a hot infusion of couch-grass in the morning, for twenty to fifty days in succession, as a rule, gives good results.

If the spasmodic element dominates, one should attempt to quiet the intestine by means of belladonna and valerian. If, on the contrary, intestinal atony predominates, treatment with strychnine, the glycerophosphates or adrenal-extract is indicated.

In toxic constipation, a vegetarian diet must form the basis of treatment. Eggs, milk, and meat are forbidden, as these might increase the toxic symptoms. However, the physician must not be too strict about the dietetic restrictions, for fear of reducing too greatly the alimentation, and thus only make worse the constipation as well as the denutrition.

Contrariwise, in one case of this kind, I secured improvement by removing all restrictions and permitting the patient to stuff himself with food to his liking. Ordinarily, a vegetarian regimen is best, but, on condition that the patient gets sufficient vegetables and fruits for full nutrition—something hardly possible in these wartimes.

Intestinal disinfection must be secured by the alternate use of bouillon of lactic and perilactic bacilli, and of calomel, preparations of benzonaphtol, betol, and naphthol.

Hepatic extracts and biliary extracts are useful in exciting simultaneously the hepatic functions, which are slightly deranged in this form of constipation, as are also the intestinal functions.

Castor-oil and laxatives saline, in small doses, are of use. Copious intestinal flushings are employed, for the purpose of emptying the intestine mechanically and in order to disinfect it.

In inflammatory constipation, the diet must be nonirritant and not leave too much residue.

In the course of the peritonitic attacks, thick milk or vegetable soups, farinacious purees, and fruit-marmalades alone are permitted. Purgatives that irritate the intestine or provoke spasm must be employed only in moderate doses. As a rule, castor-oil is tolerated best. Lukewarm, emollient enemas, administered under slight pressure, are best for cleaning out the bowel. Hot applications on the abdomen exercise a good, calming influence.

It is in this form of inveterate constipation, when it is accompanied by progressive denutrition, that surgery must be called upon to assist. Generally, section of the peritoneal bands or of the false membranes is insufficient, for, these will form again. It is necessary to resort to entero-anastomosis that will make it possible for the feces to reestablish their regular course in the large intestine.

Is Opium the "Sheet-Anchor of Treatment"?

By THOS. S. BLAIR, M. D., Harrisburg, Pennsylvania
Chief of Bureau of Drug-Control, Pennsylvania Department of Health

THE sheet-anchor, according to the "Standard Dictionary," is "one of two anchors usually carried outside the waist of a ship and supported on shores: intended for use only in emergency." The sheet-anchor was, formerly, the largest anchor carried by a ship; but, so many special devices for anchoring a vessel have been devised that the sheet-anchor has lost its former prestige. Hence, my assertion, that "opium is the sheet-anchor of treatment," is a statement of fact; for, there is no doubt that, *as an emergency-remedy*, opium, together with its derivatives, makes the poppy the most necessary, Class A-botanic drug in existence—the sheet-anchor, "intended for use only in emergency."

Yet, this expression, so universally used by physicians, I venture to say, is understood by few of them in the sense obviously meant by the author of the phrase, which was introduced during the therapeutic period when opium was regarded as almost wholly an emergency-remedy; for, the uses and alleged uses of opium and its derivatives have been so extended that, in the view of many, these agents are not only emergency-remedies, but, are routine ones as well.

Ships still carry sheet-anchors, but, the emergencies are met in so many special

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and efficient ways by modern devices that the sheet-anchor now is but little employed, except on poorly equipped vessels. And, opium still is the sheet-anchor of treatment in meeting emergencies, especially by the poorly equipped physician; for, modern technic meets *most* emergencies more efficiently than do opium and its educts and derivatives.

Data collected in this bureau, relating wholly to Pennsylvania and based upon legal records of the actual purchases of narcotics by the professional people of the state and dispensed on prescriptions, show that one-third of the physicians and dentists are responsible for ninety percent of the narcotic drugs issued through professional channels.

Opiate-Statistics for Pennsylvania

As the average annual amount of morphine per physician, counting dispensing and prescriptions both of legitimate and illegitimate character, is slightly over 2 ounces per year, the better-qualified two-thirds of the physicians are, each, credited with only 1/3 of a troy ounce per year, while the less trained one-third are, each of them, credited with nearly 6 ounces a year.

