

it be well understood how any ionic or other chemical theory can be applied. Certain it is that the heart with all its nerves severed must undergo degeneration. It may well be that a combination of certain ions is essential to the well-being of the heart, as indeed of all tissues, but that they can be utilized for any considerable period apart from the influence of the nervous system seems highly improbable.

To learn exactly what share the nervous system takes in actually initiating a heart beat in the vertebrate we must await further researches; in the meantime I can not myself believe that the nervous mechanism of the heart has no other function except that of control in the generally accepted sense of the term. Also, I do not find the evidence sufficient to justify the view that this elaborate system of neurons has no other influence than that of presiding over the nutrition of the organ, important as that is; especially as it has been shown that the peristalsis of the intestine, an organization of a lower form of structure, is of nervous origin.

CONCLUSION.

In conclusion, I would say that I believe for myself and recommend the practitioner to adopt the view that the heart beat is not due in the higher vertebrates to any one factor exclusively; but that chemical, muscular and nervous factors all enter into the result, and that the exact share each takes it is impossible to determine at the present time; but for practical purposes, as well as for theoretical explanations, whether the normal or diseased heart be considered, it is very important to bear in mind that the nervous system is behind all nutrition, that of the heart included.

THE LIMIT OF PROPRIETORSHIP IN MATERIA MEDICA.

HOW FAR NECESSARY? HOW FAR PERMISSIBLE?

HOW CONTROLLABLE?

HOW CONCERNED WITH FRAUD.*

SOLOMON SOLIS-COHEN, M.D.

Professor of Clinical Medicine in Jefferson Medical College.

PHILADELPHIA.

With the question of fraudulent nostrums as presented by Mr. Kebler this communication has nothing to do. They are outside of the domain of science. We are interested in the doings of "patent-medicine" criminals just as, but no more than, we are in the doings of criminals of other kinds. We desire to prevent and punish their evil devices; but these are innumerable and it is but waste of time and energy to try to itemize them. We are interested vitally, however, in what goes on in the medical and pharmaceutical household, and to that I would call attention. A portion of the subject has been presented to this Section by Professor Diehl in his paper on the National Formulary and its relation to proprietary medicines; but there is something more to be said, especially in relation to the limits that are to be drawn about legitimate proprietorship in medicines.

PROPRIETORSHIP UNNECESSARY.

Were I free to reconstruct the world according to the method that would please me best, I should certainly fail to make as good a world as that which exists, except in one thing—I should utterly abolish all proprietorship in articles of the *materia medica*.

The purity and quality of quinin, or strychnin, or opium, or iodids, or calomel, or arsenic, do not depend on any proprietary rights in these substances or in their official names; and what is unnecessary for the standard drugs is unnecessary for any and all others.

But we have to deal with the world as it exists, and proprietorship in certain agents of the *materia medica*, through our folly and carelessness, has been so firmly established that we can not now abolish it. We are, therefore, called on to regulate it. The question is: Can we regulate it and, if so, how and how far? We can regulate it absolutely in so far as physicians are concerned, for each of us is within the control of the ethical standards, the moral consensus of the profession. The profession utterly discountenances and repudiates every attempt on the part of the physician to constitute himself the proprietor of any remedy or of any remedial process, and it will ostracize any practicing physician who will descend to such a mercenary practice.

RELATION OF PHARMACISTS TO PROPRIETORSHIP.

How about the allied profession of pharmacy? Thus far pharmacists as a professional body have not seen fit to establish a standard which forbids one of their number from becoming proprietor of a drug, or of a process of manufacture of a drug, and so long as pharmacy has trade relations I presume that such proprietorship can not be forbidden. But there are two kinds of pharmacists: First, the retail pharmacist, so-called, that is to say, the individual practicing his profession, one who in his highest development is the colleague and brother of the physician, to whom the physician turns for advice and on whom he depends for aid in the treatment of the sick; and, second, the manufacturing pharmacist, the man, or firm, who produces either a single agent or a few agents, or who manufactures drugs and medicinal preparations in general for the purpose of selling them in bulk, and who does not fill prescriptions—does not come, therefore, into direct personal relation either with the patient who takes, or the physician who prescribes, his products. The relations between the physician and the individual or dispensing pharmacist are fairly satisfactory, are becoming better defined, and are not seriously disturbed by the question of proprietorship; that being adjusted on the basis of personal name-brand to which I shall refer later. The really serious and important question is as to what relation the medical profession can establish with the manufacturing pharmacist—whether the manufacturer of specialties or the manufacturer of drugs and preparations in general—that shall be fair and honest; that shall remove the obstacles offered by present conditions to the advancement of medical science, but at the same time shall concede to the manufacturer such property rights as may justly be his.

