we have performed our duty. Carelessness, neglect to observe directions of labels, and suicide we can only partially guard against."

MR. FERTÉ:—"A colored bottle with a distinctive shape is desirable to be used if there is an understanding in relation to them. Medicines which in teaspoonful doses would be fatal should be dispensed in such bottles."

PROF. LASCOFF:—"Owing to the fact that many errors are made by persons taking, internally, medicines which were intended for external use, all bottles containing dangerously poisonous substances should be dark-colored and, preferably, of a triangular shape, to distinguish them from those containing medicines intended for external use."

MR. GRAY:—"A bottle with diamond-points, with a stopper of corresponding shape, is an excellent one to use in a limited degree, say for carbolic, nitric, hydrochloric, sulphuric, glacial acetic, hydrocyanic and nitro-hydrochloric acids, stronger ammonia water and formaldehyde, and for such preparations as Liquor Cresolis Compound, Wine of Colchicum, Fowler's, Pearson's and Donovan's Solutions and for potent tablets; also for fluid extracts of aconite, belladonna, digitalis, cannabis indica, adonis vernalis, gelsemium, hyoscyamus, nux vomica, opium, physostigma veratrum and strophanthus. These with the addition of oxalic acid, tartar emetic, paris green, corrosive sublimate, sugar of lead, potassium ferro- and ferri-cyanid, and potassium dichromate about covers the field. In my opinion the general use of the poison-label has a tendency to cause a disregard of the same."

Question 3:—What is the best container for dispensing ointments on prescriptions?

A PLEA FOR REFORM IN THE DISPENSING OF OINTMENTS AND SIMILAR PREPARATIONS.

F. W. NITARDY, PH. C.

In such common use are ordinary glass ointment-jars and metal boxes as containers for ointments and similar soft preparations, that their unclean and insanitary feature fails to impress us without special attention being called thereto.

Ointments, etc., are used as an application to skin, mucous membranes or exposed surfaces. These are frequently infectious, and by the usual mode of application the medicament must necessarily become contaminated. It is not an uncommon occurrence that several people, or various members of a family, will use an ointment, each, in their turn, dipping into it with fingers infected by the disease for the alleviation of which it is applied.

Aside from the dangers of contamination with pathogenic bacteria, the imperfect seal, as well as carelessness on the part of the consumer, frequently causes the preparation to become unsightly, altered or spoiled by oxidation, evaporation and other effects of exposure to atmosphere, light and dust.

Economically, these containers are wasteful as the last portions of their contents must frequently be thrown away. Even from a stand-point of convenience we can hardly find an argument in support of their use.

The collapsible-tube is free from these objections and serves as a container, protecting its contents from every form of contamination or exposure. It is easily filled and more convenient for the patient. Properly dispensed, it makes a neater and more attractive package. Its additional cost is trifling, compared to its advantages, and this can easily be added to the customary charge without causing complaint on part of the customer.

For prescription-use it is preferable to have lacquered pure tin tubes in assorted colors that fit into hinged boxes lined in corresponding colors. In this

way two or more tubes of ointments of the same size may be prescribed for one patient without danger of confusion. The number, doctor's name and directions are placed on the box. If desired, the tube may also be numbered, either before filling, with a steel numbering machine, such as is usually used for prescriptions; or after filling, with an ordinary lead pencil. In the former case it is best to have a cylindrical hardwood block with a flattened place on which a piece of cardboard is pasted to act as a cushion; the block should just fit the tube; the number may then be indelibly impressed into the soft metal of the tube. In the latter case it will be found that the marks produced on a filled tube with a bluntly-pointed pencil, knitting needle or similar blunt instrument, are sufficiently deep impressions to remain readable even after the tube is emptied and rolled or crumpled up. Such numbers on the tube are, of course, preferably placed near the shouldered end. Covered metal clips, capable of being numbered, may also be placed over the folded end.

The filling of individual tubes is most easily accomplished by rolling the preparation into cylindrical form with a piece of paper, slipping this into the tube, flattening the paper cylinder just beyond the portion holding the ointment and then withdrawing the paper, continuing to flatten it as it is being withdrawn, so as to force the ointment out of the paper into the tube. After one trial the operation will be found just as quick and simple as filling a jar with a spatula.

