with the situation in higher space, Desargues' theorem in the plane is not a consequence of the axioms of projective geometry. A second group of results concerns Pappus' theorem (that is, Pascal's theorem for a line-pair): it may be proved that this theorem holds in a plane if and only if the corpus defining the co-ordinate system is commutative. Also the theorem cannot be established on the sole basis of the incidence postulates and Desargues' theorem; but Desargues' theorem can be deduced from these postulates together with Pappus' theorem.

There follows a very interesting chapter on finite linear spaces, a subject to which the author has made fundamental contributions during the past few years. It is here, in the geometry of a finite number of points, that intuition receives its gravest shocks and that seemingly unshakeable theorems tumble

like ninepins.

A substantial appendix by L. Lombardo-Radice on non-Desarguesian finite graphic planes takes the theory further; but much has happened in the two years since the book went to press. The style and content of this work are such as we have come to expect of the distinguished author, whom all geometers will thank for this valuable addition to the literature.

L. ROTH

"OPINIONS OF THE LATE AND BEST PHISITIANS"

Tobacco

Experimental and Clinical Studies—a Comprehensive Account of the World Literature. By Prof. P. S. Larson, Prof. H. B. Haag and Prof. H. Silvette. Pp. xii+932. (Baltimore, Md.: The Williams and Wilkins Company; London: Baillière, Tindall and Cox, Ltd., 1961.) 160s.

N 1595, an anti-smoking tract appeared in England entitled "Opinions of the Late and Best Phisitians concerning Tobacco", establishing a tradition of criticism which has persisted to the present day. This reference does not appear in the book under review, but there can be few of scientific interest which are not included. The authors' stated intention is "to be deliberately non-selective, printing good work and bad, sound and uninformed opinion, alike, in the same type", for they discovered that "there was scarcely to be found consistency of data in any area of observation, and unanimity of interpretation was even more rare". The result is an enormous work with more than 6,000 references. It is not, however, an unevaluated mass of contrapuntal observations, echoing the disagreements of a century and a half, for the authors have decided views expressed by length of quotation, inclusion of critical reviews, and their own comments on methods and principles of

The authors are pharmacologists, and the first part is devoted to the pharmacology of tobacco in many species.

The human race has experimented on itself with tobacco so persistently that short-term effects due to nicotine must be relatively unimportant. It has been said that nicotine can be regarded as a naturally occurring hormone in regular smokers. It is not significant that it can be toxic in large doses; so, after all, is adrenaline. Since nicotine is the major constituent it has pride of place, and our ignorance of the other 150 constituents of tobacco smoke, 10 of

which are carcinogenic, is startlingly apparent. In such chronic habits as smoking these 'tracer' substances must be as worthy of study as nicotine.

A large part of the volume is clinical. One feels that in referring to particular diseases the aid of specialist clinicians might have been an advantage. For example, the statement is made, correctly, that most authorities forbid smoking in thromboangiitis obliterans; but the patients observed by these authorities were almost certainly arteriosclerotic, and their conclusions will not stand up to critical appraisal.

This is a minor criticism. The authors' general critical approach could be imitated with benefit by many clinicians who are in the chase after chronic

influences on chronic diseases.

In most cases one must agree with the authors that the correct verdict on tobacco is "Remanded for further evidence". The greater part of the literature is critical of tobacco, but in this instance quantity does not count. There is no disease from piles to coronary thrombosis for which it has not been blamed, but it has also been used to treat most of them. It would be a mistake to condemn it from puritanical tendencies, when there may be beneficial effects as difficult to demonstrate convincingly as its alleged disadvantages. One supposes that the habit is of some value to those who use it.

KENNETH BLOOR

ÆTIOLOGY OF ALCOHOLISM: CONTROLLED OBSERVATIONS

Origins of Alcoholism

By William McCord and Joan McCord, with Jon Gudeman. (Stanford Studies in Sociology, 1.) Pp. xi+193. (London: Tavistock Publications (1959), Ltd., 1960.) 35s. net.

HIS is an important work. It is a well-controlled I study of a large group, of both 'normal' and 'pre-delinquent' boys, of which the original purpose was to consider the value in prophylaxis of criminality of guidance by trained social workers. A vast amount of information was obtained. In due course the boys grew up, and some of them became alcoholics. Thus for the first time we have unprejudiced information about the alcoholic, obtained before the onset of the disease. In other very numerous investigations the information necessary for evaluating pathogenesis has been elicited retrospectively and liable to many sorts of bias. In the work presented in this book, bias seems to have been eliminated-partly by the multiplicity of observers and observations; partly by the absence of any design, in the original scheme, of studying alcoholism; and partly by careful coding and rating techniques.

They find no support for some widely held views: for example, glandular diseases, malnutrition, oral tendencies, latent homosexuality, do not correlate with alcoholism. They list seventeen variables in the childhood background that did correlate with alcoholism. Six were highly important: (1) maternal alternation between affectionate and rejecting attitudes; (2) maternal deviance, for example, alcoholism, promiscuity; (3) paternal antagonism; (4) paternal escapism; (5) an 'outsider' in conflict with parental values; (6) absence of high demands on the child by the parents.