THE COUNCIL ON PHARMACY AND CHEMISTRY.

That is the question which we have to take up very seriously, which we must in a judicial spirit determine and, having so determined, must settle, and settle in the right way. The establishment of the Council on Pharmacy and Chemistry of the American Medical Association is a step in the right direction. I do not know how far that step will go. We have not yet been able to measure it accurately. So far as may be judged from present developments, however, the work of the Council on Pharmacy and Chemistry seems worthy not only of the approval of the Section, but also of the active support of every practitioner, every dispensing pharmacist, and every honorable manufacturer of pharmaceuticals.

* Read in the Section on Pharmacology of the American Medical Association at the Fifty-seventh Annual Session, June, 1906.

ALL PROPERTY RIGHTS DEFINED AND LIMITED BY LAW.

Before taking up and trying to define the limits of the proprietorship in remedies which physicians may recognize on the part of the individual pharmacist or on the part of the manufacturing pharmacist, let us see what light may be thrown on the question by a brief review of property rights in general. All civilized communities recognize property rights. They recognize in the individual the right to make himself the exclusive possessor of an article or of an idea. Rights tangible and rights intangible, rights of various kinds, are recognized as legitimate property. On the other hand, property rights are accurately defined and limited by law. There are some things which may not lawfully be made property. At one time it was not only perfectly lawful, but was also deemed right and honorable for a man to make himself the proprietor of other men. Little by little opinion changed. First isolated voices, here and there, of cranks and reformers and agitators and abolitionists were heard and finally in this country, at least, property in human beings was abolished by law. Now we hear voices here and there advocating further limitations of those property rights which are still recognized; for example and notably in Russia, in Ireland and in Great Britain, property in land or the method of exercising proprietary rights over land is questioned; in the United States regulation of railroads and trusts, even public ownership, is agitated. Whether or not these and similar agitations will crystallize into law we do not know, and their justice does not here concern us; but we see that the principle has been established and is universally admitted that society has the right to define what objects shall be property, how property may be acquired, held or transferred, and in general to limit the extent to which property rights may go; that property in anything, except a man's own person and the fruit of his labor, is not a natural right inherent in man, but is purely a social, legal regulation. The existence of limitations on property rights is not, however, an excuse for the denial of right, given by law, and, therefore, within the domain of social protection. That property rights are limited by law justifies no one in seeking to deprive another by force or by chicane of what is lawfully his; hence we properly have laws to prevent and to punish theft. But there may be public property as well as private property. If the limitation of property rights fails to excuse the theft of private property, neither does their existence excuse the private appropriation of public property. To deny the existence of lawful property rights in *materia medica* is folly; but that does not justify illegitimate attempts to make private property of knowledge that belongs to the whole medical profession.

PUBLIC AND PRIVATE PROPERTY.

Here, then, is the point at which we must draw the line. That which is of necessity public property, that which belongs to the whole medical profession—including therein both physicians and pharmacists—may not rightfully be made the exclusive property of any pharmacist, or any inventor, or any manufacturer. The attempt to introduce confusion into this subject is made in the interest of fakes and fakirs—not of those confessed criminals, the rogues whose fraudulent devices Mr. Kebler has told about, but of men who claim respectability and who, nevertheless, are a disgrace to the profession of pharmacy, if they ever belonged to it, and who certainly have been cast out of the ranks of recognized medicine, if, indeed, they were ever enlisted. I refer to

the projectors or proprietors of the fake "synthetics" and alleged novel "amido-benzol derivatives" or "compounds of the benzene ring," etc., which are novel only in name, usually being familiar agents disguised by mixture or otherwise. I refer to such stuff as "antikamnia" and its numerous imitators; to those manufacturers and dealers who have made or perhaps still make false or misleading statements concerning the composition, action or chemical character of the products they sell as remedial agents, and whose endeavor is by virtue of such false or misleading statements to induce physicians to use and to prescribe their nostrums. The effort to confuse the issue has been made in the interest of this type of fraudulent pharmaceuticals and their authors.

PATENT RIGHTS.

