

additional bacteria from the air. Both of these objects are met by the flattened glass flasks designed by Petruschky.

These flasks contain the nutrient gelatine ready for use, so that it is only necessary to warm them gently and so melt the gelatine, drop in the proper amount of water and after shaking them gently to lay them on their side till the gelatine stiffens.

As these flasks are expensive and not always easy to obtain, it may be of interest to those who work under conditions which make it difficult to obtain apparatus to know that I have found ordinary flat sided, common, white glass vials, obtainable anywhere, answered the purpose admirably. Owing to the small size of the bottle necks I find it best to plug them by wrapping the cotton wool about the end of a wooden toothpick, which is then broken off short. By doing this the plug can be readily inserted and removed. The colonies are readily counted with a lens, and to facilitate this I rule with a writing diamond a couple of parallel scratches on the flat side of the bottle in the axis. Cross lines are not usually necessary. Any of the colonies can be fished out with as much ease as from a Petruschky flask. The only respect in which these bottles are not satisfactory is that, being made of rather thick glass, when using a low power microscope, the object appears somewhat blurred. This also could probably be obviated by using a correcting lens. They possess, however, a distinct advantage over the Petruschky flasks in being much stronger. They also pack closer, owing to their flat sides, and having flattened bottoms they can be stood up.

For summer field work I was able to pack 160 of the bottles in a small double walled tin chest or portable refrigerator, measuring 20" x 16" x 18", and this included a space of 8" x 8" x 18" for the ice chamber.