scription, the druggist dispensed Squibbs' fluid extract, and after the first dose the patient died. Desiring to ascertain if this uncertainty were exceptional or not, I purchased samples of all the various makes in the market, of the fluid extracts of nux vomica, belladonna and aconite, ten varieties of each, and placed them in the hands of a chemist for analysis. He found that no two, were of the same alkaloidal strength, the difference between Squibbs', the strongest, and Warner's, the weakest, being in the proportion of ten to one; the others being strung along at various points between these two. Obviously, the physician who had been giving his patient enough of Warner's extract to produce its physiological effect, would make his patient very uncomfortable if any other make were substituted, and certainly kill him if Squibbs' or Parke, Davis & Co.'s product were employed. For certainty of effect, then, the doctor who prescribes fluid extracts must specify the make, and see that he gets it. How many do this? If not, one ceases to wonder that the doctor becomes skeptical, for an occasional manifestation of unexpectedly powerful effects renders him cautious, and reduces him to infinitesimals or chemical products.

The same objection holds good as to every other preparation from plants. Alcohol evaporates from tinctures. Powders lose strength. The value of plants varies with the soil, climate, season, and many other things. Cultivated herbs are inert, especially digitalis, of which the second year's leaves of wild plants, growing in England, are supposed to be furnished. Their activity depends upon five glucosides, of which digitin is inert, and digitonin exerts a contrary effect to the other three. These comprise all the remedial virtues for which digitalis is used, one being said to excel as a heart tonic, another as a diuretic, the third as a hemostatic. It seems that one might with propriety employ each of these alone for the purpose desired, and not the entire plant, with the antagonistic digitonin and the tannic, digitalic and antirrhinic acids, volatile oil, fat coloring matter, chlorophyle, albumen, starch, sugar, gum, lignin and salts, all inert or of unknown properties.

Cinchona was given to break up malaria attacks in doses of an ounce of the powdered bark; and a dose it was. The use of the extract reduced the bulk to thirty grains, and now we simply give the alkaloid ten grains. This was the first step towards alkaloidal medication, and no one now dreams of retracing; though the text-books long held out that the results from quinine were not equal to those from the bark.

The poppy has long been used as a sedative, and some of my text-books recommended poppy-heads. Opium came next; then we learned to prefer morphine for relieving pain. Study of the drug showed that of the other components of opium, codeine relieves cough better than morphine, and without interfering so much with the elimination and the digestion. Then why use opium when we want the codeine effect? Why morphine when we desire the anti-periodic action of narcotine, the convulsant and tetanizant