Brushing such products and such confusion aside, let us inquire in what manner property may rightly be established in a legitimate drug or pharmaceutical product? Let us use the word product as the simplest, practically covering the ground. According to the laws of the United States, exclusive rights may be obtained over inventions relating to medicine, either on the product or the process. The grant is for seventeen years. This is a patent. It is on record in the Patent Office at Washington. Before the patent is granted a full description of the product or process to which claim is set up, including, therefore, tests for identity, must be made and filed. It is not secret, being of public record; and, moreover, the requirements which the Pharmacopeia properly insists on for the admission of a drug, are fulfilled—inasmuch as there are standard tests for identity, for purity and for quality. While, therefore, we should continue to reprehend secrecy, we should bear in mind that the law grants to pharmacists and manufacturers the right to take out patents on their processes; and so long as articles which are useful in medicine and of whose benefits we can not rightfully deprive our patients are lawfully patentable, we must recognize those patents (and I for one am in favor of doing so) about which there is no fraud. Of course, if the process as patented, or if the test of identity as filed, does not apply to the substance as found in commerce, the matter then enters into that region of fraud with which, as I have already said, we have nothing to do. But when a patent is honest and the article is useful, I am in favor of recognizing the product, using it and admitting it to the Pharmacopeia. Here, however, a new phase of the question appears—indeed, the most important one.

NOMENCLATURE.

When a new medicinal product is brought into the world it must be given a name to distinguish it from all other products, and it is on this question of name that the whole discussion finally turns. A combination of carbon, hydrogen, nitrogen and oxygen in certain proportions made in a certain way, is given, let us say, the name of "phenacetin." It might have been called "acetphenetidin," but the inventor chooses instead to call it phenacetin. Never mind what his object is in using that particular combination of sounds, he uses it. He brings this product into the world, he gives it a name, and that is the only name by which it can be procured. That name enters into pharmaceutical and therapeutic literature. What is the necessary consequence? Surely this—the name is public property and not private. The patent law may recognize private property in processes, but it must recognize no private property in names. I believe—if I am incorrect I trust that Dr. F. E. Stewart, whom

I am quoting from memory, will set me right—that there have been certain cases decided in the U. S. Supreme Court and other courts—I think one was the “Singer sewing machine” case and another the “Castoria” case—which uphold this doctrine; then when a name is given to a patented product and the name enters into literature in general, into trade lists, into the dictionary, into periodicals and lectures and text-books, then such a name becomes a common noun and, therefore, common property. It is a descriptive name, and not a trademark. There can be no exclusive right in words, and if the word by which this particular combination of chemical elements has been described in literature is phenacetin, then its rightful name is phenacetin; and as phenacetin it can enter the Pharmacopeia. The Pharmacopeia may give it also another and a better name. It may give preference to the form acetphenetidin and give the form phenacetin as a synonym. That is another question. But whether official title or synonym, the rightful property of any individual in that name is *nil*. We must never for an instant admit such property. Otherwise our text-books, our dictionaries, our lectures, our medical society meetings, become one huge advertising machine for some proprietor. If the law is other than I have stated, then it is our duty to agitate for such amendment of the law as will exclude private property in names.

The process, however, is a different matter. Law and custom give the right to make property of processes if these show the necessary originality; and as the property right is a limited one, no great harm is done. I do not advocate patents on processes; indeed, I doubt from a sociologic viewpoint the wisdom of all patents; but that is too large a question to discuss here and now. Patents exist and we must face the fact.

But if patents on one process are advisable, how about patents on other processes? A patent on a process must cover that process and no other. Improved processes must have equal rights to obtain patents. Suppose a new process is found for manufacturing phenacetin or acetphenetidin? If the name phenacetin or acetphenetidin is private property, the inventor of the new process can do nothing with his invention unless he acquires the consent of the proprietor of the name. That is a manifest injustice; it retards the science of pharmacy; it is a clog to the progress of medicine. Therefore, if new processes are discovered for the manufacture of patented articles the inventor of the new process should have the right to the old name, because that is the name by which the product is known and used. If that is not the law, we must make it law—in the constitutional manner.

TRADEMARKS.