When tubes are used for such preparations such as should not come in contact with metals, the tube must, of course, be previously coated with a suitable lacquer. Collodion or an ethereal tincture of tolu, are suitable for this purpose. A little of this is poured into the tube and rotated so as to completely cover the inner surface, the surplus is then poured out and the tube allowed to dry. The operation takes only a few minutes.

Pure materials, care and cleanliness in compounding are put to naught if we choose containers incapable of properly preserving our products under the ordinary conditions to which they will be subjected after leaving our hands. This applies not only to ointments but to all preparations or products dispensed.

We should put forth constant effort to make each package leaving our prescription-department as neat, convenient and perfect as possible. We should never allow a package to go out that is incapable of keeping its contents in the desired condition, for carelessness in these things cannot help but reflect carelessness on the rest of our work.

DISCUSSION.

PROF. RAUBENHEIMER:—"Although the ointment-jar, especially the one of glass, has a strong hold on the pharmacist as well as with the public in the United States, it is only a question of time when collapsible tubes will come into general use for dispensing ointments, especially for those dispensed on prescriptions. It is my experience that their popularity among physicians is increasing. Their use is a sanitary method for dispensing ointments and they are also economical to use. What a contrast between the unsanitary earthern ointment-jar and the sanitary collapsible tube of today."

MR. NITARDY:—"To help to make the matter clearer I have brought some boxes and tubes along to illustrate my meaning. The ointment is dispensed in a colored tube and the color of the box and tube are alike. In the lid of the box we have reading-matter that tells to the doctor as well as to the patient the object of dispensing ointments this way. The label reads:—'Cleanliness and purity are of prime importance in all medicines. We have therefore, devised this package which will protect the contents from any contamination until

all is used, an end not easily accomplished when drugs of this nature are dispensed in the old style, in an unsanitary jar or box.'"

MR. JONES:—"What method do you use to fill the tubes?"

MR. NITARDY:—"It is a little hard to make that clear in a paper. Where there is many to fill it is best to use a machine. In the absence of a machine, place the ointment upon paper, roll it up small enough to slip into the tube, then pinch the paper and draw it out leaving the ointment in the tube."

MR. JONES:—"I have always used that method, but I thought there might be some better way. What do you charge for that extra service?"

MR. NITARDY:—"I cannot answer that question. I am not directly connected with the prescription-department. I have charge of the laboratory. I suggested this system to our prescription-department and I asked them to add a charge of five cents for the smaller and ten on the larger tubes. This package costs us complete for the smaller size about four and a half cents, and the larger ones about nine and a half."

MR. REYER:—"Would it not be possible to leave the paper inside the tube? It would protect the ointment from contact with the sides."

MR. NITARDY:—"It would do no harm. There would be no objection, except that the paper might be forced up and interfere with the emission of the ointment."

MR. RAUBENHEIMER:—"The older members can well remember the earthern-ware ointment jars, a very unsanitary container. From these we passed to glass, which with the aluminum tops were a great improvement. The collapsible tubes are however the real thing, more sanitary. Besides the sanitation they are really more economical, because the patient only has to take from the tube the amount only that he requires. The manner in which this is prepared by Mr. Nitardy seems to me to be rather an extravagant way however. As he puts it up I would charge fifty cents for it, whether a dram or an ounce. Do you place labels on the tubes?"

MR. NITARDY:—"It is a difficult thing to retain a label on an ointment-tube. We found that we could number the tube itself and that is what we are now doing. The box also is numbered so that the package-number and the box-number agree. We call attention to the need of always keeping the tube in its own box also by a label attached."

MR. APPLE:—"It occurs to me, that from a legal stand-point it would be advisable to label the tube. If you should be haled into court you could prove that you had taken that precaution against mistake."

MR. MAYO:—"In New York we have a law that requires the labelling of prescriptions in a certain prescribed way. It is doubtful if the courts would construe the application of a number as a compliance with the law."

MR. MYERS:—"As to the labelling of tubes or anything made of tin, I use a little banana oil, instead of tinct. of benzoin. The label then adheres very strongly to the tin."

MR. NITARDY:—"Collapsible tubes are very much the best for dispensing ointments. They are not more expensive than other containers, unless the tube is dispensed in another container."

MR. SCHULZE:—"It has been our experience that our trade, at least, prefers the screw-cap ointment-jar to the collapsible tube."

