- (4) As Oersted states in a Latin brochure, a German translation of which appeared in Gilbert's Annalen, vol. 66 (1820), p. 295, this observation was first made in connection with one of his lecture experiments, and later repeated in the presence of personal friends. Inasmuch as he regarded the observation of fundamental importance, he mentions the names of those who saw the experiment as witnesses. The importance of the observation and the consequences derived therefrom, are dwelt upon by Rosenberger in his Geschichte der Physik, 3rd part, p. 173.
- (5) For copy of this work, the University Library is indebted to the generosity of Mr. Otto J. S. Boberg, of Eau Claire, Wisconsin, who received his pharmaceutical education in Danish apothecary shops and at the University of Copenhagen.
- (6) Rbdl. = Rigsbankdaler, i. e., the dollar of the imperial bank, the equivalent of one-half dollar, U. S. coin.

DRUG STORE RECOLLECTIONS.*

BY J. N. HURTY, M.D.

Col. Eli Lilly beguiled me into the drug business. I was a callow youth of 16 years and 9 months, and was to graduate in high school the spring of 1870. It was April—Col. Lilly lived in a humble frame dwelling opposite the school house. He was raking his yard that bright spring morning, and I, a callow, conceited and centered youth, with strap-bound books, was trudging unwillingly to school. "Hey, John," said the Colonel, and I stopped. "Come in here, won't you, I want to speak to you." I went in and he unfolded his story which shaped my life work. Up to that time it had never entered my mind to become a druggist. The Colonel made a "center shot." All that day and the next, and the next, and for two weary weeks until school ended, I thought, I dreamed, I contemplated upon becoming a druggist. My expectations were keen, my enthusiasm was at a white heat. I walked by the Red Front Drug Store (that was the name of the Colonel's emporium of drugs and simples) at least twenty times a day. My salary was to be three dollars a week and what could I not do with such a princely income? Priorly I had earned one fifty per week selling and carrying papers, and here was a jump of one hundred percent. It isn't every boy-I said to myself who early in his life's career has his salary doubled. The morning of the first day I awoke at four and it seemed an interminable time until 6.30 A.M., when I was to meet the Colonel at the big double doors of the Red Front. I was there twenty minutes before time, having eaten scarcely any breakfast.

The Colonel appeared a little behind time, which surprised me greatly. He inserted his big iron key, which I remember was about eight inches long and weighed at least three ounces. The door opened and supposedly my life work was before me.

"Sprinkle the floor and sweep out," were the orders, and willingly I went at it. I had for a year sprinkled and swept the floor of the news stand by the post-office and so the work was done acceptably. The show cases, the counters and the base board of the shelves were then dusted with a feather duster and the store was ready for business. "Fix the lamps," was the next commmand. Eight coal oil lamps suspended from three two-armed fancy iron chandeliers lighted the room. I started to take down the lamps two at a time to show my efficiency.

^{*} Read before Historical Section, A. Ph. A., Indianapolis meeting, 1917.

But, alas, I fell off the shaky step-ladder, broke both of the vitreous dispensers of light, skinned my shins and made an awful muss of broken glass, wicks and coal oil upon the recently swept floor. Of course, the Colonel was startled and he exclaimed—"My God, what a stupid ass you are." But seeing my plight and the sorry look in my face, he relented and broke into a paroxism of laughter. My life was saved. Now that he had laughed I knew that my execution was not near.

In about two weeks I had another accident which I might just as well tell right here. The cellar was entered by a flat door in the floor lifted by a ring. Just above this door on a wide shelf was a row of one-gallon glass-stoppered bottles which held stock such as paregoric, laudanum and Huxhams Tincture. One of the bottles contained a gallon of freshly made bay rum, which the Colonel had given a slight yellow color with tumeric. It was this bottle which came very nearly undoing me, and it happened in this way: I was ordered to the cellar, to bring up a bundle of handles for white-wash brushes. They were about two feet longer than ordinary broomsticks. I was told to be careful, and I resolved to be, but alas and alack, man proposes and God disposes. On the stairs I slipped and the end of the bundle fell with heavy impact upon the bay rum bottle and shattered it into a million pieces. The bay rum poured forth upon my head and down my neck, saturating me with its fragrance. It was a veritable deluge of bay rum. The Colonel did frown "sure nuff" this time. His face plainly said, "this brat I had nothing to say and could only look at the Colonel, and he is impossible." looked at me. There I stood, dripping with fluid and the fragrance of bay rum filled the room. A customer appeared and viewed the wreck, and again the ridiculousness of the situation became ascendant, and we all broke forth in laughter. My laughter was somewhat forced. But I was saved.