But there is still another way by which the attempt is made to make property of agents of the *materia medica*; that is by the so-called copyright or, in reality, trademark. As a matter of fact, there is no copyright on anything but books and papers; that is to say, on collocations of words, but not on a single word. But the single word may be “registered” as a “trademark” or “brand.” I may write and copyright a book or paper or poem on “stars” or on a “star,” but I can not copyright the word “stars” or “star.” I may, however, register the word “star” as a trademark to designate a particular brand of goods; for example, “star” razor or “star” braid. In neither case is the word itself copyrighted, because each manufacturer—the razor maker and the braid maker—has used it freely without regard to its use by any other; but it has become private property as applied to a par-

ticular product having another common name—razor or braid. So we could have “star” sewing machine, “star” phenacetin, “star” acetphenetidin, or “star” quinin, if you please; but the words razor, braid, sewing machine, quinin, phenacetin, remain common stock of all who use the language. If the law is otherwise, the law must be changed.

MANUFACTURER'S BRANDS.

How, then, shall the manufacturer, if he has given time, effort, expense, ability to the production of a particularly pure and worthy article of pharmacy, be protected? There is a simple and effective way. He has his own name and this he can use as a brand. Let him put his own name on his product, as a trademark, as Squibbs' ether or Johnson's plaster; or let him use any other device—star or sun or planet or initials, or anything that will indicate sufficiently that a particular article is made by a particular manufacturer. Let us frankly recognize this right by designating, when necessary, the particular brand of product with which our prescriptions are to be filled. I never hesitate to specify, when for any reason I find it necessary, Chapoteaut, Rosengarten, Wyeth, Fairchild, McK. & R., Fraser, Lloyd, Armour, Schering, Merck, or any other manufacturer, whose special product I wish. These are simply the names that come to me at the moment; there are many others that might be used with equal propriety. In this way we give the manufacturer his legitimate protection; we concede and make valuable his property right to his brand. We also protect the medical profession and science in their right to what is the general property—the descriptive name of the product. The name of the manufacturer as a trademark or brand of his products; the name of the article as the common property of the profession; thus we concede and thus we limit. The patent on the process may belong to the inventor for the seventeen years that the law gives it to him—until the law is abolished—and here also we have a definite concession and a distinct limit.

SECRECY.

It will be observed that, thus far, I have excluded entirely the question of secrecy. We are discussing questions of science, and secrecy is the very antithesis of science. Science is knowledge, systematized knowledge; secrecy is systematized ignorance. They are unrelenting foes; they can not come together save in deadly and destructive conflict. Moreover, secrecy is the parent of fraud. All the frauds that have arisen in the field of proprietary remedies have been builded on real or pretended secrets. But we are not concerned with mere frauds; I allude to them only to illustrate a danger. Is there any legitimate form of secrecy concerning agents of the *materia medica*? Concerning single agents? No. Concerning mixtures, I doubt if there is much room for a secret of importance. I differ at this point with many manufacturers whom I respect for their high commercial and scientific standards; but whose vision is perhaps obscured a little by the question of trade interest. A manufacturer may say, for instance: “This mixture which I put forth contains ingredient A, so much; ingredient B, so much; ingredient C, so much; mixed according to a particular manner, with such flavor and such vehicle as I have found the best. All right. If

1. That is, as to the product. I have a sentimental objection to a secret process of manufacture but provided the product be of one definite composition and readily identifiable, I would not hesitate to use and to recommend it. Quinin, for instance, was long, perhaps still is, prepared by a secret process.

A, B and C really represent all that is active in that mixture and the exact quantities are as specified I have not much quarrel with him concerning his real or pretended secrets as to method, or flavor, or vehicle, though I would much prefer complete frankness. Frankness, so far as I am personally concerned, would inspire a confidence which I do not always have when it is absent. But suppose the manufacturer uses, as corrective or adjuvant, cocain, or hyoscin, or cannabis indica, or codein, or some other agent of positive power, and omits to publish the fact?

When we tell him that this is scientifically and morally wrong, he may reply: "Why, I just put in a little cocain to avoid upsetting the stomach, but it is only one-tenth of a milligram; that is of no consequence; it is not an active agent in the mixture; the other components do the work; that is simply my 'trade secret' in mixing." I do not care how little it is; if he did not put it in for the purpose of being active, why is it there? The manufacturer is not wasting his money by putting in unnecessary ingredients, and so long as the drug is there to act on the human body—whether synergistically or correctively to the other ingredients makes no difference—so long as it is there I must know it, or I am not justified in putting the mixture into the body of my patient. Therefore, we can not tolerate secrecy concerning anything, however minute the quantity, which is intended to, or which may without intent, give part of the medical effect, or which may be used to modify or to correct the general action or any special action of the whole mixture, or of any special ingredient. Any ingredient that, under any circumstances, may become physiologically active is one of which an overdose might be toxic, and concerning the presence and quantity of such agents full and exact information must be published. So, too, as to ingredients which chemically alter other ingredients or affect their absorption or elimination when administered.