These striking facts—for, they are facts based upon actual legal reports rendered—show that the better-qualified physicians are not heavy prescribers of morphine in their respective practices; for, they employ only about ½ grain a day—a most creditable showing. When we remember that this use covers cancerous and other incurable cases, it is clear that the better two-thirds of the profession in Pennsylvania do not constitute a problem as regards morphine-addiction.

What of the other one-third that employ 90 percent of the morphine accounted for in professional channels? Their showing is: 6 ounces per physician in a year, or, nearly 8 grains a day—sixteen times as much as that prescribed by the better men.

An analysis of this one-third of the profession shows that seven out of eight of them are *not* catering to drug-addiction, but, that they are employing fairly large quantities of morphine in good faith. The record of this seven-eighths of the less-qualified men is below 6 ounces per year; it is, probably—we do not have separate figures—about 3 ounces a year, for, they are merely using morphine unwisely and are not advisedly catering to drug-addiction. More concerning these men further on.

But, the one-eighth of the less-qualified third of the profession *are catering to addiction,* more or less in bad faith. Our records here show that about 490 physicians in practice in Pennsylvania constitute our whole physician's-problem.

Now take 8 hypothetical men catering to addiction and making unwise use of morphine, the whole 8 averaging, each, 6 ounces of morphine a year, but, 7 out of the 8 averaging only 3 ounces a year (largely through unwise use) what is the one man (the eighth one) doing?

Vicious Prescribing of Opium

As the whole 8 are using a total of 48 ounces a year, but, 7 of them are using only 21 ounces of the whole, the eighth man is using the remainder, or 27 ounces a year —2¼ ounces a month, or 36 grains a day. Now, remember that there are about 490 physicians in Pennsylvania averaging that amount, or that there were during the six-months' time (February to July, inclusive, 1919,)—on which these actual records were based. Of these 490 physicians, the highest individual record was an average of 15 1/3 ounces of morphine a month, or 184 ounces in a year. Think of it!

Of course, this is the one most-extreme instance, and his case was duly attended to; while the rest range down from these figures rather rapidly, only about 150 men constituting the vicious element in the profession, out of nearly 12,000 physicians registered in the state. Only 1 vicious "dope-doctor" in 80! This speaks well for the profession at large.

It is "up to" the authorities and the overwhelmingly large reputable element in the profession to "get" these 150 men. The rest of the 490 are being rapidly "shown", and there is every hope for their reformation; but, about 150 seem to be beyond reform, and quite a large proportion of them are, themselves, drug-addicts. Quite a number of them have been apprehended by the federal and state authorities, and evidence is accumulating against many more. Some are getting out of this state.

To get the figures with regard to opium in Pennsylvania, *multiply* the morphine-figures by three. In Pennsylvania, the cocaine-menace has largely come under control; and, if the morphine-figures are *divided* by four, the cocaine-situation will be

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depicted fairly accurately, so far as professional traffic is involved.

Now let us discuss the several classes of physicians instanced in what has preceded.

The Goats and the Lambs Separated

First, the capable two-thirds of the profession, or, rather, the MORE *capable* two-thirds—for, it is hard to draw a distinct line, on one side, the capable, and, on the other, the incapable. The matter is purely relative and is used here for convenience; for, in our work, we find about one-third of the Pennsylvania profession using narcotics at least unwisely, as judged by the teachings of standard textbooks, not, from any extreme or socalled propaganda point of view. We are trying to be no mere propagandists or beaureaucratic regulators, for, we are physicians and make every allowance for difficult conditions encountered in practice. We know from experience what they are.

At least two-thirds of the profession are modern practitioners, either young or keeping abreast of the times. They know the uses as well as the limitations of drugs; they have adopted modern diagnostic measures; they either do laboratory-work or have it done; they realize fully the sphere of surgery and of the specialties; they are keen to learn efficient technic; they know how to meet emergencies, or most of them, by means other than by administering narcotics; and these men regard opium, with its alkaloids, as their sheet-anchor, to be resorted to in emergencies in which other emergency-measures fail.

