DEPARTMENT OF BUSINESS MANAGEMENT

Conducted by Paul C. Olsen.*

COMMENTS, QUESTIONS AND SUGGESTIONS ARE INVITED AND WELCOME.

Readers are invited to submit comments, criticisms and suggestions regarding the material which appears in this department. The Editor also will undertake to answer questions regarding general problems of business management. Letters of general interest will be published, but the writer's name will not be revealed without his permission.

DOES A MANUFACTURER'S VOLUME INCREASE WHEN RETAILERS CUT PRICES?

BY THE SALESMANAGER OF A NATIONALLY KNOWN PHARMACEUTICAL MANUFACTURER,
AS TOLD TO PAUL C. OLSEN.

It is a fact that a great many manufacturers are only a little more than lukewarm on this subject of wholesale and retail price maintenance. If the truth were stated frankly their opinions would run somewhat as follows:

"Oh, yes, price maintenance," (with a gesture of impatience) "that's just a difficulty between two different classes of retailers. When one group starts to cut prices, I gain from these cutters what I lose from the others. In fact, the more of a cut price war there is, the greater the net gain I stand to make, because it is only common sense to presume the lower the price at which retailers choose to sell my product, the more of it there will be sold."

In college there was a professor of mine who, when he spoke before an audience of business men, immediately disarmed them by starting his speech with this sentence—"The trouble with the average business man is that he is too theoretical!"

The more I see of business men, as the years go by, the more I am inclined to believe that the old professor wasn't so far wrong at that. And one of the most potent reasons for this belief of mine is the condition that I have just described—the unreasoning, unsound belief that I have just described, which is held by many responsible manufacturers—that cut price wars of retail distributors in which their product is involved are no concern of theirs. In fact, such price wars are rather to be encouraged or at least tolerated, say these manufacturers, because they are believed to help build up that fetish of modern business practice—volume.

My contention is that these gentlemen are guilty of armchair theorizing which is far, far removed from the actual facts of the situation. We have just had an experience in Philadelphia which proves that—to our satisfaction at least.

We manufacture tooth paste and, as tooth paste is probably the most widely used toilet article, we have been trying for years to make it the leader of our line. The unfortunate side of the picture is that because of this widespread use of tooth paste, there probably is no item in the entire toilet goods field which is harder to get started or in which competition is more severe.

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However, we were in a much better position than most manufacturers who have wanted to enter the tooth paste field, because our name is one of the best and most favorably known in the pharmaceutical field and the mere attachment of this name to a tooth paste was sufficient to secure for it initial distribution, at least.

Moreover, because of our varied and favorably known line of pharmaceutical products and toilet articles, we had, already established, when we began our tooth paste campaign, the necessary contacts with the drug trade. In fact, in recent years, these contacts had been direct with practically every worth-while outlet in the retail drug trade, although we still sell also to jobbers at prices which permit them their usual profit. The importance of these direct contacts with the retail trade will be apparent in a minute.

When we were ready to enter Philadelphia our first step, therefore, was to try to place at least a small stock of our tooth paste in every store which, from previous contact and experience, was likely to prove a satisfactory distributor. As I explained, this was not especially difficult, because of the good will and reputation attached to our name. The real test would be the repeat business.

Simultaneously with this introductory distribution, newspaper advertising began to appear in liberal space in the Philadelphia papers as well as the usual magazine advertisements. In addition, we arranged for and readily obtained hundreds of window and counter displays all over the city.

This was easy because retail druggists were willing to cooperate with us. They knew they could safely put in one of our window displays and not find the very next day, to their chagrin, that a competitor down the street was offering the very same merchandise at cut prices. From the first, we have vigorously used every legal means to maintain prices on our products. Because of our direct distribution methods it is possible for us to exercise rather close control over our distributors by the simple expedient of refusing to sell those who do not conform to what we know to be fair retail prices for our products.

Our tooth paste sales increased steadily in Philadelphia under the combined influence of newspaper and magazine advertising, plus interested dealer cooperation and a product of proved merit which did repeat.

Then one week the sales curve suddenly flattened and became a horizontal line. Sales barely held their own. Armies of our scouts quickly descended on Philadelphia to learn the causes for our failure to maintain our usual sales increase. They soon uncovered the trouble.

The price we have always suggested for our tooth paste is 35 cents with a minimum price of three tubes for a dollar. A few weeks before, one salesman in Philadelphia had run across one druggist who had boldly marked his stock 29 cents. When we suggested to him that this price was bound to be unprofitable to him as well as unfair to us, he flatly refused to listen. So we immediately stopped filling his orders and thought our troubles with him would soon be over.

Unfortunately, however, this was only a beginning. This druggist had discovered a source of supply which was willing to sell him our tooth paste in virtually unlimited quantities. It wasn't long, of course, until other druggists, too, began to sell at the cut price and they also soon discovered this source of supply. Then, in an effort to outwit competitors, some stores dropped the price to 27 cents and 26 cents, and as low as four tubes for a dollar.

Here the armchair theorists who are ardent supporters of the laissez-faire policy in price maintenance will say, "Don't worry. Let them go to it. You will sell more of your tooth paste than ever before. If the retailers are foolish enough to throw away their profits, that's nothing for you to concern yourselves about."

If these theorists are right in their contention, our sales in Philadelphia should have kept right on going up after this price war started. In fact, if anything, they should have gone ahead even faster than before because of the impetus of the lower price. As I have said, however, we barely held our own.

Remember, our magazine advertising kept right on. Our newspaper space was the same as usual and the product of course was as good as ever. The only thing missing from the set of conditions which had brought us distribution and increasing sales could be druggists' window and counter displays of our product. Our scouts quickly discovered that these displays had disappeared practically overnight.

Almost as one man, the druggists who formerly had displayed our product reported as follows. "Certainly yours is a good product and we know those of our customers who have tried it like it, because it repeats regularly.

"But it's hopeless for us to try to push your tooth paste at the price at which you insist we sell it. We have arguments enough with regular buyers who come in and ask for it and then want to know why we don't sell for 27 or 29 cents like So and So down the street. Why should we multiply our troubles by trying to create more sales for a product which causes us enough trouble as it is?

"Of course we could meet these 27 and 29 cent prices by buying from the sources where those fellows get their merchandise, but if we do there's always someone who will undersell us. So why start an endless chain of cutting? We're sorry for you, but we simply can't afford to do anything to push the sale of your tooth paste."