It is not absolutely essential that we should know exactly what is used for mere flavor and mere vehicle, but I am under the impression that there are very few profitable secrets in flavors or in water; and when we come to vehicles other than water, as alcohol, glycerin, and so forth, we have definite and positive actions—perhaps chemical changes in the agent, perhaps local and systemic effects on the human organism, which must be taken account of. Thus many of the so-called liquid foods are chiefly alcohol, and the physician who ignores this fact does not do justice to his patient.

POWER TO CONTROL.

Finally, what is our power to control the action of manufacturers in the matters here spoken of? It is unlimited. We can prescribe or refuse to prescribe—dispense or refuse to dispense—any product or the products in general of any manufacturer. Let it be known that we will exert this power. Let us vest recognized authority in the Council on Pharmacy and Chemistry of the American Medical Association; in the Committee on Revision of the United States Pharmacopeia. Let them publish the facts—the whole truth, no more, no less—concerning all products and all manufacturers. Accordingly as our standards are respected or defied, let us act. There is no product, no firm, but something "equally good" may truly be found among legitimate products and among manufacturers willing to coöperate with the profession. Ours is the power if we choose to use it. Ours, therefore, and not the pharmacist's or the manufacturer's, is the full responsibility. We must meet our responsibility. We must use our power.

SUMMARY.

1. It would be best were there no private property rights concerning agents of the *materia medica*.

2. Property rights, however, exist legally in two ways: By patent and by trademark or brand.

3. Physicians and the Pharmacopeia should recognize these two forms of property right, and utilize them to control the situation through some recognized central authorities such as the Council on Pharmacy and Chemistry of the American Medical Association and the Committee on Revision of the United States Pharmacopeia.

4. The Pharmacopeia should admit useful patented products untainted by fraud (a) under the best short name fairly descriptive chemically, (b) under the name given by the inventor and recognized in literature as a synonym of the official title. Such names should be common property, free to the use of any manufacturer who may legally, and can actually, make a product conforming to official standards.

5. The patent as thus recognized applies only to process, not to product and not to name; and if this limitation be not in accordance with existing law the American Medical Association and the American Pharmaceutical Association should take the necessary steps to have the law amended accordingly.

6. Names of products being common property, manufacturers should be encouraged to register as brands and trademarks their own names or initials, or some arbitrary word or device, which should apply to all their products; and physicians should recognize and coöperate by specifying, when they deem it advisable, such brands of special products.

7. The use of fanciful and misleading names for special products and mixtures should be discouraged, and such brands or trademarks or proprietors' names of special articles should receive no recognition by medical or pharmaceutical authorities or by physicians. Products thus improperly designated should not be prescribed; they should not be referred to in lectures or papers or text-books.

8. This whole matter is entirely in the hands of physicians. Whatever manufacturers may do or fail to do, physicians write, or should write, their own prescriptions, or make their own purchases for dispensing. What they neither prescribe nor dispense will not prove profitable to manufacture. The responsibility, therefore, rests at last, as at first, squarely on the shoulders of physicians and can not be shifted to those of either the dispensing or of the manufacturing pharmacist.

DISCUSSION.

DR. W. J. ROBINSON, New York City, called attention to the fact that following the reading of his paper on the nostrum question at New Orleans in 1903, entitled, "The Composition of Some So-called Ethical Nostrums," the medical societies took a hand in the movement and wonderful results have been achieved. An examination of the pages of the medical journals of to-day will show the tremendous improvement that has been made. Many preparations which a few years ago were advertised in the most reputable journals are at the present time found only in those of the lowest kind. Of course, he said, there are still some preparations which should not be advertised in any reputable journal. He referred to a journal containing the advertisement of a preparation which purports to give the formula. It is headed: Beware of coal tar antipyretics. It itself contains two coal tar products, but fancy perverted terms are used for them. The nostrum is Labordine. Another is Buffalo Lithia Water. It is advertised in a great many magazines and in the New York Times. It is stated therein that Buffalo Lithia Water will cure the albuminuria of pregnancy and Bright's disease, stone, renal inflammation,

rheumatism, uric acid conditions and so on, and the names of Loomis, I. N. Love, Bartholow, Shoemaker, etc., etc., are given as authorities highly recommending it.

