Section on Practical Pharmacy and Dispensing

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CATAPLASM OF KAOLIN.

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This preparation, much prescribed by physicians, and used extensively in some sections of the country, appears to many pharmacists too difficult to prepare on a small scale in the laboratory of a retail pharmacy.

The fact is, that Cataplasm of Kaolin can be prepared in your own laboratory without too much labor, and for about one-half the price you pay for it when buying from some manufacturing house at their lowest price.

Having eight years of practical experience in making it, I feel it is my duty to inform my fellow pharmacists of the knowledge resulting from this experience, and to give the simple mode by which Cataplasm of Kaolin is prepared in my store.

It may be interesting to mention how I gained this valuable knowledge. While clerking, I received a prescription one day calling for "Pasta Kaolin $\mathfrak{zvi}$." Having never heard of such a thing, I referred it to my principal, who directed me to weigh equal parts of Fuller's Earth and Petrolatum and then mix together. After about 45 minutes "Pasta Kaolin" was dispensed.

A few days later another such prescription came in, giving me a chance for a good sweat-bath on a Sunday night. But unfortunately the started exercise was interrupted by the appearance of the writer of the prescription, who informed me that "Pasta Kaolin" should be prepared from pure Kaolin and Glycerin, and that it is impossible to do this by hand, because herculean strength would be required to make a paste of proper consistency. He also said that he was not particular as to where, or by whom this "paste" was produced, and to dispense whichever we had on hand.

As the proprietor of this store did not permit any experimentation and waste of time, the long wished for opportunity to try my strength came when I was engaged to manage a little store owned by a physician, who used a considerable amount of that original "mud." My first experiment consisted of mixing in a mortar one pound of pure Kaolin and Glycerin, adding the Glycerin gradually to the proper consistency. After a short time I was convinced that without possessing herculean strength, I could produce satisfactory "Pasta Kaolin." At my first chance I presented my preparation, together with the formula according to which I prepared, to the doctor-proprietor and asked him to give it a fair trial.

The doctor informed me that I had omitted one important ingredient—Iodine. As I was doubtful about his claim, he attempted to prove to me that his state-

ment was correct, but the starch test failed to indicate any free Iodine present in the original product. Later I suggested the Nitric Acid and Chloroform test which did show traces of Iodine.

I promised the doctor that I would prepare "Pasta Kaolin" with Iodine, and I did. I started with three pounds of Kaolin. When the "Pasta" was finished, I added ten drops of Tr. of Iodine. The result was that ten drops of tincture was enough to give "Pasta Kaolin" a brownish tint. Taking an equal amount (5 gm.) of my preparation and of the one from Denver, I demonstrated to the doctor that mine contained about ten times as much free Iodine as the other preparation.

I will not go into detail of perfecting the process of manufacturing this preparation. I will only mention that my first apparatus consisted of a mortar, next, of a dishpan having a capacity of about four gallons and my fists, which served as mixers.

My formula for "Pasta Kaolin" was as follows:

Kaolin	1 lb.
Glycerin	fl. $\frac{5}{8}$ xss.
Oil of peppermint	drops 2
Oil of wintergreen.....	drops 8
Carbolic acid, 95%.....	drops 12

This preparation never gave me any trouble in keeping, and two physicians prescribed it whenever there was an occasion for it, and claimed good results.

As soon as the new Pharmacopœia appeared, I started to compound the Kaolin preparation according to the formula and directions found therein. The first batch was disappointing, as swelling, which was taking place slowly for some time, was noticed right after the completion. The result made me think that reaction was taking place between Boric Acid and Glycerin, as this did not happen when Boric Acid was not used. Next time I started with a smaller amount, heating the glycerin and dissolving the Boric Acid in the warm glycerin. This showed that the swelling was not so rapid, and that it had diminished considerably. This result put me in the right direction.

But as I am taking too much of your valuable time, I will tell you briefly how to prepare Cataplasm of Kaolin in your laboratory.

Most of the utensils required you will find in your own store. Procure a large candy pail or something similar, fasten a piece of board about thirty-six inches long and ten to twelve inches wide to the bottom of it by hinges, hooks or otherwise, or fasten the pail to the floor. Order from a carpenter or prepare yourself a stick thirty inches long, or longer, the longer the better, and at least one inch thick. This done, you are ready to begin the work.

Kaolin should be free of moisture. To assure yourself that it is perfectly dry, heat as directed in the Pharmacopœia. The pail, too, must be thoroughly dry. Add the Boric Acid to the Glycerin and heat to about 150° C., remove from the fire and pour into the pail, add the Kaolin and stir until it becomes a smooth mass, free of lumps. Then dissolve the Thymol in the oils and mix well with the mass. Finally add enough Glycerin to bring the Cataplasm to the proper consistency and transfer to an air-tight container.

I find it necessary to add more Glycerin than the pharmacopœial formula calls for.

Time required for making 20,000 gms. is from 45 minutes to an hour. It will be to your advantage in every way to prepare Cataplasm of Kaolin in your own laboratory, without, as I said before, much labor and for about one-half the price you pay for it when buying from a manufacturing house.

DISCUSSION.

Mr. C. A. Mayo, of New York, inquired if an ordinary domestic bread-mixer would be suitable for this purpose.

Mr. Sass said he did not think it was strong enough.

He said it was hard work to mix the paste when he attempted to do it with his fist, because when he had his arm about ten or twelve inches in the paste, he couldn't pull it out. Then, too, it required another man to hold the pan down; whereas, by having this pail fastened to a board, he simply stood on the board and mixed it very easily with the long pestle described in this paper.

WHY DO DRUGGISTS RECEIVE SO FEW PRESCRIPTIONS?

Doctor Henry Beates, president of the Pennsylvania State Medical Examining Board, at a recent meeting of the Philadelphia Branch of the American Pharmaceutical Association gave an answer to this question which would have raised a storm of indignant protest had it come from a druggist. Doctor Beates plainly said that one reason why the druggist does not receive more prescriptions for galenical preparations is that physicians do not know how to formulate a prescription of the proper drugs in the proper combination best suited to the patient or the conditions of the case. Furthermore he asserted that few of the present day practitioners know the exact therapeutic action of drugs, that not one in ten could tell the difference in the effect produced by an infusion of digitalis made from a fluidextract and that produced by one made from the assayed leaf, giving this as an example of the results of the lamentable lack in the study of *materia medica* and in a positive knowledge of drugs. Strong language this, but, coming from one with long experience in examining candidates for licensure to practice medicine in his state, he must know.

One of the chief causes assigned for the decline in the prescribing of preparations the dispensing of which would require skill and learning on the part of the druggist was the insufficient teaching of *materia medica* in medical colleges, this subject usually being given in the first year and promptly forgotten in the succeeding years when all of the student's time is taken up with the refinements of diagnosis, pathology, bacteriology and other modern additions to the curriculum. The graduate, it was said, could diagnose a case in the most exact manner, but when he came to prescribe the proper drug or combination of drugs for it he was all at sea and in despair would prescribe something made by somebody which he remembered to have been told was the exact remedy required. And the worst part of the situation, in the speaker's opinion, was the fact that the prescriber not only did not know what he was prescribing, but did not even know how the remedy ordered acted upon the patient, except that he got better or got worse.—*American Druggist*.