Those Who Prescribe Scientifically

These physicians are seeking for remedies specifically meeting definitely diagnosed pathology, whether the remedy be a drug, a serum, a vaccine or surgical intervention. But, they know that specific remedies are few, and, so, they stress case-management in the run of practice, regarding the administration of symptomatic medication as only a *part* of case-management, and, often, the least important part. They know from experience and from reading that the narcotics *cure* no condition having a definite pathology, and they regard the administration of narcotics as emergency symptomatic medication, to meet violent pain and spasm, certain surgical and traumatic emergencies, acute inflammation of serous membranes, aggravated dyspnea, cases of pneumonia and typhoid fever with talkative delirium and in which the patient simply *must* have sleep, inoperable cancer, and so on. They know that, in certain aggravated conditions, the *temporary* use of a narcotic is lifesaving, even though it is not specifically curative; and, thus, they prescribe narcotics conservatively and scientifically, ever keeping in view the associated danger of addiction. No law interferes with such practice, and these physicians no more think of supplying to a patient at one time 200 morphine pills than they do of giving an equal number of calomel tablets or aconitine granules.

When these men are consulted by, say, a "bladder-patient", they analyze the urine, employ the cystoscope, and so forth, and reach a definite diagnosis. They do not call it "cystitis" and "let it go at that", puttering with the case and finally making a drug-addict of the unrelieved patient, because the only resource they have left to them is, to give morphine or opium. But, these physicians of whom I speak are "on the job" and they *know* their work; they make of narcotics a blessing to the sick and injured, helping the poor sufferers over the hard places. May their tribe increase!

Those Reckless Prescribers

And now, what of the one-third of the profession who are using nine-tenths of the narcotics supplied through professional channels? Here is a tender spot. Yet, we must face conditions as they are, and we can not afford to ignore the sore spot once uncovered. If a ship has only a sheet-anchor, it is "up to" the master of the ship newly to equip his vessel and make it safe for his passengers. The authorities will not give him clearance-papers if his ship lacks proper anchors, while no crew would sail with him.

The pharmacists of Pennsylvania fill nearly 2½ millions of narcotic prescriptions in a year, and the physicians of the state dispense as much as the pharmacists supply on prescription. It takes the entire working-time of two clerks in this office to check up and tabulate the large numbers of reports received, that cover this matter. About one-half of the narcotics-prescriptions are for morphine, and the prescriptions average 2½ grains each.

The great proportion of these prescriptions are for persons actually ill, are issued in good faith, and very many, indeed, are perfectly legitimate; still, a very large

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proportion are issued unwisely and not in accordance with the teachings of standard textbooks. Yet, the good-faith prescriptions, so far as the *total amount* of morphine called for is concerned, account for only one-half of the morphine prescribed; for, the addict-prescriptions average about 30 grains each, and such prescriptions, although relatively few in number, account for the other half of the drug-volume in the prescriptions for morphine as issued by physicians.

This is a startling fact and reveals a condition that is indefensible. Our records show that about 80 percent of addiction in Pennsylvania is caused by the unwise and illegitimate supplying of narcotics by physicians. I am exceedingly sorry to be obliged to make this statement; but, our card-files of drug-addicts are no mere approximation; for, the data are very carefully collected and as carefully checked off and tabulated, and they are based on clinical reports regarding each individual listed. This list is secret and is carefully guarded from publicity.

Consumption in Different Countries

A U. S. Government report shows the annual per-capita consumption of opium, figuring all educts and derivatives on an opium-basis, to be 3/5 of a grain in Austria, 1 grain in Italy, 2 grains in Germany, 3 grains in France, and 36 grains in the United States. Our estimate in Pennsylvania is 32 grains per capita, and our figures show two-thirds of this supplied through professional channels and the rest used in patent and proprietary remedies and smuggled and other illicit pedler-supplies. This, however, is not a fair presentation of the pedler traffic, for, a large amount collected and trafficked in by pedlers is secured by them from certain physicians and dentists, who shamelessly exploit the "easy" physician and dentist, and, occasionally, the veterinarian and nurse.

This is a serious state of affairs, showing the per-capita consumption of opium in the United States to be 17 times as great as it is in Europe; and, as about two-thirds of this opium goes through professional channels, the physicians in the United States are using in practice, legitimately and illegitimately, wisely and unwisely, 11 times as much opium per patient as are their colleagues in Europe, and, in Pennsylvania, about 10 times as much. Evidently the sheet-anchor-idea is being overworked here. I have shown, as based on the actual reports coming into this Pennsylvania bureau, that one-third—the less-competent third—of the profession is responsible for these bad figures.