Some people may wonder why we didn't get enough business from the cutters to more than make up for our losses in these other stores. A little common sense reasoning will answer that. The difference between 35 and 27 cents is just 8 cents. Now, I ask you, how far out of the way will a person go to save 8 cents—how far out of the way is he justified in going to save 8 cents? Of course what happened to us was that the cutters sold their regular trade plus a few competitors' customers within easy reach of their stores. The rest of the people in Philadelphia who did not have ready access to the comparatively few cutters simply read or heard about these cut prices and when they demanded them of druggists who were maintaining the price these druggists simply stopped boosting our product and sold it only to those who unmistakably asked for it.

Is this some theorizing on my part? Listen to this. We succeeded at last in stopping the source from which these cut rate druggists were getting our tooth paste after we had refused to sell to these druggists. Immediately, retail prices went back to their former fair and profitable level and, best of all, our tooth paste sales resumed their upward trend, because now druggists over the city were willing to get back of a product which they could sell continuously at a fair profit.

Don't let anyone ever try to tell me that retailers' cut price wars are no concern of the manufacturers. I know and I have the facts to back me up. Dealer coöperation very well may mean the difference between profitable and unprofitable volume, and dealer coöperation isn't to be obtained from any large group of retail merchants unless they are able to sell a product at a fair profit.

DRUG CLERKS ONE HUNDRED YEARS AGO.*

BY F. B. KILMER.

To be located in the same building for over one hundred years, to be in the possession of members of one family for nearly the whole century and to have never sold soda water, is the somewhat unusual story of a drug store in New Brunswick, N. J.

In the year 1827, Richard McDonald, a druggist, erected a building at the

corner of Church and Peace Streets, in New Brunswick, and occupied the lower floor for a drug store, using the upper floor as living quarters for his family.

In this building, altered from time to time to meet the changing conditions, the trade in drugs is still "going strong." The founder, Richard McDonald, had his sons for partners, and in turn his sonin-law, R. G. Van Pelt. Through other changes the business descended to Edwin R. Van Pelt, grandson of the founder. Thus we have the grandfather, sons and grandson for nearly a century dispensing drugs from behind the same counter. The store, known as Van Pelt's Drug Store, passed out of the family in 1924.

A man who in after life achieved fame in literature as a critic and historical writer, Charles D. Deshler, was apprentice and clerk and at one time a partner in this now century-old drug store. He left behind a chronicle of his experiences



CHARLES D. DESHLER.

as a drug clerk. Eliminating matters, local in character, Mr. Deshler's story is given here.

RECOLLECTIONS OF AN OLD TIME DRUG CLERK.

FROM THE WRITINGS OF CHARLES D. DESHLER.

When I entered upon my novitiate in the art and mystery of an Apothecary, the business was in a semi-transition state, and had almost entirely divorced itself from the sale of dry goods and groceries, which had formed an important branch of the business in the eighteenth century and in the early part of the nineteenth century. I speak more particularly of the business as it was conducted in New Brunswick, where I began my novitiate on September 1st, 1832.

I think I am quite safe in saying that the business as then conducted in New Brunswick was a favorable type of the business elsewhere in New Jersey; for New Brunswick was then one of the largest as well as one of the oldest cities in the State, and several of its druggists were considerably in advance of others in the State.

Although, as I have said, the business had divorced itself from two of its illegitimate affini-

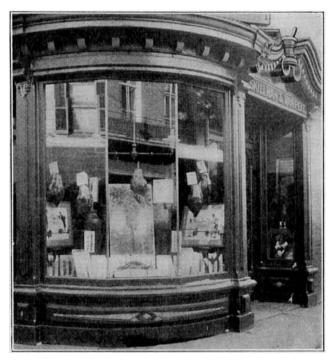
^{*} Section on Historical Pharmacy, Portland meeting, 1928.

tics, it still retained, and indeed had greatly enlarged, its relations with others which were no less illegitimate than those which it had discarded, but still were not so absolutely incongruous as they were with the art and calling of an apothecary.

The New Brunswick druggists included in their stock of supplies such articles as paints, oils, dye-stuffs, varnishes, window glass, bakers', fullers' and hatters' articles, lime, sand, tar and ship-chandlery, snuff, spices, liquors, etc. I observe in passing that liquors were only sold by druggists by the bottle, or by the pint, quart or gallon. I never knew or heard of any having been sold by them to be drunk on the premises. Moreover, their sale was confined almost exclusively to wines and brandy. Whisky, rum and the like, were seldom sold by them.

A DRUGGIST IS MORE THAN A MERCHANT.

Notwithstanding that these unrelated branches constituted by far the larger part of the stock and sales of the druggists of that day, it was the apothecary department which chiefly oc-



The Old Apothecary Shop.

cupied their time and thoughts, and which gave their business the special distinction and consideration which it enjoyed in the popular estimation. The apothecary was then popularly rated as quasi-professional, perhaps because the art and mystery of his calling demanded a longer training and a higher intelligence for its mastery than that of any other mercantile pursuit, and also involved a much greater responsibility.

Beside the ordinary merchant the apothecary was comparatively learned. He knew something of Latin. This, small though it was, was considered a mark of distinction by the multitude, who regarded with unaffected admiration the learning displayed by the man or boy who glibly rolled off such long and thundering terms as "aqua picis liquidæ" for tar-water; "adeps suillus præparatus," or "axungia porcina" for common lard; "sulphas aluminæ et potassæ" for alum; "tinctura opii camphorata" for paregoric; "stannum" for tin; "amylum" for starch; "mel despumatum" for honey; "extractum glycyrrhizæ" for licorice; "carbo ligni" for charcoal;

sinapis nigra for common mustard; sevum bovinum for common tallow; triticum sativum for wheat flour; "aqua pluvialis" for common rain water, etc.

The druggist of that period was really possessed of more than average intelligence, and had acquired a large amount of more or less precise knowledge as to the source, nature, uses, preparation, and dispensing of medicines. He was usually the first one—even before the physician—to whom the people had recourse in sudden emergencies or access for the more common ailments. He was expected to know how to treat burns, scalds, sprains, frost-bites, colic, and simple flesh wounds, cases of poisoning, and attacks of diarrhoea, cholera morbus, and cholera; and, generally, he treated them with prudence and success.

