

able as a captain of finance." The ablest professors in the country would be overjoyed to have a salary equal to that of the higher and more competent business employees, the factory managers, expert salesmen, etc. But by "employees" Mr. Welsh seems to mean "clerks," for in his final sentence he ranks the merit of the average professor below that of the average clerk. That would put the young instructors and the secondary school teachers level with the office boy, and as for the primary teachers would not a German mark be overpayment?

But grant everything Mr. Welsh says. Suppose that the great majority of our faculties are made up of "unselected" weaklings or incompetents who "get all they are worth to the community." The real point remains. Is Mr. Welsh content that such men, cheap men bought for an unskilled laborer's wages, should instruct *his* children? Or is he willing to raise the price and get better men? Or does he consider science and scholarship so unimportant that they can be confidently entrusted to an inferior type of human being?

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A WARNING TO MICROSCOPE USERS

FROM personal experience the writer wishes to warn both the microscope user and manufacturer of the danger of the projecting corrugated rim of the ordinary microscopical eyepiece as an agent for producing an epithelioma in the region of the orbit. This applies especially to the binocular microscope, where it is almost impossible to look through the microscope without scraping a piece of nasal epithelium with the eyepiece. Can any other procedure, if repeated day after day for year after year, be any more favorable for the production of an epithelioma on the side of the nose?

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SCIENTIFIC BOOKS

Mankind at the Crossroads. By E. M. EAST. 8vo., viii + 360 pp. New York, Scribners, 1923.

WE have here a book on "Population" by a biologist. It is devoted to the discussion, in a general way, of the quantity and quality aspects of the population problem.

The argument of the book is to the effect that: (1) Certain processes in present-day civilization are dysgenic due to the fact that it is made easy for inferior types to breed more rapidly than superior types; (2) the present rate of increase of the white race will bring it up against food barriers in about fifty years; (3) many parts of the world—particularly those inhabited by the brown and yellow races—

are already so filled that but little further increase can take place; (4) the sensible thing for us to do in the light of these facts is to undertake a thorough-going control of population growth, both for the purpose of preventing deterioration in the quality of the stock, and in order to keep numbers down to the point where man may have time and energy for something besides extracting a meager living from the soil.

After a short introductory chapter calling attention to the urgency of population problems, Professor East opens his argument proper by exposition of the biological principles which must be kept in mind in any discussion of population. It is interesting to note that he—a genetic specialist—is far less dogmatic on the question of the inheritance of acquired character than most biologists. "Everything is relative," says the author, and with that belief one can not very well be dogmatic on such a matter. "For all practical purposes," however, the possibility of the inheritance of acquired characters can be disregarded.

His statement of the way in which racial traits have probably developed and the likely results of race crossings is of fundamental importance to the social scientist; while the explanation of the significance of the mechanism of heredity is of great interest and importance to everyone. These facts of heredity urge more potently than any emotional appeal, care in selection of mates. And yet one is not made to feel that breeding superior stock is the sole aim of life, as many eugenicists seem to think. After showing that we now have sufficient biological knowledge to enable us to maintain our stock at its present level of ability or, even to improve it, the author wonders whether we have the ability to apply this knowledge.

The rest of the book may be looked upon as an effort (very successful in the reviewer's judgment) to prove that we must undertake in a definite manner to control population growth in the light of clearly established biological principles, and in the light of our knowledge regarding the food supply, if we are not come to grief in the near future. A brief review of population opinions held in the past is followed by a statement of the growth of population in the world to-day, and what this means in terms of increased production of food. The author comes to the conclusion that three times the present population of the world will use up all tillable land, and that when there is this population, the standard of living will be about the equivalent of that of the peasants of western Europe. At our present rate of increase, it will take about a century for population to triple. But, Professor East shows that within about fifty years that part of the world open to Europeans will be so filled up, at present rates of increase, that pressure will become keen and the positive checks—famine, disease, war—will become operative. The chapters on