I know that these figures will be called in question by some physicians; however, they have been painstakingly arrived at on the basis of *actual importations* into the United States, checking off the small exportations against smuggled supplies, and on the basis of legal reports actually received in this Pennsylvania bureau. There is a possible margin of error, but, it can not be large.

The Plight of the "Backnumbers"

Now, to discuss the less-competent one-third of the profession. Our figures show that 7 out of 8 of them are not catering purposely to drug-addiction and are prescribing in good faith, yet, often, unwisely and not in accordance with the teachings of standard textbooks. Then, why are they using narcotics unwisely and are overworking the sheet-anchor-idea?

We check over records of all narcotic prescriptions and heavy purchases by physicians, sending a form-letter which courteously asks for clinical details; and by far the larger number of these letters go to physicians over fifty years of age. A few young men do overwork the sheet-anchor-idea; not many. It is a fact in our work that nearly all of the physicians to whom we must send warnings after receiving an unsatisfactory reply to a form-letter are men fifty years of age or over, and that those requiring last-resort legal action are almost wholly men of middle or advanced age.

Men of this age received their medical educations before any narcotics-laws had been enacted; they were accustomed to entire freedom of action in prescribing as they willed, and many of them now resent what they feel to be an intrusion upon their proper prerogatives. When they were in medical school, the narcotics-menace was not stressed, and narcotics were freely sold as domestic remedies; so, it is a bit hard to impress upon these men that the matter is one that must *now* come under control. Many of them do not know how serious the menace has become.

Then, too, most of these older physicians have patients advanced in years and who have always kept the laudanum- or morphine-bottle handy for any and every occa-

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sion, and now, that they can no longer purchase supplies themselves, they look to their old friend, the Doctor, to keep them supplied. There lies on my desk an illustration. A woman, aged and diseased, had her physician write for her in one month seven prescriptions, each for 1 dram of heroin; and the physician strenuously upholds her right to use, and his to prescribe, this colossal amount of this poison. She used to use other narcotics, but, liked heroin, and now consumes an amount of it that would kill many normal people. She probably will die suddenly one of these days; then, aside from the narcotics-laws, what will the coroner do about it?

Many of these older men had a poor medical education. That is not all their own fault, for, we know how defective most medical schools were only twenty years ago. So, these men, hosts of them, worthy and upright gentlemen, are physicians of small resource and do not employ modern diagnostic methods and technic and who rely almost wholly upon the use of drugs in treatment.

We must also remember that many of the older men follow the textbooks used by them in their student-days; they do not understand the modern book that outlines diagnostic methods that are entirely beyond these oldtime doctors; they find, in these old books, narcotics recommended in a host of conditions in which the modern books condemn them, as, for instance, in peritonitis, tuberculosis, and chronic diarrhea. They don't know, many of them, how to diagnose appendicitis and doubt the wisdom of its surgical treatment and, so, they prescribe morphine in its treatment. And so it goes.

Pitiable Ignorance

One can not but respect many of these men for their good qualities, their kind hearts, their devotion to their patients; and it is a fact that many of them have long struggled against adversity and have "hard sledding" generally. They are poor financially, have many obligations to meet, can not afford to take postgraduate work or renew their libraries; so, they drift along, fail to compete successfully with younger and better-equipped men, get out of touch with the medical age, and gradually drift, more and more, into giving narcotics, thus making a great many new addicts, as well as keeping up old addictions.

The very virtues of these men make them err on the narcotic side, as they are of large sympathy and readily believe the lies told them by addicts that consult them. I wish that some of these older doctors could hear what certain addicts say about them and how they "worked" the poor old gentlemen. When we write kindly letters to these physicians, giving actual facts, half the time they do not believe us.

A strange thing in these reports, that we must fairly wring from some of these good old doctors, is, that probably half of their addicts are aged people who, of course, are more or less diseased; while the other half have diseases assigned to them, probably in good faith, so far as the doctor is, himself, concerned. But, disinterested investigation shows that the "neuralgia"-diagnosis is based wholly upon the statement of the patient; that the "sciatica", "lumbago" or other diagnosis is equally flimsy; that the "female trouble," after actual examination, fails to materialize; that the "syphilis"-case is one in which the victim never received modern treatment while seriously in need of it, instead of morphine; that the "chronic-diarrhea" patient merely has the diarrhea common to addicts whose supply is irregular; that the "cancer"-cases are, many of them, not malignant trouble at all, and that the case described as "incurable" is commonly what the doctor regards as incurable addiction.