His chemical knowledge was moderate. He knew the official names of the comparatively limited number of "chemicals" that were then embraced in the Pharmacopæia, and was familiar with their medicinal properties, doses and uses. He knew which of them had an affinity for, and which were incompatible with, some other chemical; and also in what menstruum each was soluble and in what vehicle was best suited for its administration. He had some knowledge of tests and reagents, and could not only skilfully distinguish one chemical from another, but was also a good judge of the medicines generally.

There was no use in trying to palm off upon him as genuine, powdered opium, or ipecacuanha, or rhubarb, or aloes, which had been adulterated with powdered licorice root or some other comparatively cheap substance; or Egyptian for Turkey opium; or sophisticated for pure cream of tartar; powdered ginger, arrow root, pepper, or roots, or barks—from which the medicinal properties had been partly extracted by infusion or otherwise—for those which had not been tampered with. He could detect the cheat on the instant by sight or touch, just as he could detect a bad bill or a counterfeit shilling; and the wholesale dealer who attempted to "turn an honest penny" in this way at his expense would quickly discover that he had "waked up the wrong customer."

The druggist of those days, I am inclined to believe, was far more completely the master of all branches of his business than is the druggist of to-day, for the reason that numberless articles which he now buys ready-made, were then home-made. The druggist of those days spread all his own plasters; to spread a compound Burgundy pitch plaster quickly and neatly was one of the first lessons of his novitiate. He prepared blue mass, syrups, confections, conserves, medicated waters and perfumery. He made pills of all the standard kinds set forth in the Dispensatory—chief in demand among which were the compound cathartic, compound colocynth, compound rhubarb, aloes and myrrh, assafætida, quinine, guaiacum, opium, etc.; also, powders of all kinds. He manufactured his own soda water, fruit syrups, seidlitz and soda powders, inks, sealing wax, putty, boiled linseed oil; he prepared fish oils for painting, copal, japan and black varnishes; he was an adept in mixing paints of all colors for retailing, and in preparing a multitude of other things.

I have said that the druggist then made his own tinctures and powders. The former were prepared in the primitive way, by digestion, and not by the more perfect process of displacement which was introduced later. Such tinctures as laudanum, paregoric, colchicum, rhubarb, and the simple and compound tinctures of bark and aloes, which were the kinds most largely in demand, were prepared in five-gallon demijohns, each of which had a label tied around its neck resembling a white clerical hanging neck band, on which the date of the original preparation was written, together with the number of days the mixture must undergo digestion; and regularly, thrice a day or oftener, it was the duty of us junior clerks to agitate it briskly so as to facilitate the process.

The process of powdering was always a laborious and sometimes very trying to the unfortunate one whose fate it was to effectuate it, and when the substance had to be reduced to an impalpable powder, many distressing hours were the lot of the operator. Especially was this the case when the substance to be so reduced was canella bark, squills, or scammony; and most intolerable of all were hellebore root and gamboge. Such sneezing as was provoked by the hellebore, and such sore eyes and noses—especially noses—as were caused by gamboge, were, in the expressive colloquialism of the day, "a caution."

The home-made syrups of that day were made of the best loaf sugar, assisted in the process of clarification by the whites of eggs or Russian isinglass. All the fruit syrups,—raspberry, strawberry, blackberry, pineapple, etc., were made direct from the fruit instead of by the aid of the factitious and unwholesome flavoring essences which were later employed.

THE DREAD CHOLERA.

My mention of the Burgundy pitch plasters in my list of home-made articles recalls an incident in my very early experience. My entrance to the calling was in the first cholera year, 1832, in the midst of the panic created by that dread epidemic. This panic was hysterical, ungovernable, and almost universal—shared in alike by all ages, from childhood to "tottering eld." The odor of chloride of lime prevaded the entire atmosphere inside our city limits and a bottle of Labarraque's Solution formed a part of the outfit of every household. The curbstones throughout the town were all whitewashed diligently and repeatedly, and our gutters flowed with a semi-fluid paste of quicklime and the chloride of lime. People shunned fruits and vegetables as if they were poison. Nearly every man, woman and child was provided with an amulet in the form of a camphor-bag, which was suspended from the neck and worn next the skin in the hollow just under the breast bone, and usually one was also carried in the pocket, where it might be easily reached by the owner to be held under his nose when feeling a passing qualm, or when traversing an unsavory locality. Almost the entire population dosed itself industriously with oil of cajeput, spiced brandy, tinctures of ginger, camphor, cloves and cayenne pepper, and other stimulating preparations, and wore Burgundy pitch plasters, ad libitum, on the breast or stomach, or both. The first salutations in the morning and the last at night were such cheerful ones as "such and such a one was attacked with cholera," or "so-and-so and so-and-so died of it last night;" or, "there have been so many new cases and so many deaths today." The grand staples of conversation of the streets, at the market house, in the cigar and barber shops, and at all the other head-quarters of town gossip, were cramps, rice-water discharges, collapse and sudden death, with which our citizens frightened one another until each fancied that he saw symptoms of the pestilence in some other, or felt them in his own bowels.

One morning when the epidemic was at its worst and the panic at its height, I was left temporarily in charge of the store while my elders snatched a little needed relaxation from the long strain to which they had been subjected. I had become quite familiar with the common cholera remedies and the doses in which they should be administered, and had been specially coached for the occasion by the head-clerk who was an experienced pharmacist. Of course I felt highly important over the trust that was reposed in me and felt several inches taller in consequence. As fortune would have it my first customer, quite early in the day, was a gentleman whom I had known from my very early boyhood. He was then a theological student, about 28 or 30 years old, a large, fine-looking, florid-complexioned and robust man, usually full of life and overflowing with gayety and animal spirits. He now came rushing into the store, wearing a most dejected and woe-begone appearance. "Charley," he exclaimed, after looking around in vain for the head-clerk, "Where is Boyer?" "Gone out, sir, for a while, to get some rest," I replied. "Great Heaven!" he cried, "What shall I do? I'm going to have an attack of cholera." I assured him that I could give him whatever was necessary, if he would describe his symptoms; and I ran glibly over the names of various preparations suited to various cases; but he vowed that he would have none of them. What he wanted, and he would have nothing else, was a Burgundy pitch plaster which should extend from just below his throat down to and below the pit of his stomach; and, although we had an abundance of ready-made plasters on hand, which I showed him, none of them approached these large proportions.

