbridge Street by sewage, was the cause of the singular symptoms observed in the six patients who came under my care. Impure as it was, it did not, however, produce typhoid fever, and my cases show that while impure water may produce prostration as great as that seen in this disease, it will not produce the fever itself, unless it contains the specific typhoid germs.

The symptoms presented by these cases seem to have indicated the existence of blood poisoning rather than of irritation of the bowels. The latter could hardly have existed without the presence of a certain amount of fever. The temperature records will show that at no time in any one of the cases was there any elevation of temperature above the normal. The stools, too, indicated the existence of relaxation rather than of inflammation: they were rather dark in color and watery, and never presented the ochrey yellow appearance of the stools of typhoid fever. The cases further show that persons may become accustomed to the use of an impure water, or that at all events it may cease to excite in them after a certain time any active symptoms. It will be remembered that all the patients had only recently been employed in the fac-

² The water is taken from the foot of a long wharf projecting into the river; it is returned at the point nearest the factory. These two points are distant from each other about one hundred and fifty feet.

¹ Read before the College of Physicians, Philadelphia.