The country has many physicians who do not understand at all the modern treatment of genitourinary diseases, or even of tuberculosis. All cases of "rheumatism" look alike to them, and focal infection is to them a very vague term. They have no microscopes, do not understand laboratory-diagnosis, can not interpret an x-ray plate, never employ the Wassermann test, fail out in surgical diagnosis; never make blood-tests, can not make a modern uranalysis, can not take the blood pressure accurately, know little about the differential diagnosis of cardiac murmurs, and, withall, ridicule modern pharmacology.

And the country is also full of human wreckage whose diseases never were accurately diagnosed or effectively treated—poor creatures, many advanced in years and infirmities, who are monuments to our defective method of handling the sickness-problem and keeping the doctors and dentists abreast the age.

These are the doctors and the patients who constitute a narcotics-problem—a great

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big problem hard to handle, with a certain legal side, but, a much larger *human* side. How shall we meet it, both firmly and humanely? Here, in this office, we regard it as a problem in public-health administration. We are trying to eliminate unwise prescribing, even though done in good faith; for, we realize that, while the drug-pedler-traffic is an important factor, the medical one is far greater; for, defective physicians are, in our experience, making far more drug-addicts than are the underworld and the pedlers, large though this latter menace has been and is today.

It is a slow job, for, defective doctors and the addicts have to be hand-picked and individually worked over. The prostitute and drug-pedler are a great factor in the large cities, but, the unwise and even the vicious prescriber is scattered all over the country. All of these are keeping up drug-addiction and making new addicts galore, and most of them justify themselves in their own eyes.

The Greatest Reason for Opium-Prescribing

And, perhaps, one of the greatest reasons for the large amount of narcotics prescribed by physicians is the fact that the addict is a very hard case to handle, even in a special institution. What, then, can be expected of the private practitioner who undertakes the ambulatory reduction-treatment? Some succeed; most of them do not.

A national committee of which I am a member has had drafted and introduced into Congress a bill (Senate, 2785) sponsored by Senator France, himself a physician, which aims to provide hospital-care for drug-addicts all over the union. It has met the approval of the U. S. Public Health Service and the Internal Revenue Service, and has been referred to the Committee on Public Health and National Quarantine. We hope that it will pass. If it does, the bureau with which I am connected will be in a position to stop so much sheet-anchor abuse. And it can also then be stopped all over the Union. Without this support, we are gradually stopping a vast deal of it, being as kindly and considerate as we can, but, rather firmly upholding the federal and state laws.

As regards the vicious element in the profession, fortunately small, we are inclined to show little quarter; for, we owe it to the honorable medical profession to rid it completely and finally of these degenerate doctors. Certainly, we owe it to the country at large and to humanity.

This paper, however, has to deal more with unwise prescribing of narcotics than with the legal administration. The latter is half of my work, but, I am first of all a physician. Permit me, even though it be a bit egotistic, to say a few earnest personal words of advice to my professional brethren.

The narcotics-laws, the Treasury decisions thereon, the Internal Revenue rulings, the state regulations, and so forth, really are necessary, and they do not interfere with legitimate medical practice, even if they do impose reports and annoyance upon professional people. But, the federal and state authorities are determined to shut down on narcotics-abuses as a duty to the people, including reckless prescribing by physicians. It is the duty of the profession to help in this reform.

I can not be charged with bureaucratic tendencies in this work; for, I have practiced medicine for thirty years and written three more or less useful books on materia medica and therapeutics. The writing of these books did more good to the author than they ever did to any reader, for, I believe they taught me how to use drugs without doing unnecessary damage. Added to careful study of diagnosis and case-management, the special study of materia medica taught me how to practice with the very minimum employment of narcotics. But, I keep that sheet-anchor always ready, and it is being used as a sheet-anchor is meant to be used, *exclusively in emergency;* and I do not believe that I can be charged with failure as a practitioner.

Doctor, first study diagnosis very much in detail; then study case-management, and, lastly, study intensively materia medica and therapeutics in no nihilistic way, and you not only will be a better and more flourishing practitioner, but, you will forget the sheet-anchor until after everything else has failed or the case is such that you know that these other measures must wait on morphine as the rationally indicated measure of choice.

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