ated by thinking people and that they may share in expressions of congratulation and the heralding of well-deserved honors. Thus, in reviewing the achievement of the unostentatious investigator on the scientist's birthday, the New York *Times* has offered this editorial tribute:

A world accustomed to accept such facts as the communication of disease by insects can scarcely appreciate the significance of Dr. Smith's discovery in 1893 of the transmission of the so-called Texas fever of cattle from one animal to another by means of ticks. For seven years he had been experimenting with this disease, and discovered that it could be carried even by ticks which had never been in contact with infected cattle, but which had acquired the virus from their parents. This opened up an entire new field of thought and lent moral courage to those who made the test which finally proved that yellow fever was transmissible by certain types of mosquitoes. In like manner the connection between the spread of malaria and mosquitoes was discovered, and between sleeping sickness and the tsetse fly.

Dr. Smith's achievements are by no means completely covered by reference to his studies of Texas fever in cattle and all that this implies. He was among the earliest students of the phenomena that are now designated by the comprehensive term anaphylaxis—mysterious manifestations that are concerned in the genesis and the control of many maladies of mankind. But this is not a review. American medicine—indeed, the scientific world and the layman as well—rejoice in recalling the part that Theobald Smith has played in the advancement of learning and the promotion of human and animal welfare.—*The Journal of the American Medical Association.*

SCIENTIFIC BOOKS

Incomes and Living Costs of a University Faculty. Edited by YANDELL HENDERSON and MAURICE R. DAVIE. Yale University Press. 1929.

THIS admirable report on the academic standard of living, based on adequate returns of a representative community, takes the question out of the sphere of "academic" discussion into that of statistical evidence. It does not stand alone. There is the similar study by J. B. Peixotto for the University of California, and the General Education Board has collected data of a wider range though less complete. The conclusions of all are closely in accord so far as the bearing of condition upon desirable provisions go. The day is past when one can speak casually or earnestly of the underpaid professor and let it go at that. The problem of the colleges and universities in the United States is a very complex one; serious influences of many-sided origin are in operation making unmistakably for decline. The blind optimism and complacent acceptance of mediocre standards and still more the bid for popularity under the pressure of unenlightened influence in their combination is itself one of them. Consequently the redemption of the universities by providing adequate incomes on a just scale of compensation is but a partial solution of a grave situation. Yet it is in itself so vital, so definitely critical to one phase of the academic maladjustment that its importance is convincing.

Selecting the practical issues rather than the statistical basis for them as a basis of comment, we are understating the case in saying that the average member of the Yale faculty—doubtless more fortunately situated than the average member of high-grade faculties in general—has about half the income necessary to maintain himself and his family in comfort and security and enable him with reasonable freedom from care to devote his energies whole-heartedly to his profession. The very paradox of the situation appears in the statement that only by "excessive curtailment of the budgetary needs" can the college professor "buy for his children such education as he and his colleagues produce." The ultimate and actually operative effect of this situation is that high-grade men are dissuaded from entering what should be a high-grade profession; the quality of the personnel of even the best-manned faculties (certainly of all but the very best) is declining. The promising candidate for the academic life may now read in these objective statistics about what he may expect if he decides to trust his fate to university conditions. Unless his youthful enthusiasm places himself in the rôle of the very few who escape the common lot of the barely successful professor, or he finds himself with some private means to offset the struggle, he may well decline the venture, however enthusiastic his devotion to learning. He is likely to be guided in his decisions by comparison with the economic position of other high grade professional callings; the statement that "the American university teacher in many cases lives essentially as do men of the skilled mechanic class" is discouraging even to one who has a high regard for mechanical skill and no more snobbery than is democratically acceptable. There are professional standards of self-respect that are socially reflected; there are limits to the correlation of high thinking and plain living.

