JOURNAL OF THE

should take cognizance of these different factors; instead of being a drawback to the business, they will increase the material revenue.

S. K. SASS: I think this is a time when we should get away from the old system of charging 25 cents and 35 cents and 60 cents. We should take a lesson from the plumber, the automobile manufacturer and others. The plumber will not work for 35 cents or 75 cents; he charges a dollar an hour, and materials extra. I smashed the fender of my automobile not long since and the mechanic charged me for the material and then five dollars for labor. Five dollars for the labor of a competent man for not more than two hours' work. You put in five hours' work sometimes for a dollar and a half. It is a shame! But we can get the prices if we only ask them; there is no trouble about that.

A man came in not long ago with two prescriptions and asked what they would cost. I said, as nearly as I could figure it out, \$1.65. He said, "Oh, that is too much." I said, "That is my price, I cannot do it for any less," and started back behind the prescription counter. He said, "All right, I will call for them in half an hour." When he called for them he paid me and then said, "Doctor X told me to go to this store (and then he named another store), and when I went there they said it would be a dollar and a half." He asked for his prescription to be given back to him, when the druggist said he would fill it for a dollar and thirty-five cents; this made him suspicious, so he took the prescription away from him. I did not have any difficulty in getting the price, and I think we are justified in asking the higher prices, because we have to pay a good deal more for everything that we use in our prescriptions.

CONSERVING LIFE BY ELIMINATING WASTE.*

BY ROBERT P. FISCHELIS.

In April 1916, it was the writer's pleasure to address a joint meeting of the Philadelphia County Medical Society and the Philadelphia Branch of the American Pharmaceutical Association on the subject of "How Physicians and Pharmacists Can Coöperate in the Use of Available Drugs." It was pointed out at that time that the scarcity of many drugs made it necessary to look about for suitable products to replace those which were unobtainable. The suggestion was made that sodium salts be used to replace potassium salts wherever possible and that standardized galenicals be used in place of alkaloids for internal medication wherever this procedure was feasible. Since these suggestions were made, our own country has become actively engaged in the great world war and the problem of conserving life has become more significant to all of us than ever before.

We have a fair example of what may be expected on the part of some of those who are in control of the necessities of life when we consider the food and coal situation. Prices have increased with the constantly increasing demand for these products on the part of our allies and the situation has reached such a stage that dictators have been appointed by the Government to take full charge of the regulation of prices and supply. I cite this merely to show the ultimate outcome of either speculation or improper handling of necessary articles.

It is time to sound a warning to pharmacists, hospital authorities, physicians, dentists, veterinarians, and all others engaged in manufacturing, supplying, dispensing and using drugs and biological products, that unless efforts are made on the part of all to eliminate waste through carelessness, deterioration or misapplication, we may be confronted with a serious situation regarding supplies of many

^{*} Read before Section on Commercial Interests, A. Ph. A., Indianapolis meeting, 1917.

drugs, chemicals and biological products most necessary for the conservation of life.

Fortunately, much has been done in the past three years to place America on an independent footing as regards the manufacture of medicinal products, but much more must be accomplished before this end will have been attained. The demand for certain drugs and biological products, particularly for the large armies which are being raised, is bound to be unprecedented. The civilian population will need the same medical attention as it is accustomed to in time of peace, and patriotism demands that our boys at the front shall not be inconvenienced the least bit for lack of medical supplies.

Unless waste is eliminated in the handling of drug products and remedies are judiciously employed, shortages are bound to occur. Foreign governments have commandeered drugs in their countries from time to time when acute situations arose. Our country will be forced to do the same thing unless the professions demonstrate that they can handle the problem adequately themselves. Surely we do not want a dictator in pharmacy, nor do we want situations to arise which will compel the government to further regulate business.

Such steps are inevitable, however, unless concerted efforts to conserve supplies of pharmaceutical and biological products are put forth. There is an inexcusable waste of biological products each year, due mostly to careless ordering on the part of the retailer. Let us stop and consider for a moment that if every drug store in the United States were to return but one package of diphtheria antitoxin to the manufacturer because it had become out-dated and therefore useless, approximately 50,000 packages of this valuable remedial agent would be wasted—and this while lives are being lost elsewhere for want of the product. This is but one example and when we take into consideration that there are 150,000 physicians and 15,000 veterinarians in addition to the 50,000 druggists in the United States, who use hundreds of biological products, the wastage possible, because of careless ordering, at once assumes enormous and startling proportions. Yet such a waste would occur if a majority of the members of the professions did not stop to contemplate the results of such carelessness.

