Gould (Geo. M.)

The Duty of the Community to Medical Science.

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THE DUTY OF THE COMMUNITY TO MEDICAL SCIENCE.[1]

By George M. Gould, A. M., M. D., of Philadelphia.

I can not say that I have had any personal experience as regards the difficulty, but it is stated that an intelligent and duteous rich man, by reason of his mental vision and conscientiousness, finds no problem so hard of solution as that of disposing of his wealth without doing injury to the individual legatee or to the general community. There are but few "charities" so carefully and judiciously established that a cold intelligence does not find them productive of as much harm as good, and there are many that are fountains of almost unadulterated evil. The most grievous crimes of many "good" men are frequently their wills—those very documents in which the devisors seek to make some atonement for the sins of wealth-gathering by the unconscious sin of wealth-scattering. There should be a book of instruction written on this subject, setting forth the science of endowing without damning. Millionaires are such common every-day folk that they should be instructed and trained in that excellent art, so little taught, so little practiced—the art how *not* to make an ass of one's self. I have read somewhere of a spinster of advanced years, bearing a secret grudge against the government for taxing her, triumphantly considering that on her death bed she had "got even" with the United States treasury by burning her whole fortune of government bonds. Many bequests are quite as wise and still more harmful. There is a strange fatality, a subtle waywardness in institutions, whereby they insensibly drift away from the plan of founders, and in a few years are seen to be increasing the very evil they were meant to check. There is in this an historical sarcasm, a divine irony that tells the impertinent philanthropist that it is of no use to give unless he gives wisely. In charity, sentiment alone is not to be trusted. It is only intellect that transforms benevolence into beneficence. And this is simply because benevolence seeks only alleviation and the annuling of effects, whilst it is

[1] A paper read before the American Academy of Medicine at its meeting in Milwaukee, June 3, 1893.

only the intellect that tells how to stop causes, and thus end the entire generation of effects.

The object of this writing is to encourage medical men by every means in their power to spread abroad throughout the community the knowledge of a truth, awful in its significance, and absolute in its application, a truth of which legislators and philanthropists are outrageously ignorant or scornful—the truth that there is no duty so imperative and no self-interest so evident as the duty and the self-interest of the endowment of institutions of preventive and didactic medicine. When the power-squandering legislator or the wealth-squandering capitalist falls ill, the first thing he does is to call a physician to rescue him from death. Power and wealth would he gladly give for health and lengthened life. But he does not then ask himself if he or his fellows have given a word or a dollar to enable that physician to discover the causes, and thus to prevent the existence of disease in the abstract. And neither by word or deed has he done anything to help that physician to outfit himself with the knowledge and experience necessary to deal successfully with his own individual ailment. We should, therefore, by iteration and reiteration pound it into the brains of these silly folk that such a proceeding is simply a lack of foresight, a failure in simple prudence. In financial matters they know enough to create sinking funds and prepare for coming drafts and liquidations, but they are ignorant of the most palpable self-interest in the matter of the financial value of life and health, and the dire expense of disease and death. It is the duty of the Academy to teach financiers some financial good sense.

Dr. Bayard Holmes tells us that the productive funds of the theological schools of the country amount to seventeen or eighteen millions of dollars, whilst those of the medical schools amount to about one-half of one million. I have no sympathy with those who would scorn the value or belittle the dignity of the science of theology. But in all candor what egregious injustice and imprudence, financial imprudence of the most literal sort, does not this fact show up? Personifying the community as an investor of capital does he not really exhibit a mad house economic science? Which yields the best mundane and cash

interest, the investment in M. D.'s, or that in D. D.'s? Jenner saves the community more dollars in one year than all the endowments of all the theological schools of all time. Behold the financial wisdom of the world that makes an investment thirty-five times as great in heavenly stocks that have never declared a single earthly dividend, as the stingy subscription in a company that infallibly divides an enormous per cent. profit in hard cash every year! It is agreed that within a few years medical science has lengthened the average life some three or four years. This proportionately postpones and lessens the number of funerals and funeral processions, does it not? Well, now how much do you suppose the community pays the undertakers and the livery men? The saving in cab hire to the community from these postponed funerals would alone richly endow every medical school in the land! This is a *reductio ad absurdum* of a peculiar sort, but isn't it literally true? We are compelled to this kind of argument to arouse the attention of our remarkable democratic investor. Gratitude for the saved life and the postponed death we do not expect—Lord Demos has no love for his medical friends—but we do wish we might have this saving in cab fares wherewith to endow a dozen hygienic institutes, a score of bacteriological laboratories, and two score of medical schools.

