stores on Commerce Street, at that time San Antonio's leading thoroughfare and business street.

The leading physician at this time in San Antonio was the beloved Dr. Ferdinand Herff, who practiced medicine for about 50 years in San Antonio.

In 1892 Adolph Dreiss sold his wholesale interest to F. Kalteyer & Son, when the two wholesale firms were merged and the San Antonio Drug Company was organized, with Geo. H. Kalteyer as president. His father, F. Kalteyer, died in 1884 and was a vice-president of the Texas Pharmaceutical Association at the time of his death. With Geo. H. Kalteyer at its head, the San Antonio Drug Company soon became the leading wholesale drug jobber in the Southwest. Geo. H. Kalteyer served as president of the Texas Pharmaceutical Association in 1891. The retail drug store was taken over from Kalteyer by Geo. J. F. Schmitt.

Adolph Dreiss continued his retail drug business on Alamo Plaza until his death, in 1908; the local newspapers paid him many compliments, referring to his sterling qualities as a patriotic, loyal and distinguished citizen. He was always found among the willing workers in the cause of bettering the conditions in San Antonio, which he had also served as Alderman-at-large. He operated an ethical pharmacy, as did his colleagues of those pioneer days; they were all gentlemen of the highest type. Hermann Dreiss (son of Adolph Dreiss) took over the drug store on Alamo Plaza and operated it until a few years ago, when he retired after disposing of the business to the Sommers Drug Co.

AN INTERESTING OLD MEDICINE CHEST.*

BY CHARLES WHITEBREAD. I

Such great sentimental value is placed upon the belongings of parents, grand-parents, and more remote relatives, that personal relics are kept until the facts which enhance their value are forgotten. As a result of this sentimental clinging to old things much material loses all particulars pertaining to ownership before it is turned over to a museum. In many instances the fact that so little is known about a specimen is one of the principal reasons which prompts the donation of it. Of course, years of experience and work on similar specimens make it possible for the workers in museums to supply the approximate dates when some of these old things were used. The records of ownership when once lost are seldom resurrected.

The connection of relics with the persons by whom used and the places where they were used adds so much to their interest that efforts are made to procure as full information as possible to give them the required personal touch. It is so rare a thing for a specimen to retain the information which links it up with the persons who used it that it is a fact worth mentioning. A specimen of this type, well-preserved and well-authenticated, was recently added to the pharmacy collection of the United States National Museum. This relic is a medicine chest made by Paytherus, Savory & Company, Chemists and Druggists, 136 New Bond Street, London, England, in 1804. This medicine chest was the property of Ian Abraham

^{*} Section on Historical Pharmacy, A. Ph. A., Dallas meeting, 1936.

¹ Assistant Curator, Division of Medicine, United States National Museum, Washington.

Willink of Amsterdam, Holland, who married Cornelia A. Ludlow and lived at 18 Wall Street, New York City, and "Bloemen Heuvel," Flatbush, Long Island. The subsequent owners of the chest were Elizabeth Ludlow, Marie P. James, John P. Treadwell and William C. Baur. Mr. Baur, a well-known citizen of Norwalk, Connecticut, the last private owner of the chest, presented it to the Museum, and is to be credited with preserving the specimen and its history, as well as placing it where it will be kept for future generations, and thus serve the most useful purpose such an old relic can render. Mr. Baur is due much praise for parting with the chest before the facts which he knew concerning it were forgotten. In presenting the chest, Mr. Baur stated:

I must tell you that it pulled a little at my heart strings to part with this chest for I can count more than a hundred years between my father and myself that were devoted to the sale of medicines.

The chest is of great interest to me. Since being placed on exhibition it has held the attention of members of the medical profession in general and pharmacists in particular. This is one of my reasons for offering pictures of the chest, one to show the interior and exterior, and the other to show the odd glass and metal medicine containers in use nearly one hundred and forty years ago. Particular attention is called to the sheet of paper bearing the skull and cross-bones. It is thought this paper was used to wrap poisonous medicines. It may have had other uses also. The iron for spreading plasters is the only one of its kind in the pharmacy collection of the United States National Museum. It illustrates a part of the art of pharmacy absorbed by the machines of the mass production era.

