A STUDY OF SUPERSTITION

Do You Believe It? By OTIS W. CALDWELL and GERHARD E. LUNDEEN. 307 pp. Doubleday, Doran and Company. 1934. $3.00.

THIS meritorious volume has a divided purpose. The one is to present a general survey of superstitions as they come down through the ages, are modified and revived, together with some account of the origins of these persistent beliefs and the habit of mind, the quality of reasoning behind them. The other is to investigate the present prevalence of beliefs in superstitions and their effect upon behavior; and in view of the finding to suggest some educational measures to counteract this incongruous and somewhat weakening trend. The two purposes are not altogether consistent, nor can they follow the same treatment and style. The reader interested in the popular aspects will not follow the statistical account; and those who read it for its more serious purpose have no need to enlarge their acquaintance with popular misconceptions.

The general survey does not go sufficiently behind the scenes to add to the philosophy of the topic; that is a far-flung inquiry in its own right. The survey includes false beliefs (such as weather signs) where there is some measure of scientific approach and also folk-lore as well as doctrinal superstitions in which this is lacking.

While these two orders of false thinking should be distinguished, it is convenient to have the two aspects assembled within one pair of covers; and this contribution by Dr. Caldwell and Mr. Lundeen serves the purpose well. It will give libraries just the book to which they can refer the general reader, who, if he reads it properly, will emerge from the exercise with a wiser view of the distinction between the cautious steps of science and the vaulting leaps of superstition, untroubled by the insecurity of premises. It makes a fine correction for the vagaries of popular belief.

The statistical study proceeds by the method of selecting 100 current superstitions and false beliefs and asking the subjects—in the initial series about 700 junior high-school pupils—to indicate whether they hold this belief or do not, whether they heed it or not in their behavior. The general result, that on the average, these students approve or assent to or are affected by as many as 22 such superstitions, indicates a rather formidable hold of false beliefs in the formative educational years. The superstitious tendency diminishes somewhat with maturity; girls are uniformly more hospitable to such beliefs than boys; the more intelligent entertain fewer superstitions than the less intelligent; the contagion of belief among friends, home and immediate surroundings is the dominant factor in their spread. Introducing corrective training in the general principles of cause and effect, as illustrated in the sciences, definitely reduces the inclination toward superstitious beliefs.

These general results, for the most part readily anticipated, are about all that the statistical method can yield. They supply a somewhat objective set of data, but do not, perhaps can not, attain any greater significance. It is true of this, as of many another painstaking study in the less concrete realms of educational psychology, that their yield is small compared to the expenditure of mental energy involved. The essence of such a problem as the spread and hold of superstitions lies in the qualitative analysis of the habit of mind conducive to their acceptance. This disappears in the mass statistics, in one respect needlessly so. Crude superstitions and false generalizations are treated as one. If separated, as they could readily be, and if furthermore within the superstitious field the more venial instances were separated from the grosser violations of logic, a step or two might be taken toward an index of superstitiousness. A comparison of the ten most generally accepted with the ten most generally rejected gives the impression—despite a rather scattered distribution—that these young ideas, which are trying to shoot straight, are mostly given to the lighter types of illogicalities.

The literature of superstition has been mainly one of anthropological interest when serious, of folk-lore curiosity when in popular vein. The psychological interest forms a chapter in the comprehensive story of how the human mind groped, stumbled, drifted, fumbled in its haphazard course in learning how to think. The conflict of psychological trends with logical precepts, pointedly illustrated in wish-thinking, explains part of it; the intrinsic difficulty of the technique outside the familiar range of events accounts for another phase. Scientific thinking does not come naturally to the popular mind; those professionally devoted to its dissemination have gone through a discipline to attain their expertness. JOSEPH JASTROW

SCIENTIFIC APPARATUS AND LABORATORY METHODS

THE GEAR PUMP AND HOSE AS A COLLECTOR OF WATER SAMPLES FOR GAS ANALYSIS

IN our study of the gaseous content of the waters of Chesapeake Bay and its tributaries, in connection with a biological survey, it is often necessary to take samples from a depth of 25 meters or more where the water is under much greater pressure than at the surface. It is generally known that when such samples reach the surface there is a tendency for the contained