Dr. Robinson agreed with Dr. Cohen in all he said. He covered the same ground two years ago at the Atlantic City meeting and showed what preparations may be prescribed and the relation of the physician to proprietary medicines. If a preparation is patented and not a secret it may be prescribed with propriety. Dr. Robinson is convinced that the nostrum evil agitation will result in tremendous good to the professions of medicine and of pharmacy, as well as to the public.

MR. M. I. WILBERT, Philadelphia, corrected Dr. Robinson in one statement he made that the agitation in reference to the nostrum evil originated with him. In 1817 the then president of the New York State Medical Society read a communication along these very lines and made suggestions. In 1819 the same question was brought up by the County Medical Society of New York and the members discussed the question at great length, and even produced a pamphlet which attracted considerable attention. Coming to more recent times, it is more than fifty years ago, that, at the annual meeting of the American Medical Association in Boston, this question was discussed. Two years later the American Pharmaceutical Association discussed the subject even more vigorously and adopted a Code of Ethics which to-day stands for exactly what Dr. Cohen propounded, and which is ideal if the members of the pharmaceutical profession would only live up to it. So far back as 1880 the Philadelphia County Medical Society took up this same question. It was discussed in the State Medical Association, and Dr. Stewart brought it up later in this section. However, it is not a question of credit, but a question of doing, and eliminating the fraudulent from the practice of medicine.

DR. W. J. ROBINSON, New York City, stated that he did not mean to say that he was the first to mention this subject. To go back into history we find that even in Egypt they had a nostrum problem. He only wanted to assert with all possible emphasis, that his New Orleans paper was the paper that brought the whole subject to a head. The issues were presented so squarely and so unequivocally that they could no longer be ignored. And it is well to bear in mind, he said, that that paper, which would now be considered rather mild, was at that time considered so radical that there was some hitch about its publication in *THE JOURNAL*, and it was published only after quite a few abridgments and eliminations. Hundreds of people are now doing excellent work in the anti-nostrum movement, but Dr. Robinson believes that he deserves some credit as one of the pioneers of the movement.

DR. F. E. LEWIS, New York City, thought it must be very gratifying to the members of this section to note the friendly attitude the pharmacists have taken at this particular meeting. He deprecated a rather different tendency on the part of some of the pharmaceutical profession, that is in a measure a dictatorial position and an over-critical position toward the medical profession. Physicians have a right to demand from the pharmacist his assistance. He is to correlate their work, but not assume a dictatorial attitude. The Council of Pharmacy and Chemistry, in its fundamental bearing, he believes, is a step in the right direction. The one feature that will hold it back in its first objects is that it is too restricted among its pharmacists, that it does not embody sufficient of the principles of the medical profession. Dr. Lewis maintains that while the pharmacist has been of great value in the establishment of and in the placing of materia medica on its present high plane, the pharmacist knows nothing about the problems of the physician in the rural districts, who has problems which he must solve, and he must solve them according to the education and knowledge brought to his attention. This whole campaign, if it is going to amount to anything, must be educational, not coercive. Dr. Lewis believes that the medical profession, as a whole, is largely to blame for the situation as it exists to-day.

The question of proprietorship, he said, is not offensive at all. Proprietorship can be just as high-minded as any other walk in life, but physicians have the right to be scientific and they have the right to insist on a statement of the active ingredients of preparations they use. They should be honest. The question of honesty is the whole one. The question of

honesty of act. This movement must be slow because the profession is confronted by conditions and not theories, and there is a large body of medical men in this country to-day who depend on these ready-made things. If they are honest and if they can use them in a better way, well and good, but there are many people who would like to abolish the charge on the part of the physician, and they act on that basis.

DR. REID HUNT, Washington, D. C., agreed with nearly everything Dr. Cohen said. He referred to two points. First as to some of the new names in the Pharmacopeia: these names are for the most part the true names but in an abbreviated form. The very composition determines the name, and the substances can not scientifically, have any other name. Many of these names must be shortened for commercial reasons, but it certainly seems preferable to adopt names which are at least suggestive of the true names instead of perpetuating trade names, which are often derived from supposed therapeutic properties. Second, Dr. Cohen spoke of the physician specifying the maker of the drug he wanted. That would put the pharmacist to great expense. One physician would specify, *e. g.*, A's ether, another B's, because he believed it to be as good as A's, but less expensive; a third would want C's for some other reason, and so on until the pharmacist would be compelled to have a dozen brands of nearly every drug; aside from the expense the temptation to substitution would be opened. Dr. Hunt thinks it would be better for the physicians to ask for the U. S. P. article, but, of course, until there are thoroughly enforced national and state pure drug laws there is some danger of inferior articles being dispensed.