A booklet of fifty-five pages entitled "A Companion to the Medicine Chest," printed for and sold by James Tindal, 112 Great Portland Street, London, gives careful directions for the use of the various medicines and utensils contained in the chest. This little booklet lists the contents of the chest as follows:

Peruvian Bark	Paregoric Elixir	Soap Liniment
Epsom Salt	Tincture of Bark	Extract of Lead
Маппа	Sal Volatile	Blistering Plaister
Magnesia	Spirit of Lavender	Basilicon
Rhubarb	Tincture of Gentian	Spermaceti Cerate
Jalap	Tincture of Rhubarb	Opening Pills
Cream of Tartar	Castor Oil	Astringent Powder
Calomei	Essence of Peppermint	Adhesive Plaister
Ipecacuanha	Æther	Court Plaister
Emetic Tartar	Elixir of Vitriol	Lint
Antimonial Powder	Tincture of Myrrh	Tape
Salt of Wormwood	Tincture of Benzoin	Glass mortar, scales
Laudanum	Spirit of Hartshorn	and other utensils.

Most of these medicines are in the chest, and everything indicates that many of them are part of the original stock of the chest. The Genuine Black Drop (Vinegar of Opium) and James's Powder, a celebrated proprietary medicine, are not included in the list of contents, and may have been added by one of the first owners of the chest. It is astonishing that so much medicine and so many utensils can be conveniently and neatly arranged and stored in the chest, the outside dimensions of which are $10^{1}/2^{n} \times 10^{1}/8^{n} \times 9^{n}$. Quite a lengthy preface follows the List of Contents and Table of Weights and Measures. This gives general medical information.

The following advice concerning diseases, medicines and the prevailing method of determining doses is quoted:

It is impossible, however (in a publication necessarily so limited as this) to give direction sufficiently ample and particular for the employment of every medicine, still less for the management of every disease; much, undoubtedly, must be left to the sense and discretion of the reader; but the author has been exceedingly cautious not to urge or sanction the use of medicines beyond what necessity and safety dictated, whenever these guides could be kept in view. And so convinced is he of the intricacy of the art of medicine, and the duties attendant on its practice (even

to those who have made it the study of their lives), that he earnestly advises every one not to trifle with health, and consequently with happiness, by assuming a medical capacity; but always to have recourse to professional assistance whenever it can be obtained.

The prescribed dose of each medicine (except where the contrary is expressed) is calculated for an adult or grown up person; but for children it must be diminished in the following proportions:

For a child seven years old, one-half
3 or 4 years old, one-fourth
one year old, one-sixth
one month old, one-tenth
or -twelfth.

Peculiarities of constitution and habit will often render necessary some deviation from the plan proposed; but these it is evident, could not have been detailed.

The next thirty-five pages of the "Companion" are devoted to descriptions of the medicines contained in the chest. These descriptions are interesting but too lengthy for attention here. The three pages which follow the body of the little book give "Observations on Blood-Letting and Directions for Bleeding." The outline of this part of the art of the physician, then in its heyday, but since thrown into the discard, is interesting. It reads as follows:

Fig. 1.—View of the old medicine chest with the lid raised and the lower compartments partly withdrawn.

The following observations are necessary to be attended to, since, however simple or unimportant the operation may appear, the

or unimportant the operation may appear, the life of a person sometimes depends on its being well timed, and properly performed.

Bleeding is proper after severe falls, where internal bruises are suspected; and where such injury has been inflicted, by any accident, as to threaten inflammation, etc.

In pleurisies and other inflammatory affections of the chest, known as stitches in the chest or side; cough and difficult breathing; and a full, hard pulse; from six to twelve ounces of blood may be taken away, and the operation be repeated in ten or twelve hours, if the blood has a sizy appearance, and the patient has been clearly benefited by the former bleeding.

