

The physicians concluded that they could see no noticeable differences in the therapeutic action of these various lotions.

SUMMARY AND CONCLUSIONS.

1. Native American calamine is not available on the market. The samples which were obtained were silicates and not carbonate of zinc.
2. Several of the impurities which were reported as having been found in English calamine were also present in the Chinese calamine, namely, calcium, magnesium, iron and aluminum.
3. When tested in the form of ointments and suspensions by acceptable procedures, prepared calamine N. F. VI, zinc oxide U. S. P. XI, zinc carbonate A. R., Chinese calamine, precipitated zinc carbonate and semi-colloidal zinc carbonate were not bacteriostatic.
4. Clinical observations were made upon lotions of Chinese calamine, zinc oxide U. S. P. XI and prepared calamine N. F. VI and no differences as to their therapeutic action could be observed.

RECOMMENDATIONS.

1. In view of the fact that native American calamine is no longer available, and in view of the fact that native calamines, both foreign and domestic, are of uncertain composition and quality and furthermore that their superiority over prepared calamine as therapeutic agents has not been established, we recommend that prepared calamine be retained as an official product.
2. In view of the fact that the color of prepared calamine seems to have contributed to its acceptance as a medicinal agent, we recommend that the present formula for calamine ointment be changed so as to improve its color unless it can be shown that its therapeutic value is impaired by such a change.

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THE HOSPITAL DRUG BUYER.*

BY MORRIS DAUER.¹

Those who have any conception of the task involved in regulating the purchase and distribution of drugs and medicines for use in a hospital, regardless of its size, realize the many angles and the various needs that must be catered to, whether they be general or specific.

* Presented before the Sub-Section on Hospital Pharmacy, A. Ph. A., Minneapolis meeting, 1938.

¹ Director, Department of Hospital Pharmacy, Brooklyn College of Pharmacy.

The pharmacist, like all who comprise the executive personnel of a hospital, is constantly reminded that his first obligation is to the patient whose needs must be unqualifiedly met and is given in the same breath a thousand and one restrictions with reference to expenditures for medical and pharmaceutical supplies. The medical staffs, particularly in a hospital, feel that they should not be hampered because the proper medicament cannot be immediately supplied but they insist on strict and rigid economies as far as budgeting pharmaceutical expenditures is concerned.

Practically speaking, this balance can only be realized when the medical and the pharmaceutical staffs get together from time to time and agree on certain official remedies which are used in rather large quantities and which can easily be manufactured in the hospital pharmacy at little cost.

However, there are many items which must be purchased, and try as much as you will, hospital pharmacists will definitely agree that the use of proprietary and trade-marked medicines and prescriptions is definitely on the uptrend and it is imperative that hospital administrators coöperate fully with these suggestions made by the author gained from practical experience so that the full measure of economic and clinical results may accrue to the hospital as an entity and to the patient as an individual.

It would be unsound to make a statement at this time that the hospital pharmacist can appear before his medical board and plead that they use only such drugs as appear in the official books in spite of the fact that many doctors even in this day and age insist that given a scalpel and three or four drugs they can practice all the medicine that there is.

The hospital pharmacist, on the other hand, must become more practical in this connection and ask the medical staff to coöperate upon a sound economic basis and simplify the use and purchase of such patent and proprietary medicines that have established merit, these purchases to be made exclusively from reputable pharmaceutical firms. This applies not only to patent and proprietary medicines but also to commonly used articles which cannot profitably be made in the hospital pharmacy.

Reputable pharmaceutical firms earn this distinction by their record of service to the medical and pharmaceutical professions and to the public. They restrict the operations of their sales force to the medical and pharmaceutical professions; their form of advertisement is conservative and educational and the results of clinical trial, both pro and con, are freely and honestly published.

In many cases after the indications for use have been fully described and set forth, the manufacturer feels free enough to warn the doctor of such cases where their product is counterindicated, thus reducing to a minimum the introduction of panaceas or cure-alls which the medical and pharmaceutical man knows is unscientific and which is unhesitatingly to be discouraged. These better firms, for the most part, conduct rather extensive research laboratories, wherein there are constantly developed new remedies to be used in the treatment of disease and they secure the services and coöperation of the best research medical scientists in their search for newer and more efficient therapeutic agents.

Well-known scientists too numerous to mention here are freely giving of their efforts to ailing mankind and to the promotion and elevation of the medical and

pharmaceutical professions through the medium of these pharmaceutical and technical laboratories. These firms are well known to all; they need not be mentioned by name and if their products be consistently ordered and used, the expenditures for specialty drugs will be kept at a constant and reasonable level in the hospital pharmacy.

It is common knowledge in our profession that as soon as a meritorious product makes its appearance many less qualified laboratories and manufacturing houses offer a substitute article which is represented to be just as good, identical in every respect, and which is quoted at one-half or one-third of the price of the original item.

Such unscrupulous and unprofessional competition should be discouraged because experience has shown that few substitutes are as reliable as the original product and, eventually, we will find our shelves cluttered up with countless duplicates.

The hospital pharmacist is frequently compelled to obtain these various duplicates at the insistence of members of the medical and surgical staffs and in spite of the fact that he sometimes misguidedly buys these articles in the name of economy, it can readily be seen that we are practicing a false economy that will prove more costly in the end.

If time and space permitted, I could show by actual reference the tremendous duplication that actually exists in numerous hospitals and institutions, and the irony of this situation is that many of these preparations are expensive such as hormone combinations, vitamin combinations, liver extracts and combinations, digitalis principles and the various combinations of biologicals.

It would not be amiss to make a plea at least to the better type of pharmaceutical manufacturers, even at a temporary commercial risk, not to duplicate every product introduced by a competitor.

Pharmacists in the retail field, not only in America but throughout the world, will support and sustain this plea.

This duplication is a large factor in the depletion of funds appropriated to the hospital pharmacist's budget; and his colleague in the retail field sadly admits that because of this deplorable condition most of his profits remain on the shelf.

Only too often is the question of price made the determining factor when purchasing pharmaceuticals and due consideration is not given to quality.

It is of paramount importance that quality and price be considered together; the prime essential, therefore, is to purchase at the best price from the most reliable manufacturer. Pharmaceutical firms who sell on the basis of price only should definitely be avoided.

Despite the fact that samples upon analysis come up to standard and meet specifications, unscrupulous manufacturers who compete mainly on price, contracts notwithstanding, will find some joker or loophole which safeguards their financial interests.

The economic factor in determining pharmaceutical expenditures must be based upon a sound, ethical foundation and hospital pharmacists must purchase pharmaceutical and medicinal products in a safe, sound and highly professional manner; by so doing they will secure for their institution preparations of the highest quality at reasonable prices from manufacturers of established and unquestionable integrity.