MR. H. P. HYNSON, Baltimore, Md., believes that pharmacists are a tractable set. They are the children or servants of the medical profession, and it follows that medical men really have the correction of all these evils in their own hands.

DR. LYMAN F. KEBLER, Washington, D. C., said that if physicians are going to prescribe and are prescribing such articles as those referred to in the various papers, they are endorsing the worst kind of frauds. Very few of the concerns that exploit these fraudulent remedies are manufacturers. They are using the large manufacturers of pharmaceuticals all over the country for the furtherance of their schemes.

PROF. C. LEWIS DIEHL, Louisville, Ky., said that there is a crying need for a change by which the medical profession may be led to prescribe preparations of well-known formulæ, not by their titles of trade marked preparations, but by the original titles under which such preparations and formulæ have become well established, so that the abuse, which compels the keeping of a half a dozen brands of the same preparation in stock, may be done away with.

DR. S. SOLIS-COHEN, Philadelphia, said that he is not advocating the use of trade names, as, for example, phenacetin, in preference to acetphenetidin. But he wants it made clear that the article termed phenacetin by its manufacturers is not different from the article termed acetphenetidin by the U. S. P. What makes the coining of these names profitable is that they become private property, or at least the attempt is made to treat them as such. Let it be understood—and if a law to that effect does not exist try to have it enacted—that a name can not be made property. Therefore, if any article is best known in literature by a trade name, seize that name as public property, make it official, and let any manufacturer employ it. Then the manufacturers will cease to coin these names and the pharmacopeial or chemical names only will be used. An ignorant physician will not then say, "I gave my patient phenacetin to-day, and to-morrow I am going to give him acetphenetidin;" it will be generally understood that urotropin and hexamethylenamina, are one and the same substance, and so on. If it is not necessary to specify manufacturers' names, do not so specify. Dr. Cohen does not advocate indiscriminate specification, but he does say that the claim of the manufacturer that he is legitimately entitled to some protection must be considered; and Dr. Cohen thinks it is wholly met by the use of his name. Many manufacturers are deserving of that; let them have it and then they need not claim in addition the illegitimate protection of a trademark name. Dr. Cohen thinks physicians should congratulate both themselves and the manufacturers on the friendly relations

existing between them and the Council of Pharmacy at the present time. That can be extended in many ways, especially as to therapeutic matters. He welcomes this as he does everything which will tend to improve the relations between the professions of pharmacy and of medicine, between the individual physician and the individual pharmacist, and also between the profession of medicine and the manufacturer on whom in the last resort physicians are frequently compelled to depend, simply because so many pharmacists have ceased to prepare their own galenicals. Dr. Cohen prefers when it is possible, to send his prescription to a pharmacist who makes his own fluid extracts, his own infusions and so on, but a great many men do not, and, after all, he must depend on some manufacturer who has made the preparation the druggist dispenses. Therefore, he must come into relation with the manufacturers, willy nilly. Let it be a definite and understood relation. The profession should have some means satisfactory to both sides of controlling the products of all reputable manufacturers. Commercial exploitation is not always bad; neither is it always good. If properly controlled, the good can be increased, the bad minimized. In 1858, Benjamin Ward Richardson introduced hydrogen dioxide to the medical profession. He laid down fully the indications and rules for its use. It was largely neglected until about 1880, when a manufacturing chemist began its exploitation. Despite Richardson's authority and ability, the profession might never have used this valuable agent had it not been commercially exploited. That particular manufacturer, however, asserted in regard to the therapy of hydrogen dioxide, many things which Richardson, being a scientific physician, did not assert. His product moreover, was defective; it was too highly acid. Physicians led astray by the commercial literature and neglecting to refer back to Richardson's writings, began to do much harm with the drug. That is the other side—the want of control. Many other useful drugs in and out of the Pharmacopeia have owed their general introduction to the exploitation of the manufacturers; on the other hand many useless drugs are exploited by them to the general detriment. The attitude of the profession should be one of encouragement to legitimate and scientific enterprise, of discouragement to fraud or unscientific pretense. In other words the medical profession must resume a friendly control of pharmacy.

