

formaldehyde again and asked me to step over to the laboratory and see the results. The milk was clotted but sweet, and I found that salt had been added by ourselves to prevent the milk from freezing and to keep it from being used for drinking purposes. The proportion was about four pounds to ten gallons of milk, but I think more than that was present. On performing the regular test by taking 10 c.c. of the milk and 10 c.c. of the hydrochloric acid containing the small amount of ferric chloride, and heating them together, it was noticed that the curd did not dissolve as well as usual and floated on top of the mixture. At the time when the coloration should appear it did appear *in the floating curd* but not throughout the body of the liquid. The regular violet coloration was obtained in the curd and what stuck to the sides of the casserole, but the main solution remained a brownish color. I then returned to my own laboratory and made some experiments the results of which clearly show that milk free from formaldehyde and which gives no suspicion of a violet coloration, when mixed with sufficient salt and then the test performed, gave a strong violet coloration in the curd or floating particles, but not throughout the solution. Such coloration would usually be interpreted to mean adulteration with formaldehyde. I presume the salt raises the boiling point and also makes a more concentrated solution, but, however that is, chemists should be on their guard about reporting or interpreting any test as indicating formaldehyde, unless the whole solution is violet colored and unless the curd is all dissolved. Other things besides salt may cause the same conditions. WILSON H. LOW.

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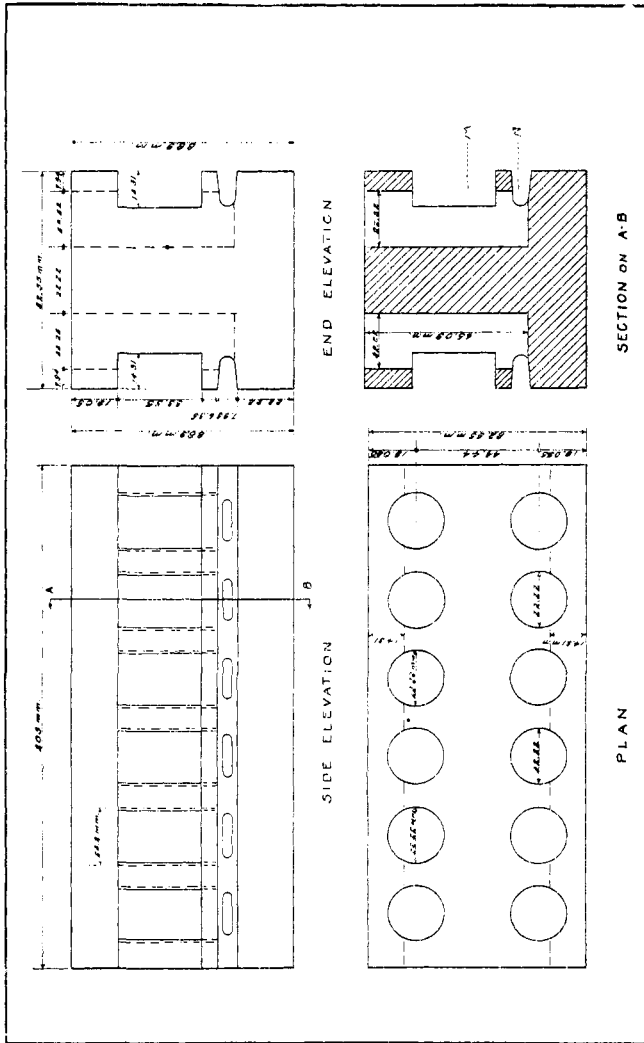
*A One-piece Test-tube Stand.*—The test-tube stand described in the accompanying drawing is the result of a series of modifications of one originally designed by Prof. J. H. Appleton, of Brown University. It has been in use for several years and has many advantages over the usual form.

There are several objections to the test-tube rack in common use. The principal ones, probably, are cost; weight, which may account for its well-known and often exasperating habit of falling over when loaded, and the tendency to go to pieces under the influence of misplaced drops of various reagents.

This stand is made in one piece, of either pine or poplar, but any sound wood will answer, and weighs from 700 to 1,000 grams. After planing long pieces to the desired size, the holes were made with a gang-drill, the grooves cut on a moulding machine, then the stand cut off after every sixth hole and dipped once in shellac.

Little further description is necessary, as all the dimensions are indicated in the drawing. The large opening M, at the sides, permits a clear

view of the tubes and contents; the opening N, below, is for drainage. If desired, small holes may be bored in the space between the rows, and pegs inserted upon which test-tubes may be inverted.



Any institution, having an engineering department with a wood-shop, can make this stand at a cost of less than five cents each, while a wood-working firm may charge a few cents more, "owing to the high price of lumber."

C. K. FRANCIS.