All of us must stop thinking merely as individuals and consider the significance of multiplication of individual wastefulness and carelessness. The slice of bread thrown away from one loaf seems a trivial thing, but a slice of bread thrown away in every home in the United States in one day would mean a waste of sufficient bread to feed starving thousands in another part of the world. A single package of any article, subject to deterioration, which becomes useless, due to overstocking, seems trivial, but when multiplied by thousands this trivial waste soon assumes formidable proportions. It makes no difference whether the pharmacist bears the loss in permitting an article to deteriorate or whether the manufacturer makes an allowance, there is nevertheless always a loss. And added to the loss of the product itself, there is the loss of accessories like rubber, metal, glass, wood, paper, dyes, other chemicals, time, labor and money used in putting it up, which in these days are very expensive and in some cases scarce commodities.

Of course, it is impossible to foretell with absolute accuracy what the demand for a certain perishable product will be, but the careful pharmacist can gauge demands pretty accurately and waste can be reduced to a minimum by careful study of conditions. It is unnecessary, particularly at this time, to order more biological or pharmaceutical products than are needed for use in the immediate future, as supply stations of manufacturers are now so conveniently located in every section of the country that in the case of epidemics, supplies of biological products, etc., can be obtained anywhere within twenty-four hours at the very latest. It is better to take advantage of supply facilities than of the privilege of returning goods. The former is economy; the latter is waste. It is also unnecessary for pharmacists to stock the products of numerous manufacturers. It is better to investigate carefully and decide upon the most reliable manufacturer who is in a position to give satisfactory service and then handle his goods exclusively than to tie up capital in the products of three or four manufacturers. Under the latter conditions the chances are that stocks will always be incomplete, whereas in the former case a complete line can be carried at much smaller financial outlay.

Overstocking of supplies of all kinds in the drug store is exceedingly bad practice from a commercial point of view as well as from the standpoint of national necessity just now. The practice of hoarding supplies of products which are apt to become scarce is also a poor one from the point of view of the shrewd business man, aside from any moral consideration, owing to the uncertainty of market conditions and the uncertainty regarding the length of the war. It not only has the effect of inflating prices, but it may also serve as a boomerang and leave highpriced stocks on the hands of the retailer when normal conditions are restored.

The purchase in bulk of pharmaceuticals subject to deterioration is a wasteful procedure unless there are immediate prospects of disposing of them. It should always be remembered that quick turnovers bring greater profits than "free goods" lying on the shelves for long periods.

We must not overlook the fact that every pint of fluidextract and every package of bacterin or serum manufactured represents materials more and more difficult to procure, as well as time and labor, which, unless properly utilized, represent absolute waste. In times of peace, this does not loom particularly large but under the stress of war it assumes great proportions and we must see that it is not allowed to go on.

"Doing Your Bit" means more than flying the American flag over your store. It means enlisting actively in the work of *Conserving Life by Eliminating Waste*.

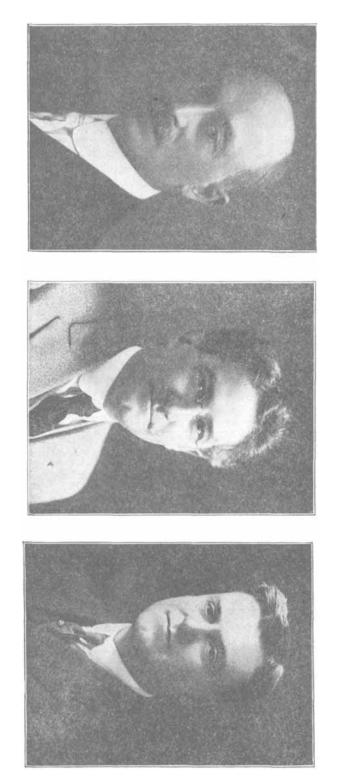
BACTERIOLOGY AT THE FRONT.

Bacteriological investigation in hospitals of the front line has been a novel feature of this war. Nothing of the kind has been practised in any of our previous campaigns. It has been rendered possible by equipping motor vans as mobile laboratories. They have been attached to a clearing station or a group of clearing stations, and the officer in charge is provided with a small motor car, so that he can go to any place in his area where his services may be wanted. These officers perform three functions:

1. They examine all kinds of morbid products from the hospital wards, and thus aid in the diagnosis of enteric fevers and other epidemic diseases on the medical side, and of the various forms of infection that attack surgical wounds.

2. They examine contacts in cases of infectious fever and search for carriers both among the troops and in the civil population.

3. They investigate new forms of disease that appear among the troops in order to discover their causes and the means of prevention.—*British Medical Journal*, June 23, 1917.



Left to right: JULIUS A. KOCH, Pittsburgh, Pa.; CHARLES H. LAWALL, Philadelphia, Pa.; LEONARD A. SELTZER, Detroit, Mich.

