

kind of poison, and it is sometimes difficult to diagnose a case specifically as being due to poisoning or not. But careful consideration of the points touched on should be a helpful means of avoiding errors and provide stimulation to greater powers of observation.

NOTE.—For detailed information regarding the indigenous plant poisons, a series of articles in the *Journal* entitled "The Poisonous and Suspected Plants of New Zealand," by B. C. Aston, may be referred to. The articles appeared in Volumes 16 (p. 324), 17 (p. 6), and 26 (pp. 78, 149, 230).—ED.

PLANNING OF THE TEST-ROOM AT DAIRY FACTORIES.

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THE writer has noticed in the course of his official travelling that in quite a number of comparatively new factories little thought has been given to the position or convenience of the test-room, especially to its lay-out. In the case of cheese-factories the tester has been placed on the open stage without hot or cold water nearer than the making-room, and where the operator has no control over temperatures, &c. In other cases the test-room has little or no drainage or is in conjunction with the starter-room, which is also in a bad position.

All test-rooms should have a suitable bath installed to read the tests from. This should have a steam-inlet to regulate temperature, and an overflow $5\frac{3}{4}$ in. from the bottom to ensure that the bottles cannot be submerged. Testers should be on a solid foundation, level concrete being the most satisfactory. If the concrete block is recessed this will provide a suitable cool and convenient place in which to keep the jar of acid that is in use. All test-rooms should be provided with an abundance of light.

Testing being a very important phase of the factory routine, the operator should have a test-room that is conducive to accuracy with the minimum of inconvenience. In the case of butter-factories the test-room should be as far as possible from churns, engines, &c., owing to vibration retarding or interfering with the sensitiveness of the delicate cream scales. If possible it is advisable to detach the test-room from the main building. With test-rooms of this description the operators find it better to carry the samples a greater distance than have their work retarded by noise of can-steaming, vibration of machinery, and incoming and outgoing of staff. It is not desirable that test-rooms be in conjunction with store-rooms, offices, &c.

It has been common in the past to place the tester in the corner of the test-room. This should be discouraged, owing to the small steam-pipes and nipples having to be replaced periodically. This work is much easier when the tester is in a central position, and in most cases it would be in a better light.

A satisfactory lay-out for the test-room from left to right is: (1) Sample-heating tubs; (2) scales; (3) burette for acid; (4) tester (central position); (5) hot-water bath; (6) washing-up tub, and rack for wet bottles. Composite sample-bottles, after washing, can be stored on shelf under bench away from light and in a cool position.