Behold plainly the necessary results of not endowing schools of preventive and didactic medicine:

1. The putting of the most precious thing in the world, health and life itself, in the hands of men uneducated either as regards general literature and science, or as regards medicine. No one of us—indeed, not one of the poor fellows himself so dumped into the community—has anything but pity and scorn for the medical outfitting of a man who is compelled to take charge of seriously ill patients, without general preliminary training, and with only ten or a dozen months of medical theoretical study. What an outrageous mockery! After many years of profound study and experience a schooled mind feels most poignantly the inadequacy of known science and the bootlessness of rich experience to deal with the unfathomable mysteries of disease. It takes half a life time to learn how *not* to make *useless* mistakes. But to take a boy so untrained that

he can't spell correctly any five Anglo-Saxon words, and after a few months' lecture-taking and mnemonic cramming to place in his hands the awful responsibility of the life and health of hundreds or thousands—surely this is a farce worthy only of our civilized barbarism.

To illustrate, let me show you a printed sheet containing a student's notes on the differential diagnosis of four varieties of tumors. It needs to be remembered that the student making the notes was about to graduate in 1893, and that the school in which he studied makes much of its preliminary entrance examinations. The young man was an amateur printer. He set up the type himself, corrected the proof, and himself printed off a number of copies for the use of his classmates.

ENCEPHALOID.

1 Soft elastic not uniformly so
2 Groth Rapid Large
3 Adhesions, Earley and Slight
4 Pane, Wandering until ulceration then fixed and servere
5 Veins Large
6 Foul ulcer fungating edges excurvaled undermined much bleding
7 Glandular envolvement early
7½ Comes at any age
8 Seat, Breast, Testicles, Uteris, Overies, Prostate and Salivery glands.
9 Duration 9–12 m fatal.
10 Nipple not retracted.
11 Histary Bad.

SCHIRRUS.

1 Hard, inelastic.
2 Groth, Moderate and Small.
3 Adhesions, Late.
4 Pane, Earley and sharp fixed.
5 Veins, Modatly large
6 Edges, Hard thickened abrupt little bleeding.
7 Glandular envolvement, Late.
7½ after 45X
8 Seat, breast uterus stomach rare in overies and testies and Prostat
9 Fatal 18–36 mts.
10 Retracted nipple.
11 History good, excema of nipple may precid it Pagits diseas.

SARCOMA.

1 Firm, generally irregular soft and flucuating apperently.
2 Rapid and Slow, Groth large size
3 Adhesions early.
4 Pane slight until, ulceration then more
5 Veins moderate.
6 Foul ulcer, great bleeding,
7 Glandular envolvement late.
7½ Any age.
8 Seat connective tisue extremities of bones periosteum, brest.
9 Long duration before fatal
10 Nipple not retracted.
11 History good.

ADENOMA.

1 Hard elastic.
2 Groth slow.
3 Adhesions rare.
4 Pane neuralgic and menstral.
5 Veins not enlarge
6 No Bleading
7 No glandular envolvement.
7½ Under, 30
8 Seat, brest.
9 Not fatal.
10 Nipple not retracted.
11 History good

2. The lessening in the proportion of men studying medicine who have had college training. Again we are indebted to Dr. Holmes for his sad showing of but some fifteen per cent. of such students in the United States. When a profession fails to attract the college bred men, something is certainly radically wrong somewhere. The wrong is essentially the love of the community for quackery and medical humbug, but the "somewhere" can only be more definitely located as due to the general lowering of professional character and standards due to dumping thousands of uneducated boys into the profession.