It may also be employed at the beginning of inflammatory fevers; but here it is attended with hazard, and therefore requires the utmost caution.

Bleeding is often very serviceable in apoplectic and sometimes in epileptic fits; but the discrimination of such complaints is often difficult.

Persons between the age of twelve and forty are the most proper subjects for the lancet. The aged can ill bear this debilitating evacuation.

Direction: Pass the bandage round the arm, two inches above the elbow, moderately tight, so as to bring the superficial veins into view; of these choose that which is most prominent, provided no pulsation can be felt beneath, and if it does not roll under the finger.

Let the patient extend his arm, with the hand firmly clenched; then holding the lancet between the forefinger and the thumb of the right hand (while the thumb of the left keeps the vein steady), make a puncture through the skin and the upper side of the vein, in a somewhat



Fig. 2.—A picture of the removable contents of the medicine chest.

oblique direction, raising the lancet upward, so as to make the incision sufficiently large; the blood is then to be suffered to flow freely into a basin whose capacity has been previously ascertained. When a sufficient quantity has been drawn, the bandage is to be slackened, and the lips of the wound nicely brought together; a bit of linen rag, folded, is to be laid over them, and there secured by the bandage passed round the arm.

The right arm of the patient is most convenient to bleed, as the operator can then more easily use his right hand in making the puncture.

I have given one of the reasons for submitting this account of the old medicine chest as my belief that members of the medical profession in general and pharmacists in particular will be interested in the old relic. My second motive is a desire to help owners of similar chests—undoubtedly many reached the United States—to

identify them. The third reason is a hope that the description and pictures may be the means of prompting pharmacists to send the relics which they possess pertaining to their profession to one of the museums of this country developing pharmacy collections.

SOME PROBLEMS AND RESPONSIBILITIES OF OUR COLLEGES OF PHARMACY.*

BY ERNEST LITTLE.

INTRODUCTORY.

When our chairman asked me a short time ago for the title of the paper which I am to read to-day, I had had little opportunity to give the matter any thought, and consequently had no appropriate title in mind. I suggested the title which has just been read: "Some Problems and Responsibilities of Our Colleges of Pharmacy," because I felt it would, of necessity, cover, at least in a general way, anything which I might care to say to you. Now that the text has been announced, I ask that you please forget it as speedily as possible, in order that you may not later accuse me of wandering too far afield in my presentation.

PRACTICAL DRUG STORE EXPERIENCE.

The suggestion is again before us that one year of practical drug store experience in an approved pharmacy, following graduation, be required of pharmacy college graduates before they are eligible for the Board of Pharmacy practical pharmacy examinations. This seems an especially appropriate place to spend a few minutes discussing this question, inasmuch as it involves both education and legislation.

The suggestion of one year of practical drug store experience following graduation, as far as I can determine, was originally made by Dr. James H. Beal many years ago and has been commented upon by various individuals from time to time during the ensuing years. Dr. Beal's suggestion was made at a time when our colleges were devoting much less time to practical and dispensing pharmacy than is now the case, and when these courses were less well developed than they are at the present time.

The question has been discussed before various pharmaceutical groups, including the American Association of Colleges of Pharmacy, the National Association of Boards of Pharmacy, before a joint meeting of the American Association of Colleges of Pharmacy and National Association of Boards of Pharmacy at Toronto in 1932, and before various state pharmaceutical association meetings. So far as I know, it has never been given an affirmative vote when presented in a good clean-cut, uninvolved manner, although it has been withdrawn on more than one occasion when its defeat seemed imminent. In June 1933, the proposal was defeated at the annual meeting of the New Jersey Pharmaceutical Association. In March 1935, it was discussed at great length and overwhelmingly defeated at the annual joint meeting of the Boards of Pharmacy and Colleges of Pharmacy of District No. 2, which includes the states of New York, New Jersey, Pennsylvania, Maryland, Delaware,

^{*} Section on Education and Legislation, A. Ph. A., Dallas meeting, 1936.