Now, if there was any one thing that I could do better than another, it was to spread a plaster, since I had been sedulously drilled by Boyer in that specialty until I was an expert at it. I very confidently assured my friend that I could spread a plaster, the mixture for which was always ready and had only to be melted, and could do it as well as Boyer or anyone else. "Well then," he said, "get about it as quick as lightning." I placed the plaster over an alcohol lamp, and while it was melting got out the sheep-skin on which to spread it. My friend then traced on the skin the outline of a huge pear-shaped plaster, some 16 or 17 inches long from apex to base, and I speedily cut the sheep-skin according to his pattern, after which I spread it thickly with the plaster in obedience to his repeated injunctions not to be afraid of putting on too much of it. He was a very hairy man, his breast and a considerable part of his abdomen being covered with a thick silken growth, and before leaving home he had shaved this off so that the plaster should have a chance to adhere to the skin properly. It was not long before I had the plaster in readiness, and retiring with him to a back room I clapped it on, and by the agency of a warm spatula made it adhere beautifully, at every point. No sooner was it on, and its genial warmth perceptible, than

my mercurial friend regained all his wonted buoyancy of spirits. His fears abated, his dejection vanished, he complimented me on my dexterity, and left the store cheerfully slapping his breast and stomach, and declaring that he already felt like another man.

A day or two afterward my friend again visited me, as anxious this time to get "that confounded plaster" off as he had been on his former visit to get it on. Scratching and rubbing his breast and stomach like a madman, he declared that he had not been able to sleep a wink the previous night on account of the intolerable itching caused by the confounded thing. He had tried again and again to pull it off, but it was no use, it stuck closer than a brother, and on his last last attempt to dislodge it the skin had given away, and now he was in torture. It seems that in the interval, the hair which he had shaved off had begun to grow again, and this had caused a degree of irritation which, added to that which naturally resulted from the rubefacient properties of the plaster, had now become intolerable. We took him into the back room, where Boyer and I, with the aid of a pair of scissors and the application of heated spatula, after an hour's hard work and numberless groans and ejaculations of the patient, finally rid our much tormented friend of his blanket-plaster, and put a cooling dressing on his inflamed bosom and abdomen. He had had a pretty lively experience, but he didn't get the cholera.

THE ART OF THE APOTHECARY.

The head-clerk, Boyer, came legitimately by his predilection for the drug business. His full name was Robert Eastburn Boyer, and he was a nephew of the late Thomas Eastburn who carried on the drug business for many years on Church Street midway between Peace and Dennis Streets. He was also a grandson of the old ante-revolutionary New Brunswick druggist, Robert Eastburn. He began his novitiate with his Uncle Thomas, but realizing the low scale of pharmaceutical knowledge that was attainable there, he soon sought a larger field with higher possibilities. He went to the City of New York and succeeded in getting employment with William L. Rushton, then the most famous dispensing apothecary in that city, and perhaps in the country. Here he remained some years, acquiring by gradual advancements a complete knowledge of the business in all its branches. He continued with Mr. Rushton until he was invited to become the head-clerk of the New Brunswick establishment at which I made my debut several years later, and in which he became a partner ultimately, as I also did after his death.

Boyer was an enthusiastic lover and a thorough master of his business. He understood as much of chemistry as was practically needful, and had the "materia medica" at his tongue's end, so far as related to an accurate knowledge of the properties, therapeutic uses, doses and qualities of medicines, or the manufacture of all the officinal preparations which were then in use. All these he had memorized from long practice, so that he could prepare almost any of them without reference to the Dispensatory, if it became necessary. He was, without exception, the most expeditious and most expert pharmacist that I have ever seen. The manner in which he filled a phial, or made a pill, or prepared a prescription, or put up a powder, was the perfection of ease, rapidity and skill. It was a treat to see him fold a parcel, whether large or small, and when it left his hands it was a model of symmetry and beauty.

He was as strictly methodical as he was skilful and scrupulously accurate. Everything must be done as he did it, decently and in order, and with religious care and exactitude. Everything must have a place, and must be put in its place. He exacted the utmost cleanliness and neatness even in trifles. Medicines that were in frequent demand were so dispensed by him that by no reasonable possibility could those which were poisonous be dispensed by mistake for those which were not; the former were so placed that some obstacle always interposed against their thoughtless or inconsiderate handling—either they were put so high that steps were required to reach them or they were placed behind other articles which must first be removed before they could be reached.

While medicines were being compounded or dispensed, he permitted no levity, and discouraged conversation; he required the most absolute attention to be concentrated upon the matter in hand. He felt, and he inspired his juniors to feel, that when he was thus engaged he was exercising a grave trust which involved not only health, but possibly life or death. He was one of the most conscientious of men, and this feature of his character extended to the minutest of his dealings as an apothecary. He gave and he exacted just weight and measure. He tolerated no sophistication of medicines, however trivial they might be. Whatever medicine he sold would

produce the desired result, so far as related to its powers and properties. He hated lies and dissimulations, whether acted or spoken, and was accustomed to say that the apothecary who knowingly sold a tincture, preparation or drug which was below the standard in strength or quality, was a liar and a cheat, and might become a homicide.

Boyer was the first to bring to the drug business in New Brunswick a thorough equipment for the pharmaceutical department. Before his return to our city from New York our druggists rarely, if ever, compounded physicians' prescriptions, for the reason, primarily, that our physicians then kept their own medical supplies and prepared their own preparations and prescriptions. The dispensing of medicines in the nature of prescriptions was almost exclusively confined to the preparation of some special recipes for their owners, or the administration, as they were called for, or doses of calomel and jalap, rhubarb and magnesia, tartar emetic, Dover's powder, quinine, castor oil, purgative pills, cholera mixtures, and a few other articles.

PATENT MEDICINES.

In 1832, and for some years later, there were comparatively few patent or proprietary medicines of American origin—the principal among them being Swain's Panacea, Swain's Vermifuge, Lee's Anti-bilious Pills, Thompson's Itch Ointment, Ditchett's Pile Remedy and Miles' Tomato Pills. That, it may be said in parenthesis, was before the day of Brandreth's pills and plasters, Dalley's Salve, and the hundreds and hundreds of other nostrums which have since come into vogue.

