

## DISCUSSION OF PAPERS ON THE ECONOMIC STATUS OF SCIENTIFIC WORKERS

By HAROLD F. CLARK

TEACHERS COLLEGE, COLUMBIA UNIVERSITY

ANY comments which I make are supposed to be in the nature of discussion of the previous papers. The papers which have been read have pointed out in great detail the facts regarding the salaries of university teachers. By implication these papers have said that the salaries were too low. With your permission I should like to confine my discussion to the one point of whether there is a feasible way to raise university salaries.

Some one may respond immediately, "Yes, there is a method, give the universities more money." That, of course, will help temporarily but it can not be a final and satisfactory solution of the difficulty. Under present conditions more money to the universities would lead to more people partially trained for teaching and research who would be seeking positions and it would lead to a continuation of the present pressure bringing about low salaries. We can find no reason for thinking that doing more of the same thing we are doing will lead to a more satisfactory salary situation. It is not more of the same thing that needs to be done; it is a different thing that needs to be done if salaries are to be increased.

Some one else may suggest that we need more agitation, more discussion of higher salaries. We can see no reason to think that agitation will be much more effective in raising salaries than it is in raising the price of wheat. Each farmer in the country might spend an hour a day urging people to pay \$2.50 per bushel for wheat, but the talking would have almost no effect in raising the price of wheat. As long as world conditions of supply and demand remain about as they are, people can buy wheat for less than \$2.50 per bushel and no amount of talking will persuade them to pay more. As long as present conditions of supply and demand of trained or partially trained university people remain about as they are university authorities can obtain about the present level of ability at about the present salaries and discussion will not lead them to pay a great deal more.

Rather careful study has failed to disclose a case of a normal competitive group where discussion has raised wages. When, due to ignorance, a group has been working for less than its competitive worth discussion has raised wages. Also in some cases of underprivileged and exploited workers discussion has led to certain minimum wages on other than direct economic grounds and thereby has raised wages. It seems doubtful if discussion is able to raise the salaries of professional groups or of skilled trades or even unskilled work unless the previous conditions apply.

We know from a large amount of recent work that an increase of supply leads to a lower price in a long list of manufactured commodities and agricultural products. The Department of Agriculture has shown that an increase of 10 per cent. in the peach crop led to a 7 or 8 per cent. reduction in the price per bushel. A 10 per cent. increase in the number of hogs led to about a 7 per cent. decrease in the price per pound. A 10 per cent. increase in the number of farm hands led to a 7 per cent. decrease in the wages per day. We have the case of a large cotton crop in one year being less valuable than a much smaller crop the year before. We would not insist that the same thing holds true in the same rigid way for university salaries; however, a study involving several hundred thousand public-school teachers lends color to the belief that the same basic facts may control in all such cases. A careful study should be made of the relation of supply of trained or partially trained people to university salaries. At present the evidence of the close relation is so strong that one should hesitate to state that as a long-term policy salaries can be controlled by any other method than by a consideration of supply and demand of trained or partially trained people.

L. D. Edie, professor of finance, University of Chicago, says, "Educated labor does not receive relatively high wages because it is educated but because there is a scarcity of educated workmen."

It is possible that it is necessary to plan supply and demand if university salaries are to be raised to a level to attract the best ability in the country. Some people may say that the number of scientific workers must not be limited. But for the future of science it is much more important that the supply be limited to those who can be placed at adequate salaries than it is to train or partially train large numbers and have many of them working for unsatisfactory salaries. The first policy, planning the number and obtaining adequate salaries, will lead to many of the ablest people going into science; the second policy, training or partially training an excessive number, will lead to inadequate salaries and ultimately will react to keep the ablest people from going into science.

If science wants the highest type of minds it must be willing to plan in order to get them. No time, money or ability could be better spent in America to-day than in working out such plans regarding numbers that adequate salaries would be paid, and they would ultimately lead to a substantial proportion of the ablest young people entering science.