dies in the first stage where the bronchial mucous membrane is swollen, congested and dry, and secretion is arrested or more correctly, is deficient. Nevertheless, a large proportion of the cough mixtures dispensed for a tight cough will be found to contain squill.² The opinion has been held from time immemorial that a tight cough forbids the use of opium. No greater error was ever promulgated. To my mind the following quotation from the late Austin Flint is replete with wisdom; no truer words were ever spoken; and the amount of suffering that has been averted by this teaching is simply incalculable. He writes as follows: "Opium is thought by many to be contraindicated in the first stage (bronchitis). It is supposed to interfere with the free secretion of mucous and render expectoration difficult. This is an inference from the effect of opium on the secretions in health; but, so far from these results being produced, opium appears to hasten the second stage. The free secretion of mucous is not the *cause* but the *consequence* of an abatement of the inflammation; and by contributing to the latter, opium virtually acts as an expectorant. Opium, therefore, is indicated in the first stage of bronchitis, as it is in most acute inflammations." This reasoning applies to children equally as well as to adults. Antimony should never be prescribed for very young children as an expectorant, for the same reasons that prohibit its employment as an emetic. The so-called stimulating expectorants as squill, senega, and carbonate of ammonia are inadmissible until free secretion has been established; they are useful in those cases where the circulation is feeble and the patient weak, and where the cough—for there is no voluntary effort on the part of a little child—seems inadequate to the removal of the bronchial secretions. In all severe cases the child should be kept in bed. The temperature of the room should be kept uniform at about 70° F. The child's chest should be well rubbed with a mixture of equal parts of camphorated oil and oil of turpentine as hot as can be comfortably borne. Immediately afterward the chest should be covered with cotton wadding to which a piece of oil-silk has previously been loosely stitched, this to be retained in position by a muslin band or binder. It should be left on and not disturbed until the child has recovered from all acute symptoms. This is far preferable to the wet and nasty poultices that we were formerly taught to use as a routine practice. In most cases a cathartic is indicated and the old mixture of castor oil and molasses which has been used thousands of times has no superior. Many mothers, however, decline to employ it, and in these cases we must resort to something else. Calomel in $\frac{1}{10}$ grain doses in the form of tablet triturates administered every hour till the bowels act, is a pleasant and effective purgative. It may be supplemented by a dose of citrate of magnesia or compound liquorice powder, in older children. For the cough which is the most distressing symptom, there is nothing to be compared to paregoric in doses proportionate to the age. The following formula has served me well:

R. Fl. ext. ipecac gttss iv.
Paregoric 3j-ij.
Syr. tolu ad. 3jij. ℞. S.

Take one teaspoonful every two hours till cough becomes looser or less frequent.

² From personal knowledge acquired in my early days as a retail pharmacist, I can vouch for the correctness of this assertion. A favorite formula for coughs and colds of all stages with one of the leading

This in many cases with the purgative, will be all the medicine required. If, after the use of this prescription for twelve or twenty-four hours the cough does not loosen and become softer, the amount of ipecac should be increased. One-half drop of the fluid extract is not too much to give a baby with a very tight cough and a dry, non-perspirable skin. It need not be kept up however, in such large doses. I do not believe that it is necessary to keep a child "constantly on the verge of emesis" to prevent an ordinary bronchitis from becoming "capillary." It is much better practice to reduce the quantity of ipecac as soon as expectoration becomes easy, which, in the child means only the ability to "raise" easily and without effort. From this time forward a mixture like the one above with the ipecac entirely omitted will be of more service in the majority of cases than any complex formula containing ammonia with one or more of the so-called stimulating expectorants. In those severe cases where the cough is suppressed or in danger of becoming so, then opium is risky for the time being, and we must resort to those remedies that tend to stimulate cough and the respiratory centre, such as ammonia, senega, strychnine or nuxvomica, digitalis and liberal doses of alcohol in the form of French brandy or good whisky. Except in these cases they are rarely needed in acute bronchitis. As to emetics, I rarely prescribe them for this disease except under the following conditions. First, in a robust child when seen early with a full, rapid pulse, and a dry, hot skin; here the constitutional effect of the emetic is often markedly beneficial. The nausea induces relaxation and the depressing effect on the circulation relieves the febrile symptoms. The other indication for their employment is where the child's strength seems inadequate to raise or expectorate an accumulation of mucus which threatens suffocation; but even in these cases the emetic should not be repeated too frequently as the depression which follows is ill-borne.