RESULTS OF IMPROVED TECHNIC IN OTOLOGIC SURGERY.*

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Of late the technic of otologic surgery has steadily improved. Some of the advances in this line have already been generally accepted, while others are only regarded tentatively, or are not fully recognized. I consider only those improvements that are not accepted by all otologists and that have not yet been incorporated into their routine work. These improvements are largely connected with the physiologic treatment of wounds which materially shortens the convalescence and notably improves the results.

1. The advantages of a thorough mastoid operation are great. In this operation not only all the diseased tissue in sight is removed, but also the whole mastoid process ablated, and the zygomatic, occipital and jugular cells, if present, are opened, to expose all the cellular diverticula of the middle-ear system. The advantages are that there is no possibility that the convalescence will be much delayed by any remnant of the infected material which had inadvertently escaped removal, and a secondary operation will not be required except for possible intradural complications. The slightly increased operative time can not outweigh these benefits. Cases 10 and

25 show good results of this method. Bad results of a less extended operation are seen in Cases 1, 9 and 14 (Fig. 1).

2. The time consumed by the operation has been considerably shortened by the use of the three following instruments: *a.* Electric burrs of improved pattern are most useful in work on sclerosed bone or in finishing off an operation by the removal of irregularities and opening the recesses difficult of access to other instruments. *b.* Richards' curette is an instrument which allows direct boring in the bone and can be used to advantage in all but the very hardest bone. It thus dispenses with the need of chisel or gouge in most cases. *c.* My hand-driven front-bent gouge can be used instead of a chisel or mallet-driven gouge to open the hardest bone and in the delicate carving required in the excavation of the deeper parts.

These three instruments add greatly to the facility, safety and speed of the operation. Much time can now be saved in the operation, because it is no longer neces-

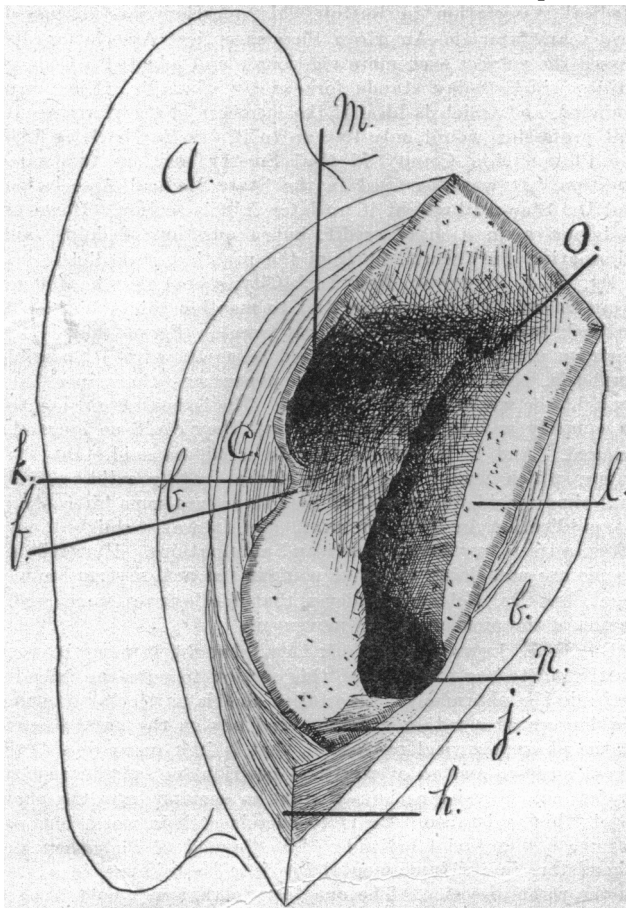


Fig. 1.—Simple mastoid operation for acute mastoiditis, the jugular cells have been thoroughly opened. The zygomatic, superior petrosal and occipital cells were not well developed. *a*, auricle; *b*, skin-flap; *c*, periosteum; *f*, posterior wall of osseous meatus; *h*, sternomastoid muscle; *j*, digastric muscle; *k*, posterior wall of membranous meatus; *l*, convexity of sigmoid sinus; *m*, mastoid antrum; *n*, jugular cells; *o*, superior petrosal cells.

sary to polish the osseous walls till they shine again if the blood clot dressing is to be used. Cases 5, 6, 9, 10, 11, 14, 16 to 23 and 25 show shortened time of the operation.

3. The soft parts are moved and handled during the operation with greater care than they used to be, in order to preserve the periosteum intact and to avoid laceration and contusion of the soft parts which might delay the physiologic reparative process. The disposal of the soft parts after completion of the operation has been very much simplified. In the simple mastoid, when the blood

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