A RACK FOR HOLDING AND SHAKING SEPARATORY FUNNELS

The use of a vertical separatory funnel shaker such as the one designed by Holmes and Mullins is highly desirable when making zinc determinations by the dithizone procedure. In conjunction with a timer this shaker gives a shaking uniformity which cannot be obtained when funnels are shaken by hand, and in addition saves considerable time since numerous separatory funnels can be shaken simultaneously.

Further time-saving can be realized by use of racks which serve both as bench holders for the separatory funnels and for mounting the funnels on the shaker, thus avoiding the tedium of handling funnels individually. A detachable top section secures the funnels during shaking. A diagramatic drawing and specifications of this funnel rack are shown in figure 1. The number of funnel positions on the rack can be varied to suit individual preference. It is usually desirable to have at least two racks, so that one set of funnels can be shaking while analytical operations are being carried out on the other.

A picture of the funnel rack with funnels in position for shaking is shown in figure 2. To modify the Holmes-Mullins shaker to accommodate the funnel rack and retainer, proceed as follows:

1. Remove the lower wood shelf which ordinarily supports the bottom row of separatory funnels.
2. Invert and relocate slightly the three brackets which hold the stopcock end of the bottom row of separatory funnels.


3. The funnel rack, funnels with stoppers, and funnel retainer can now be placed on the shaker in an inverted position by placing the rear wood bar over the upper wood funnel support on the shaker and sliding the metal reinforced portion of the funnel rack under the three inverted brackets. The metal reinforcement should be indented at the proper place to grip the shoulder of the brackets snugly.

If the Holmes-Mullins shaker is not available, no difficulty should be encountered in devising a means of fastening the racks to other designs of vertical shakers.—Louis C. Boawn, Soil Scientist, ARS, USDA, Prosser, Wash.

Figure 1—Construction details of funnel rack and funnel retainer.

Figure 2—Shaker with funnel rack and funnels in position for shaking.