

microbes experimented with can be grown "true to type" from the toxicological point of view. In comparison with the loss of time caused by the lack of these requisites, an uncertainty of 20 percent or so in the number of cells introduced into the poison is of little moment; and it is obvious that a more accurate regulation of temperature during the action of the poison can easily be attained by the use of a suitable thermostat.

SELECTION OF THE RANGE OF CONCENTRATIONS

Staph. No. 8 in poison

	0	5	10	15	20	30	40	50	70 min.
0.25% phenol, 24.5° C	—	—	44077	—	—	55315	—	42995	59630 col.
0.50% phenol, 24.5° C	—	—	43084	—	51039	55032	49741	48129	— col.
1.0% phenol, 24.5° C	—	—	16927	73	0	—	—	—	— col.
0.6% NaCl, 24.5° C	39711	—	—	—	—	49724	—	—	43046 col.

Staph. No. 10 in

	40	60	70	80	90	100	110	120 min.
0.25% phenol,								
room temp.	—	—	7000	—	7573	—	6427	— col.
0.5% phenol,								
room temp.	10500	7500	—	6637	—	6205	—	2418 col.
0.6% NaCl,								
room temp.	6045	—	—	—	7064	—	—	— col.

	130	140	150	160	170	min.
0.25% phenol, room temp.	5727	—	8591	—	7955	col.
0.50% phenol, room temp.	—	1527	—	1209	—	col.

In the experiments with culture No. 10, the room temperature varied from 20° C to 24° C, but as the tubes stood close together, and plates were poured from them alternately, the results are comparable.

Comparison of 0.80% Phenol with Its Chemical Equivalent

The equivalent contained 0.72 percent phenol and 2.0 percent salt. After "control" is given the number of colonies counted on plates from a 0.6 percent salt solution infected at the same time as the poison liquids; usually one plate from