THE RELATION OF DRUGGIST AND PHYSICIAN.

Read at the June meeting of the Ramsey County Medical Society, St. Paul, 1892.

BY CHARLES L. GREENE, M.D.,

LECTURER UPON SURGICAL ANATOMY IN THE UNIVERSITY OF MINNESOTA.

Gentlemen: This nineteenth century is pre-eminently a period of advance in thought and practice. Even theology has been forced to abandon many of her strongholds and adapt herself to changed conditions. Science has exposed many fallacies and unfolded a multitude of new truths. Medicine has upheld her standard well in the front ranks and shown men how to prevent and disperse diseases once deemed a necessary and inevitable penance for the race. In short all departments of learning have conformed to the requirements of the active, inquiring, analytic nineteenth century brain. Whither this spirit of intelligence will ultimately lead us we cannot know, but in medicine, at least, we will set no limits or boundaries to the onward march of its intelligence and the intellectual and moral light which is to illuminate for us all the dark nooks of our chosen and beloved profession. Looking back upon the work of our early predecessors with a feeling

physicians of a western city was syrup of ipecac, syrup of squills, and paregoric, each one ounce.

³ Practice of Medicine, p. 210.

of deep wonder, not unmixed with repugnance, we cannot fail to be moved to admiration for the rough and sturdy nature, the patient and profound research which enabled them while groping in comparative darkness to build a broad and substantial foundation for that great superstructure, whose upper limits we cannot now begin to measure. We feel that we labor in a brighter light but yet we find here and there areas of darkness which the sun of our united intelligence has not yet dissipated. We find in our present habits and practice many halting discrepancies which can hardly be reconciled with our steady advance in other directions.

It is to one of these discrepancies that I wish to direct your attention in this paper without desire to pose as a critic and without claim to originality. Simply desiring to place before you facts which appear to me vital and to point out what appears like a paradoxical relation between our physicians and the pharmacists of the present day. In few departments of medicine have our advances during the past century been more marked than in the direction of the preparation and therapeutic application of drugs. Jalap, calomel, blue mass and similar old remedies are fast being relegated to the upper shelves, and newer, more definite and more elegant preparations are superceding the powders, syrups, infusions and decoctions of former days. The organic chemist is giving us yearly new and valuable products the physiological action of which we may often predicate from the grouping of their elements. Physiological chemistry is adding link by link to that grand chain which we hope is to show us eventually the marvelous sequence of changes undergone by body tissues in the various functional activities of the organism as well as the true and ultimate effect of agents administered by us with the view of modifying tissue life and activity. Hand in hand with these investigators works the scientific therapist in his endeavor to formulate definite laws for therapeutic application of drugs based upon the researches of his collaborators in the chemical and physiological laboratories. All of these branches of our science are young giants, as yet in their swaddling clothes but already giving abundant promise of a robust and virile manhood. Our professional environment then is continually changing, let us inquire whether we are adapting ourselves to our changed conditions as by right we should. I believe that in many respects we are not. The bonds and fetters of custom and tradition are the most difficult of all to loose. They bind and restrain young and old alike from full freedom of thought and action. Within a few years we have had added to our weapons of offense and defense in our warfare against disease, new drugs potent in action, definite in results, and we have seen evolved from the cruder and more complex drug the infinitely subtle, pure and straight-forward alkaloid. With these have come new methods of preparation which enable us to administer our drugs with greater precision and quickness and with the least hardship to our patients.

In former days the physician could only carry his own drugs from house to house by employing a receptacle of the size of the modern saratoga, and must either dispense by guess or spend a large amount of his time weighing, dividing and directing. Now, however, he may carry all ordinary drugs for emergency or common ailments, in a small and compact case

and dispense them as quickly as he could write a prescription, and with almost absolute precision and safety. He will often save life where it was formerly lost by delay, and always save time and money for his clients.