3. And the fault of the dumping process must lie with the commercialization of medical teaching. Men, however, must be taught in some manner and to some degree; and, with unendowed schools, the motive of teaching must be as it too long has been, and too much still is, the earning of money, or more commonly the making of consultation practice by the fact of professional honor and position. Hence the inevitable result, the necessity of graduating as many students as possible regardless of fitness or acquirement. It thus comes about that proprietary or commercial medical colleges do not generally willingly advance the standards, either of entrance or of graduation, and they lengthen the period of study only as they are forced to do it by the example of university rivals or in shamed deference to public opinion. The rule does not hold in Buffalo, doubtless in other places also, and in Philadelphia we have one splendid exception to this sad law. Led by the glorious example of the University of Pennsylvania and fired with the pride of sex, supplemented also by a genuine love of progress, our noble Woman's Medical College has adopted the four years' graded course in advance of two large medical schools for men.

Excellent instances are pointed out, that show proprietary medical schools advancing the standard, and at least soon following the example of endowed schools in lengthening the course and broadening it to meet the demands of the entirely new scientific school of medicine so suddenly and so lately come upon us. Such exceptions both prove the law and test the rule. They are what they are despite the natural tendency, and

because of the dignity of character of the governing and teaching body. If half a dozen men own a college, absorb all its revenues and honors, it is asking too much of unconverted human nature to expect them to tremendously enlarge the paid teaching body, dividing both the emoluments and fame, by reorganizing the school to meet the entirely changed demands of to-day. It may sometimes happen, but, alas! it may often not happen. It is nothing but opera-bouffe medical education to pretend to fit modern physicians for their work by a half dozen or so men talking a few hours a week at a half thousand boys for two or three half years. Sometimes the half dozen may be united in harmonious ambition, and with dignity "tide over" the passage to a better future. But sometimes, too, the plan may result in making a school a hot bed of politics, of injustice to alumni, and of mutual jealousies.

Possibly the dying economist thinks he is doing his duty to the health of the community and to medicine by the endowment of hospitals. It is, indeed, becoming fashionable to endow free beds, to dance and conduct lotteries, as the newspapers say, "for sweet charity's sake." Some good, much good has certainly been effected in this way, but it is time to modify, limit, and direct the thoughtless trend of sentiment before historic momentum increases so much that hospitalism will become a sad disease and hospital endowments will rival the wasted wealth of the present day English guilds. As at present managed it is useless to deny the enormity of the hospital and dispensary abuse already existing, impossible to ignore the dangerous increase thereby of popular communistic habit, to forget the improvidence thus encouraged, and lastly the frightful injustice to physicians as a class. If these things can not be righted, the giving of money to hospitals without careful and sharp restrictions as to uses and abuses, the weeding out those able to pay, etc., etc., may become and has even now often become a public injury rather than a public benefit.

Let me illustrate how hospital endowments may be utterly turned from the purpose of founders and become at once engines of professional and social wrong. The Coventry Provident Dispensary, of England, came into existence in 1831. It now

has a membership of some 26,000 in a population of some 50,000. The medical staff numbers twenty-six. Of course in founding it, and one of the founders still lives to bear witness, the intention was to provide medical services for working people and those who could not pay medical men. But now behold! On the ground that some of the medical staff receive small salaries from the endowment funds, the government of the hospital by a large majority lately passed a resolution to the effect that the well-to-do and rich should be allowed membership and so entitled to charity treatment as well as the poor.

Much of this sort of socio-economic depravity would of course soon ruin medical education and professional dignity. It is high time that we as a body of men haul up sharp and refuse to further aid in our own personal and professional self-degradation. This is a sort of suicide that can arouse only pity and contempt. If we are willing to become valets we are worthy to become valets. But even if we are willing, society should not be willing, because every gain of professional honor is so much gain for society, and every loss of professional self-respect is society's loss. Society, the ordinary citizen, should be more jealous of medical honor and progress than physicians themselves.