There were, however, a goodly number of these, of trans-Atlantic origin, the formulas for which were given in all the dispensatories of the day, and which were manufactured and put up by druggists, enclosed in descriptive wrappers, with directions for their use, which were bought by the quire or ream, ready printed. In all these descriptive wrappers, the antiquated type and spelling, and the old-time quaint and ornate phraseology were preserved—some of them opening with a preface in such swelling words as these: "Medicamentum gratia probatum est;" "This is a Capital of great Antiquity and established Reputation;" "Elixir of Health and Universal Catholicon," etc., etc. Among the most popular of these proprietary articles of foreign origin and pretended foreign manufacturer were the following: Steer's Hard and Liquid Opodeldoc, Bateman's Drops, Hill's Balsam of Honey, Ching's Worm Lozenges, Betton's British Oil, Haalem Oil, Elixir Proprietatis, Godfrey's Cordial, Dalby's Carminative, Daffy's Elixir, James' Powders, Hooper's Female Pills, Anderson's Scott's Pills, Robertson's Pills, Lozenges Bitters, etc., and Turlington's Balsam. The last named was also variously known, and called for, as Friar's Balsam, Vervain Balsam, Traumatic Balsam, Commander's Balsam, Jesuit Drops, Wade's drops, and Compound Tincture of Benzoin.

HERBAL AND POPULAR MEDICINES.

In those days the herb and root closet formed a most important adjunct of every well-equipped drug store. Among the simples which were always to be found in it were specifics which, in the popular belief, were remedies severally for nearly all the "ills that flesh is heir to." Such of them as were the most largely in popular use were these: mint, boneset, horehound, catnip, balm, saffron, sage, pink-root, snake-root, blood root, stramonium, fox-glove, sweetfern, mandrake, wormwood, wormseed, blessed thistle, or carduus benedictus, lovage, liverwort, calamus, elecampane, comfrey, dill seed, marshmallow root, bayberry bark, sumach berry, black cherry seed, white oak bark, celandine, hyssop, pellitory, yellow dock root, dandelion root, feverfew, mezereon bark (popularly leather-wood), spikenard, sassafras, pennyroyal, rosemary, rue, elder flowers, thyme, Solomon's seal, life everlasting, tansy, coltsfoot, etc., etc.

Blood root was a specialty with the negroes, who called it, according to its fracture, salmon colored or dark red, "queen root," and "king root," or "she" and "he" root. They believed it to be rooty, or in other words, to have the power to avert spells wrought by other unfriendly negroes through the agency of the malign fetich Oby (O—beah) and also to exert a propitiatory or fascinating influence upon the other sex.

Catnep was the orthodox remedy for colic in babies, as mint and pennyroyal were for the same enterprising complaint in adults. Sweetfern was esteemed as a cure for pimples, wormseed (sprinkled on a slice of bread and butter) for worms, boneset for rheumatic fevers, horehound for coughs and colds, liverwort for pulmonary and hepatic affections, saffron for measles and scarlet fever, digitalis (fox glove) for asthma, celandine for warts, pink-root for worms, pellitory for tooth-

ache, sumach berries for sore throat and scarletina, blackberry bark and root for diarrhoea, and blessed thistle for nearly all imaginable, and all imaginary diseases.

The nostrum department, consisting of empirical preparations that were kept regularly in stock and dispensed in response to popular calls from the ruder and more ignorant classes, and which belonged entirely outside the list of proprietary medicines, was a considerable one. To it belonged, among others, the following: oil of tar, oil of stone, oil of spike, barbadoes tar, seneka oil, (crude petroleum), oil of earthworms, frog-spawn water, aqua mirabilis, balsam of sulphur, skunk's grease, dog-fat, goose grease, dried snails, prepared wood-lice or millipedes, compound powder of millipedes, egyptiacum, and others equally as crude.

I recall some of the vulgar or popular appellatives that were often applied to the articles sold by old-time druggists, and with which they were as familiar as they were with their true names. These dialect colloquialisms of home manufacture may not be devoid of interest to the student of philology. Thus: Allspice was called "Jamaica pepper;" Cloves "pepper-nails;" powdered hellebore root "sneezing snuff;" oil of origanum, "King of oil;" roll sulphur, variously, "brimstone," "cane sulphur" and "hell timber;" stramonium, respectively, "stink-weed," "Jamestown weed;" and "Jimson" lobelia "Indian tobacco;" quicksilver ointment, "blue ointment" and "anguintum;" gum tragacanth, "gum dragon;" cocculus indicus or indian berries, as "fishberries," and "cocka-nanny berried;" Peruvian bark, severally, "barks", "Jesuit bark," and "Jesuit's powder;" turpentine, "terps;" Glauber salt, "horse salts;" annatto, severally "auter," "aranetta and "yaller auter;" feverfew, "featherfew;" prepared chalk, "crab's eyes;" sweet spirit of nitre "fever drops;" oxide of tin, "polishing putty;" Nicaragua wood "nigger auger;" carbonate of ammonia, "hartshorn" and "sal volatile;" mandrake root, "mandragora," and from its resemblance to the human form, "old-man-in-the-ground;" and finally, assafætida, which was variously known as "tuybel's truyck," "devil's dung," and "asaferty." The last was the expressive Irish term for the fragrant drug. All the variations seem to have been suggested by the old Turkish legend that on the spot where Satan first set his foot when he stole into Paradise the assafœtida plant sprang up for the first time in the world.

It will not be altogether unappropriate to recall at this point a few particulars as to the popular practices and beliefs of some of those who patronized the old-time druggists. Thus: the use of opium was very prevalent among all classes, but was generally furtive. The rich bought it by the ounce, and even by the pound. The price at that time being three shillings an ounce, and \$5.00 a pound. The poor bought it by the quarter or half-ounce. To the former it was a destructive, dreamy and benumbing intoxicant, and to the latter it afforded a temporary refuge in forgetfulness. It was easy to tell the regular opium eater, by the peculiar puffed appearance of his face, and the semi-opaqueness and dead-yellow color of his complexion. Many of those who were regular opium eaters were also inveterate consumers of Scotch snuff which they bought by the ounce, pound or bladder (according to their means) and with which, by the aid of their fingers, or of a stick padded at one end, they rubbed their gums and teeth.

It was a popular belief that common black pitch, or burgundy pitch, if chewed, averted consumption, cured shortness of breath, and also sweetened the breath and preserved the teeth; consequently, many persons chewed both as assiduously as some young people nowadays use chewing gum.