So with his office prescriptions. He was formerly obliged to have either a large drug stock and employ skilled help or waste much time in attempting to combine in himself the functions of physician and pharmacist. He was in danger of either poisoning his patient by overdosing or of being chagrined by utter lack of action in some ancient or improperly prepared product. To him then the druggist came as a true friend and helper. He saved his time and his patience, was a friend in council, and a fountain of authority in the various mysterious branches of pharmacy.

Truly then the druggist should be, and once was, the doctor's aid and faithful ally. He is the representative by descent of men who stood for advance and scientific endeavor. He it was who in past times made a study of so compounding and dispensing as to give the doctor and his patient the best results with the materials at hand. He carried uncomplainingly the immense stock of roots and herbs, metals base and fine, syrups, syringes and all that might satisfy the finical and fancied, or the real and urgent needs of the physician and his patient. Much of his stock was dead and much also of necessity decomposed and inert. Yet upon him the physician relied for a fresh and pure drug. He served as a valuable check for hastily written prescriptions and in many other ways comforted, aided and abetted the long suffering and hard worked medicus. But on his part the doctor returned often the evil for the good, for, not content with prescribing capriciously, he prescribed in characters which would be as Hebrew, Arabic or Chinese to the ordinary reader. He wanted syringes of a certain curve, drugs of an infinite variety and in many ways added his mite to the burdens of the suffering pharmacist. Perhaps it is that the trodden worm will ever turn, perhaps it is the simple logic of events, but the druggist has gradually been getting even with his tormentor. For of late years a surprising change has occurred in the mutual relations of the two men. The druggist is forced to keep in stock a multitude of almost worthless preparations. This means an accumulation of dead stock and that means large prices for drugs dispensed. The charge for a prescription bears almost no relation to the ingredients composing it. It is a charge which has for a basis what the traffic will bear and not the true basis of cost of ingredients. The rise of the great manufacturing houses has taken much of the scientific investigating spirit from the pharmacist and has nearly reduced him to a purely commercial basis. At the same time, strange to say, the educational qualifications required by statutory law are being constantly increased. The sale of patent medicines has been a great source of profit to the pharmacist and injury to the physician and has doubtless had much to do with the increase in druggist's establishments which has reached a point where it threatens ruin to many through excessive competition and helps to turn the pharmacist to desperate means for stemming the rising tide which threatens to overwhelm him. We see our apothecary stores, not dispensing pharmacies but salesrooms for a miscellaneous stock of perfumes, jackknives, toilet articles and such matters as would

seem to be but distantly related to the art and science of medicine, and coincidentally and of necessity we see large and showy stores and a corps of assistants who seem to be occupied much more with the purely commercial than with the scientific aspect of the traffic. We can but feel that there is actual danger in the blending of these interests. That the man who is subdividing powerful and poisonous drugs should not be subject to interruption to sell a tooth-brush or glass of soda water to an urgent customer. Again arises the matter of dead stock. Why do we continue prescribing in powder form where the triturate gives us the same drug already prepared, equal in solubility and exact in dose? Why do we make the druggist a slave to our fancy for prescribing Brown, Jones or Robinsons' open formulæ, or closed formulæ, preparations which are no better than his own but oblige him to buy a large package only a fractional part of which is to be used? We may prescribe hypophosphites and pepsins of different make for each day in the year, and our patient and the druggist will suffer for our poor judgment. It all leads to accumulation of dead stock and that leads to high prices and unreliable products. How often does the doctor prescribe a drug, as cascara sagrada, in proper dose without effect, and upon another occasion get an exhaustive and exhausting action from the same in larger dose bought of another pharmacist. The patient is promised a gentle laxative effect, in both cases he is disappointed and blames his doctor. The doctor knows full well that he has had an inert or bastard product in the first instance and that in the latter a new or reliable preparation was obtained. Then how the fortunate possessor of a successful remedy rejoices in the possession of his prescription. That solitary dollar of his purchases medicine for his immediate and remote family connections and their friends, and ever and anon the simple formula returns to the well to be refilled. To blame the druggist for this at the present time would be unfair because the court of law decides it legal, yet the custom of past years was probably the basis for such a decision. Some things, however, are indefensible; counter prescribing is one of them. Our present laws are utterly insufficient to check this abuse. We should have such a law as would make it easy to convict and imprison all men perpetrating this wrong against the community.