Concerning bay rum. Its drug store days are not what they were. The barbers were our best customers, and in these degenerate days the barber-supply houses are the sources for this delectable cosmetic and also for lavendar water, pomade and cologne.

CONDITION POWDERS.

Condition powders sold splendidly fifty years ago. We made our own and the "Red Front Lilly Condition Powders" had a reputation which was not bounded by county lines. I have made barrels and barrels of these condition powders and packed thousands of cartons. We bought copperas, alum, rosin, epsom salt, sulphur and bicarbonate of soda in five-barrel lots. Foennugreek was, of course, an ingredient of our superlative mixture. The copperas, alum and rosin had to be powdered and, the cub powdered them. And now, say-did you ever powder a barrel of dried copperas, a barrel of dried alum, and a barrel of rosin in a fifty-pound iron mortar and sift these through a fine sieve? It certainly is some job. The iron pestle had a hickory extension handle attached to a heavy cord which passed through a pulley overhead and was counterbalanced with a small sack partly filled with stones. Oh! the dust! It filled my hair, my eyes my nose, my mouth. It even seemed to penetrate my mind and soul. For weeks after I had made a five-barrel batch of our unexcelled, unequaled and superlative condition powders, I actually oozed sulphur, copperas and foennugreek from every pore. For hogs the powders were modified by adding one-half pound of powdered arsenic to each fifty pounds. As for testimonials, we had them by the

thousands. Every user of our powders insisted there was nothing like them either in the heavens above, the earth beneath, or the waters under the earth, and not one of the ginks was in the least degree competent to testify. Yet their testimonials were a go. All I can now say for them is—as far as I know, none of the poor beasts who were made to eat the powders in their food died because of the foolish medicine.

BAKING POWDER.

Baking powder was another great seller at the Red Front Drug Store. Making it was a clean but dusty job. When a batch was finished and safely placed in its paper-lined barrel, I was white as a miller, and again mouth, nose, ears, eyes and hair were fully, completely and absolutely filled and saturated. Indeed, after mixing a barrel of Lilly's par-excellence baking powder, my soul, mind and body were not made lighter, but heavier.

DOVERS POWDER.

Has any one here under fifty ever made Dovers Powder? I doubt it. Did you ever know its ingredients? Well, I have made it, and I made it too by Colonel Lilly's method. First, the potassium sulphate and the powdered opium were stirred in a mortar for one-half hour, scraping down with a broad limber spatula. Then the powdered ipecac was added a little at a time with grinding and scraping ad infinitum. Finally, the compound was placed on a large sheet of paper and again mixed and mixed with a spatula. All of this mixing and rubbing was not entirely to effect the thorough admixture of ingredients, but also, "by human contact and motion to impart certain obscure qualities not otherwise to be secured."

PATENT MEDICINES.

Patent medicines simply were on the rampage in my early drug store days. And yet—to-day, we find school teachers and preachers who have not risen out of the patent medicine stage of ignorance. Fifty years ago Helmbold, Jayne and other patent medicine kings wallowed in wealth. They simply dripped with gold. I remember reading an account of Helmbold's great glorious golden glory at Long Branch. Solomon, Croesus, nor any of the ancient gold bugs could touch him. He had 'em all beat a hundred miles. And to think Helmbold's great fortune was produced from nothing. Absolutely nothing. No, I am wrong, it was based upon the stupidity, ignorance, superstition and irrational credulity of mankind. And all these we shall never lack.

The funniest patent medicine stunt that was ever pulled off was "Walker's California Vinegar Bitters." Our little country drug store purchased these bitters in fifty-case lots. Thousand sung their praise. The testimonials, positively asserting the life-giving and curative powers of Vinegar Bitters, came from farmers, robbers, doctors, merchants, chiefs, and not one grain of the entire testimony was worth a darn. Walker's California Vinegar Bitters was, we were told, simply aloes soaked in weak vinegar and literally wrecked the intestines into which they were introduced. Then there were bitters and bitters and other bitters.

Joseph R. Perry, the genial one-time editor of the *Indiana Pharmacist*, tried a bitters trick which won and which brilliantly reflected the credulity of people. He had in his stock odd bottles of several kinds of bitters with wrappers spoiled

and worn and unsalable. He bulked the bitters in a keg, added some whiskey, and rebottled with a flaring red label, announcing—"The Most Wonderful and Powerful Stenofacient Bitters." A New and Great Discovery. Life Giving, Life Saving, Strength Making. Upon the label were two pictures, one of a miserable individual and the other of a strong, ruddy person, showing before and after taking.

The wonderful medicine sold readily. The first supply was soon gone and the demand had only begun. Then Joe bethought himself and pondered as to whether or not the joke should be continued. Joe was honest, and, of course, therefore impractical. He just couldn't keep up the swindle and he didn't, and frankly told his customers and they voted him a fool and unworthy of patronage. But what are you to expect of a world in which millions of people will defend divine right to rule and allow themselves to be plunged into a whirlpool of human blood simply to exalt a paranoic with a withered arm, a running ear, and a cancerous throat.