MR. FERTÉ:—"The best container for ointments is the collapsible tube. If the medicament of the ointment is one that will attack the metal of the tube it is well to fill the tube with tincture of benzoin, or some suitable lacquer, then drain them and dry."

PROF. LASCOFF:—"Collapsible tubes, in my opinion, are the best to use for the dispensing of ointments. They are cleaner than any other containers, can be readily made sterile; only a small amount of the ointment is exposed to air and thus rancidity is prevented, and when they are once emptied they are never re-filled."

MR. GRAY:—"I prefer an opalescent jar with an aluminum top. They look neater and therefore make the best impression on the patient."

Question 4:—Does the ordinary shop label, as supplied by most label-houses, give intelligent directions for use, proper and available antidotes in case of poisons and such other information as is desirable? Are abbreviations desirable? Do you consider a bottle of Spirit of Camphor, put out under a label reading "Spts. Camphor," any reflection on the pharmacist's knowledge?

DISCUSSION.

MR. APPLE:—"It is certainly advisable that "Poison Labels" should be printed in red ink and should have the antidote printed upon them, also a skull and cross-bones."

MR. GODDING:—"The State of Massachusetts requires all poison labels to be printed in red ink."

MR. NITARDY:—"I have found it very necessary to carefully observe the antidotes stated on labels by label-houses."

MR. GRAY:—"Store labels are improved by adding the dose, use and, in case of poisons, the antidote for same to the labels."

PROF. LASCOFF:—"I would suggest that the labels which are put on preparations of a poisonous nature should be carefully reviewed by pharmacists before accepting them from the printer, as one cannot be too careful in such matters. No abbreviations should be allowed on any labels. All names should be printed in full. For preparations intended for external use, it would be advisable to use a red label, on which is printed the words, 'For External Use.' For instance, Salt of Tartar is frequently confounded with Cream of Tartar, but if the former is labeled in red and marked 'For External Use' no misunderstanding will occur."

MR FERTÉ:—"To the first question I would answer 'No' and to the second one I would reply that it is unfortunate that so many of our profession do not differentiate between the singular and the plural. It would be as proper to label a bottle Tinctures Arnica, or a jar Zinc Ointments. Such ignorance is a disgrace. It is also inexcusable to write either carelessly or ignorantly of 'bromide of soda' or of 'permanganate of potash.'"

PROF. RAUBENHEIMER:—"The ordinary labels supplied by printing-houses need very careful supervision, especially as to directions for use and antidotes for poisons. Such labels as 'Rochelle Salts,' 'Spirits of Camphor,' are good illustrations as to the little care printers use in wording the labels. It is very desirable that the nomenclature of the U. S. P. and the N. F. should be used. The correct wording of a label may appear trifling, but, in my opinion it carries much weight with the intelligent public."

Question 5:—How would you advertise your prescription department?

HOW WOULD YOU ADVERTISE YOUR PRESCRIPTION DEPARTMENT?

JACOB DINER, PH. G.

Theoretically a prescription department should require no advertising. Just as all men are supposed to be equal before the Law in this greatest of all countries, but are not, just so should all pharmacists be equally qualified to properly compound prescriptions, and just so should pharmacy be a proper place and properly equipped for the compounding of prescriptions, and they are not.

While this is deplorable in one way, yet it has its advantages. For this very inequality of fitness and equipment gives an opportunity to the properly equipped pharmacist to bid for the patronage of the physician and the public, in the matter of prescription business.

Assuming then that you are educationally well-equipped, and that your laboratory and prescription-department are provided with all the paraphernalia necessary for the proper and scientific handlings of physicians' prescriptions it becomes your duty to yourself, to your physicians, and to the public to set before the last two, your reasons why they should patronize you in preference to "Tom, Dick and Harry." This can be done in a perfectly legitimate way without sacrificing one iota of your professionalism. Let us take it up *seriatim*:

Advertising to the Physician:—If your prescription-department is properly equipped and properly kept, invite the physicians of your vicinity to visit it as often as opportunity offers itself. Make it your business to let them see you and your clerks at work. Show them that the drugs and preparations entering into prescription-compounds are properly analyzed and carefully standardized. Have a good reference library and put it at the disposal of the prescriber. Perfect your checking system and show your physician how you safeguard his patient's health. Make accuracy, carefulness and cleanliness, your motto and show him that that motto is being lived up to and is not merely for ornamental purposes.