But even if we left this aspect of the matter entirely by side, what is hospitalism at last but pecking away at results without a finger raised to shut off the everlasting production of these results? There is no need to remind physicians of their divine duty to heal disease, but there are two other duties far more divine: The duty, first, of training and fitting the physician so that he shall be capable of healing disease; and, second, the still grander duty of preventing disease. To train men in the knowledge and cure of disease requires an endowed college. The unendowed institution is doomed and must be supplanted by the institution that by reason of endownment is freed from the mercenary dictates of its patrons and of its proprietors, and that can provide the laboratory and clinical instruction needed to enable the physician to meet the arduous and exacting demands of modern science and modern society.

But the great problems of medicine are now summed up in

the word prevention, and the greatest benefactor of the world is he who directly or indirectly neutralizes or kills the germs or origins of disease. There is nothing more hopeful for the future of medicine than the fact that physicians are eagerly turning their interest and labor to the work of hygiene and prophylaxis. There was much danger, and there is still some danger, that the non-medical scientist—I mean the bacteriologist, the hygienist, and the scientific man abstractly considered—should seize upon preventive medicine and leave the physician the more restricted and subordinate domain of therapeutics. If this danger is not obviated through the retention of the grander domain by medical men proper, if they do not hold and lead in the work of prevention, then medicine would in a few years not occupy the proud and honorable position into which she is now gloriously entering. It is professionally a great good fortune that Jenner and Koch were practising physicians. May it be that the coming discoveries in prevention shall also be made by physicians, and that we shall all do our work in the sanitary and prophylactic sciences upon which the welfare of society depends. Ours is the only profession that is literally and enthusiastically devoted to professional suicide.

And we must teach and beg society to help us to commit this divine sort of suicide. We must plead with our masters against their own blindness and indifference to us and to their own welfare. We must beg them to found and endow institutions where, while it is needed, men may best learn the therapeutic wisdom of the past, and also where they may discover the means to make therapeutics itself unnecessary. Pathogeny will soon kill pathology if we give it a chance, because pathogenic knowledge will stop pathologic function.

We should therefore seek to switch some of the money now fashionably and mechanically going to hospital endowments towards institutions devoted more directly to the better education of physicians in the therapeutics and the prevention of disease. Here is an almost unpreempted field and one that infallibly offers speedy and certain returns.

Like morning light surging upward from below the horizon's edge, we all see and know that the sun of scientific medical dis-

covery is soon to rise upon our long darkened world. We all recognize that we are soon to discover the causes and the prevention of much of the pathologic evil that has filled the world with suffering and gloom up till now. If we could but have the means, if concentrated effort could be brought about, if the awful opportunity could be grasped!

There are two sources whence may come the endowments of institutions of didactic and preventive medicine: From communal, *i. e.*, governmental gift, or from private bequest.

Shall we also feed at the public crib, or seek to do it? There is not the least discussion as to the abstract duty and self-interest of the state to do this work. It is pre-eminently a state duty and necessity. The resultant good is the good of all, and more particularly is it the good of the coming race. The appeal is to the whole and to the future rather than to the individual and the present. Why then should not the state be educated and compelled to execute its most manifest duty? Simply because the object we seek to realize is an ideal beyond the mental grasp and the moral strength of Lord Demos. In his heart of hearts Demos loves magic and quackery, and in a representative form of government the representor cannot rise far above the moral and intellectual level of the represented. We must do good to men, we must give them good gifts, even though they at first scorn both the gifts and the givers. This is the attitude of mind of all great men. True gratitude may be ours only after our ears are deaf and dead to the word of belated thanks.

But there are other reasons why we should not rely upon the government. If the unselfish and worthy may be thus aided, the selfish and the unworthy will bedevil the legislator out of his wits until he consents to their clamor. With state legislatures voting the people's money for hypnotism, homeopathy, and humbug, and the like, and protecting the infamies of the patent nostrum vendor, what may be expected of Demos and his representatives? In Pennsylvania and elsewhere things have already reached the pass of taking every petition from every institution that by the most ludicrous twists of logic do dub themselves charitable, and after footing up all the figures, vote

a small lump sum to be divided *pro rata* among all. Each thus gets at least an ear or a nubbin, and the representative can smile at his constituents until the next election! It thus becomes doubtful if the success of the best institution in securing a governmental grant, even for the best medical purposes, will not in the long run prove a cause for regret rather than for congratulation. It forms a precedent that will enable proprietary and private greed to secure the same benefits, and thus the evil will grow as fast, perhaps even faster, than the good. The watering tongue and the long carnivorous teeth of "me too" will be well hidden beneath the cloak of charity. And if all that the community thinks medical were really so! If we were a united profession! But the sectarians make it impossible to speak to the community with one voice.