Viewed more closely, the first effect of this condition, which may be described as poverty mitigated by a salary (this for the less well-adjusted institutions) is the pressure upon members of university faculties to earn additional income. Though in some cases that supplementary earning is helpful to the professor and brings some prestige to his institution, by far the greater amount of it is pot-boiling, and the statistics show that most of the men thus earning something to eke out their income earn mighty little—the pot doesn't even boil, is just kept lukewarm. It is only the more fortunate (usually by reason of the nature of their specialties or a popular demand) who earn enough to leave a balance in the bank. The professor is nominally a full-time professor, but he is not a full-energy professor if his chief consideration outside his teaching is not self-advancement but any sort of remunerative work. Quite in the same import is the dismal statement of how few of the academic families can afford a servant or even such occasional service as would ease the strain on energies. The public would have a fairer view of the professor if they thought of him more commonly not in his lecture room or laboratory but in his household; they would find the most considerate of the group doing anything but academic work to save the excessive drudgery that otherwise would fall upon their college-bred wives.

Touch the situation where you will—and the data are here for all essential details—where the professor lives, how he lives, what he spends his money for, how he is forced to spend his time, what he finds when he compares himself with other high-grade callings—and the same story of inadequacy appears, the same crippling of energies, the same sense of insecurity. "The difference of a few thousand dollars in salary [for simpler academic communities than Yale one thousand would often be adequate] makes the difference between an anxiety that lowers efficiency and tends to dissipate energy in outside activity, and that feeling of safety and enfranchisement in the pursuit of a life interest that increases efficiency by concentrating energy and effort." The economic redemption of the professor is the indispensable step to increasing the attractiveness of the profession and thereby the quality of the personnel upon which all other academic values depend.

The responsible authors of the report have done well to include in it a discussion of the academically vital matter of how salaries, now in their inadequacy and later when endowments flow in an approximate redemption, shall be determined. For here is a serious maladjustment for which not the public or private support but the academic policy is to blame. Three systems are recognized: (1) a fixed uniform salary rate; (2) individual bargain not controlled or imperfectly so by a fixed schedule, and (3) a scale increasing with rank and service. As a fact, actual systems are composites, often temporizing ones. The report wisely concludes that "the weight of the argument bears heavily against the plan of the individual bargain and in favor of the fixed salary scale, based upon rank and length of tenure within the rank," all, however, on the assumption that the salary scale is itself adequate. The conclusion might well have been more strongly put. Individual bargaining has done more havoc to academic ideals than is easily recorded; the resort to it shows a low academic morale, however strong the temptation. Assenting to the conclusion one may add the further practical policy of equalizing salaries all the way along to make as few distinctions in rank and salary as possible. Competition among professors for salary, indeed any attempt to measure individual merit or service by salary, should be definitely discouraged. Salaries should be adequate and then forgotten. Salaries are adjusted to supply needs, as this report ably sets forth; they can not also be used as rewards of merit. One can not serve two masters, and part of the compensation of the academic life is a reasonable freedom from competition.

Authorities are impressed by printed documents and the evidence of careful research, and in this instance properly so. This investigation was undertaken by the Yale Chapter of the American Association of University Professors, and to them the academic public is indebted for a service which is likely to bring some measure of relief. The obstacles are serious, doubtless more so in state universities where different influences prevail and in the smaller colleges where standards of living are deplorably low, as deplorably intellectually as economically. The aspirant for an academic career is far more likely to land in some isolated college town than in New Haven; it would be well to complete the picture by a similar survey of the average college community. The conclusions would be still more discouraging.[1]

JOSEPH JASTROW

[1] A matter of special moment to the professor is the provision for the future. This is touched upon only by way of the item of life insurance. It is plain that the professor is inadequately insured. The provision for retiring allowances is an integral part of the question of compensation. The failure of the Carnegie Foundation is nothing short of an academic disaster, and the manner of its bringing about, the speciousness of its defense, an aggravation. It now becomes a part of the policy of every enlightened university budget to include a workable system of retiring provisions. The fact that the Carnegie Foundation is willing to pay the overhead expenses of an insurance system should be gratefully acknowledged and universities may be able to utilize that provision as part of a more adequate system. To regard the so-called substitute plan of the Carnegie Foundation as a solution of the retiring allowance problem would be misleading.