Another popular belief attributed the cure of rheumatism to the wearing of a piece of roll sulphur in the pocket. It was usually worn in pieces about two inches long, and was replaced every fortnight by a fresh piece—the idea being that its virtues had departed or had been absorbed by the patient. A like belief extended to horse-chestnuts, and to cubical pieces of raw turnip or carrot, which were worn in the pocket for rheumatism, and similarly changed every few weeks.

A popular old wives' remedy for freckles and pimples was a tea made of sweetfern leaves, which was taken freely internally and was applied as a lotion externally. Also, the white streaks, which are found in the excrement of fowls, were another popular medicine. This was carefully scraped away from the attendant dark colored excrement, after which it was dried by exposure to the sun or fire, and was then used as a sternutatory, or applied to old sores or ulcers as an escharotic. Cobweb was largely used as a styptic, for which it was quite effective in slight cases; and it was also rolled into pellets and taken as a cure for fever and ague.

To assafcetida were attributed many virtues, alike for man and beast. Worn in a bag on the breast, it was considered a sovereign remedy for convulsions and whooping cough in children, and as a preventive of chills and fever in adults. Wrapped in cloth and used to plug a hole that had been bored in the manger, or to tie on the bit, it was credited with giving horses who were "off feed" an appetite, and also with causing their coats to become smooth. It certainly was greatly liked by horses, who would lick with great avidity the hole in which it had been deposited. It was also a great favorite with negro anglers, who used it liberally sprinkled on their bobbingbait, and declared that it induced fish and eels—especially the latter—to bite.

DRUG STORE EQUIPMENT.

The implements and apparatus of the apothecary department of the druggist of the period of which I am writing, deserves mention. There were scales and weights—handsome brass beamscales with brass weights; an apothecary's small scale. There were minim-glasses, and graduates; small glass or porcelain mortars for acids and corrosives, wedgewood ware, filtering funnels and mortars of different sizes; marble mortars having wooden-handled pestles; iron mortars from the capacity of a pint to that of two gallons; a set of porcelain pill slabs and a pill machine; several broad wooden spatulas for rolling out pills, and steel spatulas of every size; alcohol lamps and stands equipped with pint, quart and half-gallon boilers; plaster pans and kettles, syrup kettles, copper boilers with faucets for preparing opodeldoc, and earthen vessels for the preparation of cerates and ointments; glass retorts and receivers, metallic forms for packing ounce, four-ounce and half-pound parcels of epsom salt and other articles which were in brisk demand; wooden spoons or ladles graduated to the proper size for soda and seidlitz powders; a water-bath, a sandbath and a vapor bath; porcelain evaporating dishes of various sizes; several sets of hair and wire sieves, and a drum sieve, several sets of wine measures from a gill to three gallons each; mills suitable for grinding cloves, cinnamon and other spices, and for the coarser roots and barks—together with petty implements which need not be particularized.

THE JUNIOR CLERKS.

Any view of the business of that time would be exceedingly imperfect which left out of sight the part borne in it by junior drug clerks and their condition. Their lot was a pretty hard one, but it is due to say that in the long run it proved a wholesome discipline to them; certainly, they were none the worse for it. Moreover, unlike the younger clerks of our more luxurious day, they had not eaten sufficiently of the fruit of the tree of the knowledge of good and evil to know how hard their lot was, or indeed to care much about it, far less to whine about it. They were kept incessantly at work, and their hours of work were long. They had but little time for mischief and still less for excesses of any kind, and they had no cause in later life to lament that such was the case. They acquired fixed habits of industry and application. They were preserved from numerous temptations to which the clerks in other less exacting callings were exposed, and to which they too often succumbed, and they enjoyed their few holidays with a zest and relish.

But although our noses were held close to the grindstone, and notwithstanding that we had but little spare time at our disposal, we had had our own fun. Much of our fun and mischief found their opportunity in connection with our business, as the following anecdotes of my own experience will disclose.

At that time there were a great many apprentices to the various trades that were followed in our town, and in the vicinity of "our store" there were several large shoemaking shops which had their full quota of apprentices. The younger and greener of these were the butts and fags of the older apprentices and the juniors who indulged in much horse-play and many rough practical For instance, when the hands of a new apprentice became black, grimy jokes at their expense. and rough from the dirty work which was placed upon him by the older apprentices, they would send him with his little savings to the drug store with instructions to invest in a sixpence, or a shilling's worth of pigeon's milk, assuring him at the same time that it would make his hands soft and white. Of course the older apprentices had been through the mill themselves and knew what would follow. The young gudgeon invariably applied for the mythical pigeon's milk to one of the younger drug clerks, and he being in the secret would give him, with an air of grave importance, the coveted specific, in the form of an infinitesimal quantity of linseed oil and lime water, with directions to rub in a few drops of it night and morning. As these directions also included an injunction to the young fellow to wash his hands carefully with soap and water before applying the pigeon's milk, otherwise something frightful would befall him, it is probable that the specific proved reasonably efficacious. At any rate, we enjoyed the joke, and got his sixpence or shilling.

As almost all these apprentices belonged to the lower classes and were exceedingly ignorant, they were often very superstitious. They believed in spooks and witches, and were terribly afraid of both. The older apprentices, working on these fears, would send the younger ones to us for "spookoil" or "witches grease" as the fancy seized them, whereupon we mysteriously gave them a small vial of ill-smelling liver oil as a charm against spooks, or an ointment composed of a little lard and a good deal of powdered assafætida, to be worn as an amulet against the incantations of witches. I can safely avouch that no apprentice who was thus panoplied ever thereafter

LOVE POWDERS.

saw a spook or suffered from the cantraps of a witch.

The darkies of that day were the most superstitious of all. They were implicit believers in the powers of roots and herbs and were frequent applicants for them in order to counterplot against their enemies and ward off or neutralize their evil intentions. They were wont to declare that such or such an one was a "rooty nigger," and that he had laid a spell on them by placing some "power root" over the lintel of a door under which they had been obliged to pass; and they must have some blood root, or old-man-in-the-ground, or Solomon's Seal, or sweetfern, to chase away the spell. They were even better customers for love powders, for which they always sneakingly applied to us juniors, with earnest appeals to our sympathy and secrecy, and with which we always sent them away rejoicing, after having pocketed their shilling or quarter. For our part we experienced not a little high art in dealing with these credulous fellows. When one of them craved a love powder, we demanded to be told with the utmost exactitude the color of his inamorata whether she was light or dark yellow, copper-colored, or downright black; whether she was short or tall; and whether her hair was long or kinky-after which we adjusted the powder accordingly and with great show of mystery, out of pale or dark yellow, or red Peruvian bark, or of the bark of black cherry. We then enjoined upon him that he must never let it go out of his possession for an instant, and that he must swallow it immediately before he crossed under the lintel of the doorway of the house where his sweetheart lived, the while keeping his thoughts fixed intently on her.

