

out by ether, and the powders best adapted to the purpose are precipitated calcium carbonate, or precipitated calcium phosphate. Counterbalance a one ounce wide mouth bottle, fitted with a good cork, and weigh into it 140 grains each of calcium carbonate and strong ether, cork the bottle, shake it, and then add 50 grains of solution of phosphorus. Again cork the bottle, and having shaken well, empty the contents into a mortar, and shake out all that can be shaken from the bottle into the mortar, allow the bottle to stand uncorked that a portion of the ether may evaporate off, triturate the contents of the mortar until nearly all the ether has evaporated and a damp powder remains. At the first sign of white vapour, or before any vapour occurs, transfer the damp powder, by means of a spatula, back to the bottle; cork and then shake it well and then weigh it. The whole contents of the bottle should now weigh about 200 grains; that is 140 parts of calcium carbonate, 50 parts solution of phosphorus and ten parts of ether, and this contains  $\frac{1}{2}$  grain of phosphorus, of this powder 10 grains is equal to 1-40 grain of phosphorus, 8 grains equal to 1-50, and so on. This powder may be put into capsules, or better, into cachets or wafers, these affording a good mode of administration to those who particularly dislike the odour and taste of cod liver oil. This powder appears to keep pretty well, that shown herewith having been made nearly a month. The portion made with calcium phosphate has, however, changed colour within the past two weeks. From being quite white it now has a brownish tinge, a sure indication of change. As the powders are not intended to be kept, but must be made for each prescription, this is a matter of small importance. About twenty minutes of time is required to make the powder properly, and the pharmacist will not be likely to succeed well the first trial; but, when successfully done, it will be found an excellent method of giving free phosphorus. Both powders, but especially the calcium carbonate, have a tendency to combine with and neutralize any small proportions of the various oxides of phosphorus that may form, and this is the reason for selecting the powders. Organic powders do not answer. There are many patients whose stomachs will not tolerate free phosphorus in any form, and a few who accept it for a few days only, and much harm is done by pushing it in such cases. If commenced in small doses, and never given on an empty stomach, but always after a meal, it then disagrees, either by producing eructation to an injurious extent, or by interfering seriously with digestion, it should be abandoned and substituted by phosphoric acid, and this is no doubt the better agent for phosphoric medication in a large class of cases.

There are many patients, also, who cannot tolerate cod-liver oil, in the smallest quantity, such, too, had better be treated by phosphoric acid, for it has been pretty clearly shown that the solution in vegetable oils, even when the oils are superheated beforehand,