

izing or solvent action of the acid or to a direct combination of the color with the albumen. In neutral egg albumen solution the reduction in digestibility is so slight that same can be ignored and the mineral colors considered as inert matter. When the color exceeds 1 part to 400 parts of egg albumen, it is often impossible to wash the coagulated egg albumen free from color, and a slight error is thereby introduced, but so small that the same has been ignored. The action of pepsin and of pancreatin on the colors direct can be observed and determined by comparison, with or without dilution, of the filtrates from the coagulated egg albumen, comparing filtrates before and after treatment with ferments. In drawing conclusions from these experiments as to the actual efficiency of colors for food purposes it is shown that the synthetic colors are less active and retard the action of the digestive ferments less than any other class of colors, when used in quantities to give like shade of color to the food product, due to the fact that the coloring power of the synthetic colors is so much more intense, from 5 to 100 times as strong as that of vegetable colors, and the amount of color required therefore is reduced in the same proportion, exactly in the ratio of the comparative color intensities.

Artificial digestion experiments can only prove one point and are in themselves not sufficient to pass any color, preservative or condiment as to its suitability for food purposes. In connection with chemical analyses, physiological and feeding tests, they are of great value. If a color, preservative or condiment is found to retard or otherwise interfere with peptic or pancreatic artificial digestion, when used in quantity equal to or less than found in food products, such articles must be considered as not suitable for food purposes, irrespective of its source, whether natural or synthetic, whether of vegetable, animal or mineral origin.

903 POSTAL TELEGRAPH BUILDING,
CHICAGO, ILL.

A NEW BURETTE HOLDER.¹

BY A. T. LINCOLN.

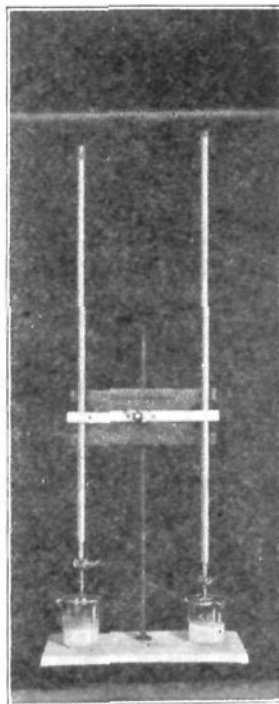
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THE INCONVENIENCE of the ordinary forms of clamps now in use for holding burettes, has been experienced by nearly every one

¹ This holder was exhibited before the Philadelphia meeting (December, 1904) of the American Chemical Society.

who has had occasion to support these measuring tubes. By means of the burette holder herein described many of these inconveniences have been removed, and it is believed that a very simple, inexpensive and effective burette holder has been provided.

The accompanying cut illustrates fairly well the construction of the holder. The holder consists of a well-seasoned block of wood, $3.5 \times 9 \times \frac{3}{4}$ inches, with the ends notched back about 2 inches, thus leaving two pieces of wood at each end with a surface about three-quarters of an inch wide, against which the burettes rest. Two grooves on the face of the board are cut parallel for the burettes to rest in, and one in the middle at the back for the supporting rod. The holder is fastened to this rod by means of a bolt provided with a staple-head, which passes around the rod and can be tightened by means of a thumb-nut in front, and hence fastened very securely to the rod. These grooves into which the supporting rod and the burettes fit are all parallel, thus securing the proper position of the holder and insuring that the burettes are always in a vertical position and parallel. The burettes are held against the wood by means of a piece of spring brass about three-quarters of an inch wide, which extends across the front of the block of wood and at the same time answers the purpose of a washer for the nut. It does not require much pressure to keep the burettes in place, but this spring can be reinforced by placing a second shorter piece of brass over this and having them properly fitted.



A very marked advantage that this holder has, in addition to those already mentioned, is the ease with which the burettes may be put into or removed from the clamp, as well as moved up or down in case the meniscus happens to become hidden by the brass clamp or rendered indistinct by the wood becoming the background.