There is a striking incongruity in making a high and rigid legal standard of requirement for the practice of medicine in this State, while at the same time men criminally ignorant of medical science are able to dispense over their counters the most powerful of our drugs for the relief of symptoms which they must necessarily be unable to interpret. Again, there is the manufacture and sale of cure-alls over the counter—cure-alls in some instances based upon the prescriptions of the very men whose patronage the druggist is soliciting.

As regards the sale of patent medicine no comment is necessary. The business is dishonorable to a scientific man if not to all who indulge in it. Most of the articles dispensed are fraudulent, and by false promises and alluring hopes doubtless produce delay and aggravation of symptoms which kill yearly a small army of credulous unfortunates. Of the evil of substitution little need be said for no pharmacist holding himself reputable will permit it. With the second-class druggist we know it as a common, dam-

aging and dangerous practice. Here then we find that, largely in self-defense and through unreasonable competition, the druggist is forced into a position of actual antagonism to the doctor. Both desire certain things which if attained would put us on a common sense footing and redound to the benefit of both alike. The physician desires accurate, rapid, low-priced dispensing. He believes that counter prescribing and patent medicine sales are directly injurious to his patients and to his own business and professional interests, yet he makes little effort to avail himself of modern preparations or aid the druggist who attempts to abolish the two latter evils. The druggist wants for himself the minimum expense for maintenance, viz.: rental, labor and the smallest possible dead stock. There are few medical men who use in regular practice over a score or two of drugs for ordinary everyday prescribing. Yet look at the shelves of our drug stores and you see them piled with hundreds of remedies which are often obsolete, useless and practically worthless, but must be kept to supply occasional demands. There is a large body of manufacturers who are placing their products upon the market daily and advertising them by bringing their articles directly to the physician. A memorandum book, paper cutter or other more or less expensive souvenir reminds the physician that he should prescribe the pills or elixirs of their firms and by no means those of any other. As before stated a man may prescribe hypophosphites or pepsins for every month or day in the year; yet it is fair to presume that any one of those made by our own reliable pharmacists would do all that they might do. Daily we prescribe our calomel and soda in powder to be triturated and divided. The druggist pounds and stirs and measures and weighs. Our patient must submit to a considerable delay and pay an additional sum for the simple prescription. Yet the time and labor of the druggist and the time and patience of our patient might have been saved had the tablet-triturate been prescribed. In the tablet-triturate I firmly believe that we find a partial means of solution of our vexatious and troublesome problem. Here is a means for the physician to secure a cheap, portable, uniformly strong, attractive and accurate form of the drug he desires to use. So also the pharmacist has a form of the drug which would cost him less than two cents a prescription, would require the minimum of space for its display, and would do away with three-fourths of his clerical force. The true druggists have been forced into their present false position, and I believe they would be glad to conform to any reasonable requests from physicians, but as prescriptions are at present written, there is too great an outlay requisite to admit of a sufficient profit from the dispensing trade alone at a reasonable price. There are doubtless too many druggists at the present time and too great competition for the needs of the community. Many of them must inevitably go out of business. We all appreciate the strict business honor and sterling integrity of our best pharmacists. We all have warm friends amongst them. We all desire that a happy solution of our difficulties may arise, but this is the business end of our profession, the point where the interest of the doctor and his patient are both involved, and in business each man must consult his best interest in all honesty. The present system, inasmuch as it forces the druggist into a position of

