

As has been stated, of all of the conditions the C permits of most accurate observation. However, the B gives values very closely paralleling those of C.

The values obtained seem to be sufficiently definite to place the alcohols in their respective positions with considerable confidence. It was never possible to obtain either the B or C condition with *n*-hexyl alcohol but values calculated from the A and D values indicate clearly that the drop in activity among the normal homologs starts with it.

The data seem to explain why there have been so many differences of opinion expressed as to variation among isomers. The order of increasing strength among the butyl alcohols is reversed by the amyl isomers.

The drop in narcotic power of the normal homologs is very great. In the single case of the heptyl member it appears to be accompanied by marked increase in toxicity. Doses of *n*-octyl and *n*-nonyl equivalent to one and a half times the C dose of *n*-butyl alcohol in no instance had any visible effect.

An interesting observation in connection with tertiary butyl alcohol is its powerful inebriating effect. For several hours after recovering sufficiently from the C and D conditions to be on their feet the pigs will run wildly and unsteadily when disturbed.

The extent to which most of the samples had to be purified to yield successive fractions of constant boiling point and refractive index leaves little question but that workers who did not carefully purify their alcohols (many of them did not) have worked with very impure materials.

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LITERATURE CITED.

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- (2) Danner and Hildebrand, *J. Am. Chem. Soc.*, 44 (1922), 2826.
- (3) Skinner and Noyes, *Ibid.*, 39 (1917), 2718.
- (4) Smith and Menzies, *Ibid.*, 32 (1910), 907.

PHARMACEUTICAL ETHICS IN THE MIDDLE AGES.

Pharmaceutical ethics was a reality in the Middle Ages, and he who infringed it was held severely to account. The distinction between physician and pharmacist was sharply drawn and no encroachment on the part of one profession on the prerogatives of the other was permitted. A curious oath dating from the fourteenth century, which all who were licensed as apothecaries were obliged to take, read as follows: "I swear not to malign any of my former masters, physicians, pharmacists or others, whoever they may be; to uphold, as far as in me lies, the honor, glory, ornament and majesty of medicine; not to disclose to idiots and ingrates their secrets and mysteries; to do nothing rashly, without the counsel of physicians or in the hope of gain; to disown and to avoid like the plague the disreputable and entirely pernicious methods of practice now followed by charlatans, empirics and dabblers in alchemy, to the great disgrace of the magistrates who tolerate them. May the Lord prosper me as I observe these conditions."—From *The Pharmaceutical Journal of New Zealand*.