An honest fellow whom I once assisted in this way came to me a few days afterward in high glee. The thing had worked first rate, he told me, and his girl who before had told him half a dozen times "to g'long about his business" had at last relented and had promised to marry him, which she did, and sent me a piece of their wedding cake. Both she and her husband always regarded me as their benefactor; for in their case at least, humble though they were, marriage was not a failure. He repeatedly declared that "ef it hadn't a-benn" for me, his wife "wouldn't a-had him;" and his wife, who had learned the whole story, did not contradict him, so he must have been right.

One of our old-time darkies, known to every boy in the town as "Har," was a jovial, good-natured, and good-hearted fellow, very bright and witty except when he was drunk, and then he degenerated into a great fool and a portentous bore. One day he came into our store, decidedly under the weather from drink, while I was engaged at putting up a supply of seidlitz powders. He was feeling "dreadful bad," he said, and he pestered me to give him something to put him "to rights." Full of mischief, I at length assented; whereupon I dissolved the acid portion of a seidlitz powder in one tumbler half-full of water, and the alkaline portion in another, and then administered them to him, one after the other. Of course, the effervescence, instead of taking place before drinking, as usual, took place afterward with the most amusing results. Har spluttered and hiccoughed, and hiccoughed and spluttered; the mixture forced itself out of his mouth and nose; tears streamed from his eyes, and he was literally frightened sober. After that, no matter how drunk he might be, Har knew enough not to trust me to give him a dose of medicine again; though, for my part, I should never have repeated the joke a second time, for I was nearly as much frightened as he at its results.

FUN IN A DRUG STORE.

A former schoolmate of mine, who was a clerk in a neighboring store, fell into the habit of dropping into our store in the evenings, when he pestered me with queries which I had no mind to answer, since they often related to the "art and mystery" part of our business. This became very

annoying, the more so since it was a rule in our establishment, which we were all expected to obey, that we must not hold prolonged talks with anyone while we were busied on anything that required our attention, but must devote ourselves exclusively to it. One evening when I was thus occupied he was specially inquisitive; and as I did not reply to him as freely or as cordially as he thought was his due he became offended, "put on frills," and made some contemptuous comparisons between his leisure and my slavery, and also between his trig clothes (he was a natty dry-goods clerk) and my coarse overalls. Of course my dander was up and I made up my mind that I would get even with the gentleman. So, betimes one evening when I was pretty sure he would make one of his customary calls, I lifted our largest iron mortar up on the counter, placing its 15-pound pestle beside it, and then sprinkled a goodly lot of fulminating powder over the bottom of the mortar. In due time he made his appearance and began his usual questioning, which I managed to divert to the big mortar and pestle. It was not long before I succeeded in irritating his bump of combativeness by insinuating that it was a man's work to handle that pestle, and more than a match for the muscle of any womanish counter-jumper. This nettled my lad. He got mad, said he'd show me that he could handle it as easily as I could, and, coming beside the counter, he took it up, flourished it around, and wound up by plumping it into the mortar so that its whole weight came squarely upon the fulminate. The consequence may easily be imagined. The fulminate exploded with a whiz and a bang, knocked the pestle out of the young fellow's hands, half suffocated him with its smoke, more than half frightened him out of his wits by its flash and noise, and he got out of the shop without standing on the order of his going.

A DAY'S WORK IN A DRUG STORE.

My summer's day work began at 5:30 in the morning with taking down the iron bars, and opening the window shutters, and ended with closing and barring them again at 10 o'clock at night: and in the winter by going through the same performances, respectively, at 6:30 in the morning and at 9 o'clock at night. The work that filled in the interval may not be dismissed so briefly, and was as follows: First, after opening the windows I successfully made the fires; swept out and sanded the floor; hung out the signs; cleaned, trimmed and filled the hanging, side and hand lamps; cleaned the lamp shades and glasses; polished the scales and other brass fixtures of the establishment; and cleansed and brightened the pint, quart, half-gallon and gallon measures that were used for sperm and other lamp oils. Then there was an intermission of half an hour for break-When that was despatched, in the intervals of waiting on occasional customers for lime, sand and tar, paints and oils, doses of salts and castor oil, and pennysworth of paregoric, Godfrey's cordial, black or Scotch snuff, saleratus, etc., I was obliged to wash and replenish such of the quart tincture bottles as were in the most constant use, fill up the various filtering funnels which had run empty during the night, and to cleanse the glass of the show-cases, and the inside sashes of the show windows. By this time, if it were a fair day, business had set in, and from then until teatime, with the exception of another half-hour's intermission for dinner, I was incessantly on the go, measuring all kinds of oil; weighing all sorts of paint, dye-stuffs and other articles; measuring lime, sand, cement, plaster, etc., rolling and loading barrels, with an occasional period behind the counters putting up sundries both fluid and solid, which had been ordered by country merchants; or waiting on some retail customer for roots, herbs, essences, and a hundred other commodities. After tea, just as we read that "When the evening shades prevail, the moon takes up her wondrous tale," so also did I resume mine. First the floor must be cleanly re-swept, and newly sanded, and then I was set busily at work, with frequent interruptions, to answer calls from customers for one thing or another, at putting up gross after gross of soda or seidlitz powders, and still other grosses of essences, tinctures and proprietary medicines, together with dozens of bottles of ink, or Stoughton's bitters, or bay rum, cologne, etc., and other dozens on dozens of packages of drugs, dye-stuffs and paints, preparatory to the possible demands of the next day.