actual antagonism to the doctor, is a false and artificial one. He is our natural friend and ally and we would most heartily welcome a restoration of the old relations, but while we on the one hand, by prescribing our remedies in the present manner, compel large purchases of dead stock, force him to employ a large amount of skilled labor and to rent expensive and spacious stores, so we must expect to see our own interests damaged by the counter prescribing, patent medicine sales and enormous charges for our own prescribed remedies. The day of change is at hand. The younger men particularly are coming to a full realization of the fact that nothing but custom and habit could maintain the present paradoxical relation between physician and pharmacist. It is a significant fact that in the great city of Brooklyn, two-thirds of the physicians are said to be dispensing their own remedies. The time has certainly come when we should throw aside our prejudices and ask ourselves whether we have any moral right or are under any obligation to keep up a system which is expensive for our patients and disastrous to our own business interests, when the means of change are at hand. We shall always need and welcome the true pharmacist, but we should work upon fairer and more reasonable lines. There are men who have endeavored to cut off counter prescribing, but they say that they received little or no encouragement at the hands of the profession. Unless some change is effected the physician will become gradually his own dispenser. For at a cost of a few cents and in as little time as would be occupied in writing a prescription he can give his patient a tangible substance for his money, a palatable and trustworthy remedy, and save him money, time and possible danger, while resting himself secure in the belief, warranted by the guarantee of a great and scientific manufacturer, that he has given his patient a pure and active remedy in exact dose. Almost all the common drugs are now put into the form of tablet-triturates and the physician may even have his own peculiar formulæ so prepared. He has then nearly all the requisites of the ideal preparation, viz.: cheapness, ready solubility, elegant appearance, exact dosage, purity, freshness, uniformity, and last but not least, portability. The cost is nominal. He can prescribe at house or office for all ordinary ailments without recourse to outside sources. I repeat that the druggist and physician must achieve a proper basis for mutual support now or never. No one can deny the right of any man to dispense his own drugs if he chooses. No one will deny, I trust, the advantage which would thereby accrue to the profession and their clients by so doing, unless some radical change is made. Let us try to look at the question frankly and without bias, as we look at others in this great era of progressive thought, and then in some happy way will be found a means rational and sensible of placing druggist and physician in proper relationship while giving to patients the protection and full benefit which they merit at their physician's hands. No doctor wants to do all his dispensing; there will in any event remain sufficient always for the pharmacist in certain lines, but if there were no other way of bringing about the relief of our patients in this matter we ought certainly to dispense for ourselves. I am positive, gentlemen, that these are the views of many here present to-night. Why should such ideas not find free expression? We are under the strongest

obligation to advance and protect the interests of our patients, and in doing so, we are true to our profession and ourselves. To allow other motives to influence us, to allow other considerations to tie our tongues, is to prove ourselves recreant knights and unworthy to bear aloft the great and victorious standard which has in the past led the fearless warriors of our profession to their countless victories.

CONTROL OF QUARANTINE BY THE NATIONAL GOVERNMENT.

Read before the Berks County Medical Society, Reading, Pa., Nov. 8, 1892.
BY DANIEL B. D. BEAVER, M.D.,

The appearance of the cholera in New York harbor lately and the measures which were taken to prevent its entry have given rise to discussions of the question as to whether quarantine should be under the control of the National Government.

The question has been argued in the periodicals from legal and sanitary points of view.

In the latter phase it interests us alike as citizens and as physicians. Being physicians we should be sanitarians, and being sanitarians we should not only be interested in a question of such vast importance to the whole country, but feel it our privilege and duty to speak upon it.

With this view I beg to present it to the consideration of this Society, but in doing so will invite attention to such points only as have not been brought out in the discussions which I have seen in the journals.

It has been admitted generally that the health officers of the port of New York succeeded admirably in keeping the cholera out of the country, with the means at their command, but it is also well known that the State of New York and the National Government were not prepared to do the work to the best advantage of all persons concerned. The people who unfortunately came into port with the disease on board were detained unnecessarily and exposed to cruel mental and bodily suffering, while others who also came from infected ports but did not develop the disease on the way were permitted to land immediately after the most superficial and useless examination.

Having been in quarantine two days on a vessel which arrived in New York on the 22d of September, after having been at sea twenty days in consequence of a break in the machinery, with a perfectly clean health bill, excepting one case of typhoid fever, I can speak from experience of the unnecessary delays to which passengers under these conditions were exposed by the hurried and careless examination of the officers. Our vessel arrived at the Quarantine Station at 3:30 P.M., and was boarded by the port physician two hours later. The next morning a young man appeared and passed in review all the first cabin passengers, asking each one the whereabouts of himself and luggage ten days before sailing. I replied that I was on the English Channel on the tenth day, but arrived at Rotterdam the next, and after having been there two days went to England directly by boat, on account of the cholera news from adjacent cities, having, however, left there the day before the vessel which brought the disease to that city got in.

No attention was paid to these explanations, and my name was marked "Rotterdam" on the list. The