I think our reliance must be upon private bequests, and these can be secured only as we educate and interest the rich. We must never weary in showing the neglect of the greatest, most palpable, most certain means of doing good. There is a strange fatality in men, an unaccountable inability of seeing the need that lies nearest, the good that is dearest. There is more money to-day devoted to astronomy than to the prevention of disease. It is positively wonderful to think that men should be more interested in stars and constellations than in their bodies and their physiological life.

As educated men there can be no question of our preference for the institutions of didactic medicine that encourage the better preliminary education. We have shivered to learn that the proportion of college bred men entering upon medical careers is so ignominiously small, and that it is decreasing. To medical schools connected with universities we should therefore seek to divert the streams of endowment. Assuredly the most ludicrous of beggars is the proprietary school seeking endowment without limitation of the professorial salary of the professorial proprietor. If private persons wish to make presents to their private professorial friends, it is a good thing—for the friends—but the donors may hardly lay claim to much intelligent perspicuity or to a large humanitarian love.

And so far as relates to the education of practical physicians

a most pathetic negligence is that of medical scholarships. There may be such, but I do not know of one in the United States. The first noble attempt or example in this direction is that of the College of Physicians and Surgeons in Chicago, which has offered free tuition to ten students each year for the purpose of encouraging a higher standard of preliminary and medical education. All honor to the men and institution that set the example. Thousands of scholarships exist to help struggling ambition in the fields of general collegiate training, in theologic, technologic, and in general scientific education; but with some experience and observation I have never elsewhere witnessed purer ideals more heroically pursued through years of penury and suffering than by many medical students. Everybody seems to think it of no question, even a matter for mirth, that a medical student shall endure unspeakable bitterness and loneliness in seeking to prepare himself for a work of the most primal importance and value to the community. If good citizens wish to help noble young men, if they wish to forefend and brighten many tragedies silently and manfully borne, let them look among medical students. Thousands would gladly give more years than the schools demand to their studies and preparation if by rigorous and unanswerable necessity they were not driven out to speedy bread-winning with its resultant experimentation on the lives of their fellow-men.

Let us, then, go back to our lay friends with a message, a new gospel we must be absolutely unwearied in preaching—the message of a new, hitherto-neglected duty to a new, hitherto-neglected science of medicine. Let us prove to them a hundred times over that the best good abstractly is freedom from disease, a healthy life, a reduction of a needlessly high death rate. Viewed from a low standpoint alone, there is no investment in money so certain of interest, and of so high a rate of interest, as the investment in saved human lives. Let us urge again and again the services of medical men to the community. Where would have been our navies and their victories with scurvy still a scourge? What a saving in money to the English government is that shown by the reduction in the Indian army death rate from ninety in the thousand to thirteen in the thousand. Pasteur's bacteriological

studies are estimated to have saved France as much money as the entire German indemnity payment. Can the financial value of the work of Lister be estimated, so enormous is it? In the German army by compulsory vaccination, small-pox is non-existent, and all over the world, despite the anti-vaccination cranks, vaccination has saved the nations more money than their present national wealth. We are almost certain that by a similar procedure the dread scourge of cholera may be likewise stopped. Lastly, there are your insurance statistics and premiums showing beyond all negation or quibble the lessened death rate. Compute by average wage and average length of life the money value of a human life; then multiply and again multiply the three or four years of lengthened life due to medicine of every one in the nation, and in all civilized nations, and compare this amount with the total values of all wealth! Then it may become manifest what medicine has already done, but before and beyond all what she still promises to do if she have but a tithe of the sympathy and help she deserves.