Naturally in giving an outline on such preparations as cough remedies, the emphasis is placed on the official products. At each meeting there is usually a general discussion as to the relative merits of proprietary preparations and a qualified pharmacist can be of real service in this connection.

There is no reason why a doctor should be getting most of his drug information from the detail man who is out to sell his own particular line and naturally will make more or less biased statements. Moreover, the detail men are not going to stress any official preparations but rather encourage the doctors to prescribe ready-made prescriptions. It is this drifting toward ready-made proprietaries that has given many doctors the idea that Pharmacy consists mostly of pouring from one bottle to another.

In this respect the hospital pharmacist probably has a better chance than anyone else to educate the doctors in the use of official preparations and I have found that the physicians themselves are grateful for constructive information on prescription writing.

In my opinion the future of professional Pharmacy lies not so much in passing more laws or raising educational standards as it is in the attitude of the pharmacists themselves toward Pharmacy.

Don't let the community forget that you are a professional person, and the hospital is undoubtedly one of the best places for the doctors, the dentists, the pharmacists and the nurses to meet in a professional way.

THE HOSPITAL PHARMACY.*

HAROLD A. GRIMM.1

Pharmacy, as a profession, has established itself as an essential part of hospital service, taking its place of importance among other major departments in our modern institutions. Twenty years ago it was not customary for hospitals to employ pharmacists. On the other hand many hospitals did not then employ pathologists, radiologists or dietitians, personnel which to-day are to be found in practically all hospitals of fifty beds and upwards.

Assuming that there was a neighborhood drug store to which the hospital could send its drug baskets, prescriptions and requisitions, the loss of time and general inconvenience of such an arrangement would make the plan most unpopular with staff and hospital personnel alike.

Emergencies arise, the attending physician is making rounds and wants to change the medication, or anyone of several other situations common to all hospitals may develop, which make it imperative that there be easily and quickly available a standard stock of drugs and biologicals. Obviously, then, the individual nursing units themselves must be adequately supplied with the necessities, and the use of the corner drug store as a substitute for the hospital pharmacy is not practical.

We may safely say, therefore, that the modern hospital needs a modern pharmacy, in charge of a competent pharmacist. The department should be centrally

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located, easily accessible, well lighted and ventilated and be of sufficient size to meet the demands to be put upon it.

Too seldom do hospital architects give proper consideration to the need for storage space of bulk drugs, space for manufacturing stock solutions and shelf space. In those hospitals whose size justifies the purchase of drugs in barrels and drums, bulk storage in the pharmacy itself may be impractical, yet the savings in drug costs over a period of years will more than pay for the space occupied.

The equipment of the hospital pharmacy is important. Instead of soda fountains and luncheonettes, the hospital pharmacy will be more likely to require an analytical balance, burettes, volumetric flasks and other scientific apparatus. Under the heading of "essentials," too, should be listed a good torsion balance, a refrigerator of ample size, water still, an alcohol vault and a narcotic safe. In some hospitals, tablet machines, filter apparatus, suppository molds and a steam sterilizer may be necessary, depending upon the kind and amount of manufacturing to be done. If there were a need for it, a mixing machine might be added and used to advantage in making ointments and emulsions, but this will not apply in the average hospital.

Depending again upon the size of the institution and the amount of space required for the pharmacy, it should be located in the most accessible place consistent with the use to which it will be put. We would hardly expect to carry on very extensive manufacturing procedures in a pharmacy located on the main corridor near the main entrance. Yet, for the convenience of patients, hospital employees and visitors, such a location would have definite merit, particularly if the pharmacy was to carry a stock of toilet preparations, magazines, cigarettes, candy, etc., for which there is a great demand.

The hospital pharmacy provides an excellent field for the woman pharmacist, particularly the type who is interested in scientific pharmacy. She must be a teacher, since nurses, interns and staff doctors will consult her frequently, seeking information and advice. She must be alert to changes that are taking place, to new drugs, their action and dosage. She should know prices and be able to estimate the probable demand for a new drug, regulating the volume of her purchases accordingly. Many drugs prove to be of only temporary popularity and it is both expensive and embarrassing to be left with a lot of dead stock.

With the help of a committee from the medical staff, appointed for that purpose, the pharmacist should be responsible for compiling the Hospital Formulary, this to contain a list of drugs and formulas that are considered to be suitable for use in the Out Patient Department as well as for stock items in the medicine cabinets of the nursing units. If the hospital has a Standing Order Book, care must be exercised to include such drugs as are mentioned in it and conversely, the Standing Order Book should make good use of the Formulary. When properly set up and in operation, this makes for greater simplicity in manufacturing, helps to keep inventories down and improves service.

From time to time the pharmacist should inspect the drug cabinets in the nursing units. Soiled labels and broken stoppers detract from the appearance of neatness and orderliness that hospitals so constantly strive for. On the other hand neatly lettered labels, applied with a coat of protective varnish, not only help appearances but inspire confidence and both are essential.

It is important that biologicals kept in the refrigerators of the nursing units be checked periodically to be sure that the stock is fresh. In an emergency, when these products mean so much to the patient there must be an adequate supply that is dependable.

In the smaller institutions the pharmacist may be of great help to the Administrator in the matter of purchasing surgical supplies such as sutures, cotton and gauze as well as rubber goods, glassware, syringes and needles. Chemicals for use by the laboratory and X-ray department might well be a part of the pharmacy stock since the pharmacist in many instances will be called upon to make up reagents and solutions for use in these departments.

More and more is being expected of hospitals and it is not an uncommon occurrence to have a patient go home supplied with drugs for his immediate needs as well as dressings. There are times, too, when they need items of enamel ware, syringes or other sick room supplies. To have such things for sale in the pharmacy relieves the hospital of the problem of having equipment removed or loaned from nursing units, and at the same time serves as a great convenience to the patient and the doctor.

With the knowledge that hospitals provide an excellent field of employment for the pharmacist, it would seem advisable for the student to learn something about the hospital's needs and what is likely to be expected of him. To that end, the school of pharmacy could, without much trouble, give the student an opportunity to learn more of the hospital, its equipment, its services and their relationship with the department in which he is preparing to work.

For the pharmacist who plans to work in a hospital, actual experience in the form of an internship would be most ideal. Such a program would appeal to the hospital Administrator, and at the same time lend encouragement to the scientific aspect of pharmacy, helping to maintain it on a professional basis.

Progress in the field of hospital pharmacy is likely to take a new direction shortly. In New York State, pharmacists employed by hospitals have been invited to become members of the State Hospital Association and a fair number have done so. At the 1938 convention of the Association pharmacists had a prominent place on the program, giving evidence that they as well as other department heads can derive benefit from an exchange of ideas, all to the end that the patients in hospitals may be served most effectively and intelligently.

MANUFACTURING IN THE HOSPITAL PHARMACY.*

I. T. REAMER.1

In a paper recently published in the JOURNAL OF THE AMERICAN PHARMACEUTICAL ASSOCIATION entitled "Medical Requirements of the Hospital Pharmacy," by Dr. W. J. Stainsby, the following paragraph was printed, "I feel that the pharmacist to be successful should, from time to time, critically examine the various preparations he issues to the hospital for the purpose of determining whether they

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