New Appliance

A NEW REAGENT OUTFIT FOR CLASSES IN BACTERIOLOGY.

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In order to meet the requirements of economy, simplicity and neatness I have devised the reagent outfit here illustrated for the use of my classes in the microscopic laboratories of the University College of Medicine, Richmond, Va.

This outfit consists of a tube rack and a set of reagent containers (Fig. 1).

The rack consists of a block of wood 2x2x6 inches, bored with 12 holes $1\frac{1}{4}$ inches deep by $\frac{3}{8}$ inch in diameter.

The containers consists of 12 small test tubes, 100 mm. long by 8 mm. inside diameter. These tubes are equipped as follows:

Figure 1.

One is fitted with a cotton mop and contains vaselin for sealing hanging-drop preparations. Three are fitted with ordinary cork stoppers and contain respectively, alcohol, acetic-acid-alcohol, xylol. Eight have pipette points attached to their mouths by means of rubber tubing 35 mm. long, 7 mm. outside diameter and 5 mm. inside diameter; the pipette points are 20 mm. long and are drawn from 6 mm. glass tubing; these tubes contain respectively: distilled water, Gram's solution, 1 per cent. sulphuric acid, Bismarck brown, Loeffler's methylen blue, carbol-fuchsin, Gabbett's solution and anilin-gentian-violet.

Each container is supplied with enough solution for from 15 to 20 coverslip preparations. When in use the container is inverted over the coverslip and the rubber is compressed between the finger and thumb until the desired amount of fluid has been expelled. Relaxation of the rubber then causes re-entrance into the tube of any fluid adherent to the point, so that there is no leakage down the side when the container is replaced in the rack (Fig. 2).

If it is undesirable to leave a container open, even by so small an aperture as the point of the pipette, it may be effec-

tively closed by folding the pipette point back against the side of the test tube and confining it there by a small rubber band, thus making a stopper of the rubber tube.

When the containers become empty they are refilled from stock bottles fitted with siphons. These siphons have long pointed distal limbs, so that in filling a container it is necessary to remove only the pipette point from the rubber tube, which remains attached to the test tube (Fig. 3).

Figure 2.

Figure 3.

After a critical experience with this outfit, covering a period of three months, with a class of 76 students, I find it admirably adapted to the purpose for which it is designed.

The same principle with slight variations has also been applied in preparing outfits for other laboratory classes.