It was the rule in our store that the clerks should never sit down during business hours. From the opening of the store in the morning until the close at night, there never was an idle moment. If the routine work was done and no customers waiting to be served, there were sundry preparations for the future to be made. There were opodeldoc, or British oil, or Haarlem oil, or balsam of honey, or Turlington's balsam, or Godfrey's cordial, or paregoric, or essence of peppermint, or hair oil, or some other article for which there was a brisk demand, to be filled and put up in dozen packages; there were soda and seidlitz powders to be put up; castile and other soaps to

be sawed off into salable sizes; spices to be ground; roots and drugs to be powdered; syrups, cerates, ointments and plasters to be made—in fine, there was ever something or other to be done, and it fell mainly to the lot of my chums and myself to do it. In addition, we assisted in the preparation of boiled linseed oil and varnishes, and regularly on Saturday evenings we were required to wash all the quart tincture bottles—fifty or more in number, and then wound up the week's work after the store was closed, by scraping the floor of the oil room, and scrubbing and oiling the counters of the store. All this was still further diversified, on dull or stormy days, by varnishing the drawers and closet doors, and also the labels on the tincture and spice bottles, painting the ceiling and plain woodwork, and at suitable intervals by a general washing-up of all the show and large tincture bottles, and the insides and outsides of the shop windows.

Notwithstanding the long and laborious hours which signalized the lot of the junior clerks in our drug stores, and of the apprentices to many of the trades, these hardworked young fellows felt a craving for intellectual advancement, and under its impulse worked hard and in the face of many disadvantages for mutual self-improvement and culture. Ten or twelve of us among my acquaintances formed a musical club, at which under the direction of a singing master, we met once a week by turns, in the stores where we were employed, after they were closed for the day, and rehearsed ourselves in sacred and secular music, in which some of us became experts. We had also a vigorous debating club.

SPRING CLEANING.

It was then the almost universal custom and the usage may yet survive, for our farmers and country folk generally to include in what they called "Spring Physic."

Regularly on the return of Spring, each of these dosed himself and his wife, his son, his daughter, his manservant and his maidservant, his ox and his ass, and everything that was his—the humans with generous doses of senna, salts and manna, and castor oil, and the others with Glauber's salts, fenugreek seed, black antimony, and horse balls in which aloes bore the leading rôle. Even the pigs, chickens, ducks and turkeys came in for their share in the general physicking. In town, this practice took the form of weekly doses that were heroically swallowed by our good people. On Saturday evenings especially there was a rush to the drug store for doses of calomel and jalap, rhubarb and magnesia, compound cathartic pills, Lee's pills, castor oil, epsom salt, hiera picra, and other brisk purgatives, whose effects our mechanics, laborers, artisans and townsmen generally, had the time or the leisure to attend to only on Sundays.

AFTER THOUGHTS.

Since the days when Mr. Deshler was a clerk in this old drug store much water has passed under the bridge.

The store in which he served is still a drug store, but how great have been the changes in human affairs. Mr. Deshler's customers arrived in ox carts, Conestoga wagons, on horseback or in the stage coach. Since that time have come the steamboat, the railway, the trolley, the bicycle, the auto and the aeroplane.

In this century-old picture we see the Drug Clerk lighting the store with candles, sperm oil and camphene. The store has since been illuminated with gas, kerosene and the electric lamp.

Wood stoves heated the store during its early period; afterward came coal oil, and steam heat.

The old store has been a witness of the progress of science and the wonderful discoveries and inventions that fill the annals of the century in which it has existed, the steam engine, the telegraph, the telephone, photography, the dynamo, the Roentgen rays, wireless communication, the radio; the advancement of physics and engineering as exhibited in electricity, radiant energy, machinery, industry and the arts.

The dispensing counter of this store has been witness to the most stupendous changes in medicine and surgery that have taken place since the dawn of history.

Percolation has routed maceration; coated pills, compressed tablets, capsules, ampuls, have displaced the pill tile; drug milling has abrogated the mortar and pestle; plaster-spreading in the drug store has become a lost art. Fluidextracts, elixirs, concentrations, resins, alkaloids, and a host of them have come and some of them have gone their way. Blood letting and blistering have been forgotten. The tar barrel has been the horn of plenty, and from it have come the anilines and the synthetics. Every whirl of the benzene ring has given forth the inumerable new, remedies.

From the germ theory of disease, bacteriology has been created. The dread cholera so vividly described in this paper, and other maladies, have been swept away through preventive medicine.

Serums, antitoxins, X-rays, physiotherapy, radio energy have displaced sulphur and Tansy bitters. Ether and chloroform, antiseptics and aseptic methods have revolutionized surgery and created the wonderful hospital systems which now cover the earth. The hand of death has been stayed in a thousand ways and human life has been prolonged, while this old store has day after day opened its doors to fill its patrons' needs.

This drug clerk of a hundred years ago never sold a postage stamp, for the reason that there was no such thing; but his notes reveal the fact that pharmacy has had its problems in all ages.

Since the time noted in this paper, the population has increased from ten to one hundred and twenty million. Drug stores have been multiplied by fifty. The training of apprentices, so clearly described in the memoir, has created more than three score Colleges of Pharmacy. Great National and State Pharmaceutical bodies create and guide the policy of advancing pharmacy.

A century ago there was a free trade in drugs and poisons (except to slaves); the judgment of the conscientious pharmacist, however, acted as a potent safe-guard. In these latter days laws and regulations without number, in part beneficial, in another part burdensome, control the sale of drugs.

Of amusing interest are the notes in respect to the sale of intoxicating liquors now restricted by the burdensome Volstead Act.

This old store has witnessed stupendous changes in the drug trade. During its life pharmacy has leaped forward a thousand years. It is still moving upward and onward. Let us hope that some drug clerk will note down his experiences in the present remarkable period in Pharmacy for the edification of his followers a hundred years hence.

PRODUCTION AND FOREIGN TRADE IN NATURAL AND SYNTHETIC CAMPHOR IN GREAT BRITAIN.

Official British statistics relating to synthetic camphor are practically nonexistent, but a reliable estimate is, that imports of this product would probably vary from 50 to 750 long tons or even more annually. It is understood that synthetic camphor is not manufactured in Great Britain, at least for general sale, although it is believed that some production

has been undertaken by one or two firms for their own use, in the manufacture of celluloid.

CORNER-STONE OF COMMERCE DE-PARTMENT BUILDING LAID.

The corner-stone of the new Commerce Department building was laid by President Hoover, June 10th. The building, which will occupy three city squares and contain 1,092,000 feet of floor space, is to house all the activities of the Department of Commerce in Washington, with the exception of the Bureau of Standards.