ASAFETIDA.

Did you ever see a one-hundred pound box of asafetida in a little country drug store? What do you suppose could be done with it? Well, the Lilly Red Front Drug Store, actually bought the malodorous drug in one hundred pound lots, and we powdered much of the vile stuff in a big iron mortar.

In those days every child was a stinker because of a little bag of asafetida suspended over its chest. It was a rank stupidity, crass ignorance and silly, but it was done by Christian people. Several times in my early drug store experience I grew faint-hearted and seriously thought of engaging in some life work that had fewer irritating, disgusting, tiring and repugnant features. Especially strong was this thought when I was called upon to powder dried asafetida in an iron mortar. That job was the limit. But evidently I was weak; anyhow, not strong enough to quit a business which dealt in asafetida.

PLASTERS-PILLS-LOZENGES.

I wonder if there are any pharmacy kids here present who ever spread split-skin plasters, made compound cathartic pills by the quart and cut ten-pound lots of tamarind, fig and senna lozenges, or made pecks of cough troches? As I remember my sensations I felt like jumping and shouting when I had finished a batch of compound cathartic pills which filled a drawer holding at least a peck. My first batch of tamarind, fig and senna lozenges brought upon me a mighty catharsis for despite warning I persistently nipped off pieces of the mass to satisfy the gustatory pleasure hidden therein.

I watched Colonel Lilly spread a plaster with a curiosity which developed into great admiration. First, the white split skin was carefully squared, then tacked to a pine board and strips of calendered paper pasted around the edges. How is this to come out?—I almost thought aloud. Then the Colonel carefully spread the melted plaster mass with a spatula, finishing the surface to perfect smoothness. Then came the dusting with tartar emetic, and lastly the paper strips (the paste not yet dry) were skinned away and there was the finished plaster, an example of the master's skill and art. I was a proud pharmaceutic kid when I finally could turn off a pitch plaster which would pass inspection. The plaster

was dispensed in a big envelope made by ourselves out of stiff manila paper. I am quite sure large paper envelopes were not purchasable on the market in those days.

SODA WATER.

Yes, we had a Tuffts Fountain, and after I had learned how to make syrups and charge fountains I voted it a nuisance. On circus days and at county fair time, people stood in line to drink our soda water, which had the reputation of being the best in town. The washing of the glasses and the slop made at the fountain led to a washing scheme which was conceived by the Colonel and which was not a success. Two hundred glasses, the thick kind, were purchased, the idea being to wash the glasses at a special sink in the rear of the store and bring them forward in trays clean and shining. The plan worked well in a rush with about three boys to keep the glass supply from failing and provided they kept out of the way of the dispenser. But if business lulled the glass washers had little to do and became "stand arounds" on expense. Only on big days did we work this plan, and on account of its complications the confusion of running to and from behind the counters, it was abandoned.

In 1873 I attended the Philadelphia College of Pharmacy, and when I returned the Colonel one day remarked—"Well, I suppose you know it all now?" The question was kindly put, for the Colonel's great heart would not brook unkindness. "No," I said, "I don't know it all, but I know more than I would have known under your teaching." "Good, Good," he shouted. "You'll come through." But it was Mike O'Hare who said the right thing. "Where have you been so long, Johny?" asked "old Mike." "Been away to pharmacy college," I replied. "That's right," said he, "make a farmer of yourself."

THE STATE LEGISLATURE.*

BY W. H. COUSINS.

Caesar had his Brutus, Job his boils and Caranza his Pancho Villa, yet none of these much-touted martyrs ever hovered 'round the corridors of a State House and sought to get the attention of the Honorable Jason Jawsmith, chairman of the Committee on Public Health. The trivial demands of the craft of Pharmacy are nothing compared with the howling needs of the populace. Nine-foot bed sheets, the lengthening of women's dresses at both ends and the tax on cigarettes are the average State solon's idea of saving the country and keeping it from going to the dogs the shortest route.

The State Legislature is the most brutal joke of the age, made up, as it is, mainly of an aggregation of unconscious comedians, who, in their serious contemplation of themselves, put Don Quixote to shame. When Heck Rogers of the Cactus and Greasewood "Deestrict" strokes his whiskers, he imagines the seismograph is having a convulsion in Greenwich Observatory, and when approached

^{*} Read before Joint Meeting: Section on Education and Legislation and Pharmaceutical Legislation, A. Ph. A., American Conference of Pharmaceutical Faculties and National Association of Boards of Pharmacy, Indianapolis meeting, 1917.