

and industrial occupations the white man goes out." The capitalists as a rule favor the policy which gives them the cheapest labor, regardless of the future of their own stock, just as they do in this country and everywhere else. Hence, they frequently incur the not unjust reproach of constituting the most effective enemies of their own race. According to Stevens, colored and Negro artisans by 1911 were in the majority in such occupations as blacksmiths, iron founders, brick workers, stone masons, carpenters, shoemakers, tailors and harnessmakers. Naturally, the white population is feeling acutely the pressure arising from the incorporation of the blacks into their own economic group. In proportion as the Negro succeeds in industry, in that proportion does he become a menace to white labor and the supremacy of the white race.

The tendency of industrial development to cause dominant peoples to be swamped out by the descendants of more primitive stocks who are utilized as laborers is one which every wisely governed people should consider with great care. Australia and New Zealand have saved themselves, at least temporarily, from being replaced by hordes of Asiatics before it became too late. Just as bad money drives out good money, so a low standard population tends to drive out a high standard population. How many dominant stocks have invited their own destruction by the importation of aliens to do the hard work I shall not presume to state. Dominant peoples naturally desire to avail themselves of the labor of less advanced races. Where the whites are able to administer dependencies inhabited by the colored races and to profit by the trade which results from such control, they may be enabled thereby to increase their own population and welfare, at least for a considerable time. This policy of exploitation has contributed not only to the increase of the white race, but it has aided also the increase of its rivals. It has led to the formation of many kinds of groups based on relationships of mutual dependence. The material needs for the support and increase of one people may be sup-

plied by natives in a remote quarter of the globe, so that we may have economic groups functioning more or less as units composed of natives in England, South Africa and Japan. It is largely the advantages which Japan has derived from Western culture since her former isolation that accounts for her phenomenal growth of population, which now adds about 800,000 annually to her already overcrowded area.

It is often said that the world is becoming an economic unit. Rather, it is a collection of units exhibiting various degrees of unity. Relative rates of population growth, migration, hence, the kind of racial replacement that goes on, and, hence the direction followed in biological evolution of various subdivisions of the human species, are to a large extent determined by the group relationships which develop as a result of the scramble for wealth. The student of the present evolution of our own species must concern himself not merely with the struggle between individuals or even neighboring groups, but with far reaching influences which tie together in bonds of common interest peoples of remote quarters of the globe and of most diverse racial extraction. And along with these new relationships of interdependence are developing new kinds of rivalry whose outcome can be only dimly foreseen.

In the present period of the world's history the white race, after having spread over and exploited very considerable portions of the earth's surface, and after having wrought unspeakable havoc as a result of its domination, has now come to minister to the welfare of its colored cohabitants, because it is finding them a valuable financial asset. At the same time, the whites must be credited with doing more for the less advanced races from motives of pure philanthropy. It may be financially profitable for a time to encourage population growth in alien lands. That many new kinds of competition will develop as the result of this policy seems inevitable. We have done much toward helping the meek to inherit the earth, but when they have come into a larger share of their patrimony they may not always be so meek.

SCIENTIFIC EVENTS

CONVICTIONS IN THE CALMETTE SERUM TRIAL

ACCORDING to a special cable to the *New York Times*, judgment in the Calmette serum trial, which opened on October 12, was rendered on February 6. Of the four defendants Professor Max Klotz and Anna Schuetze, a nurse, were acquitted. Professor Georg Deycke was sentenced to two years in prison and Dr. Ernst Altstaedt to fifteen months for homicide and inflicting bodily injury through culpable

negligence. Dr. Deycke and Dr. Altstaedt were acquitted on a count charging the same offense in the introduction of the Calmette treatment in Luebeck.

In an oral opinion Presiding Judge Wibel said that the deaths of 68 of the 76 children who died of tuberculosis in the spring of 1930 and the illness of a majority of 131 survivors who then contracted the same illness were attributable to their inoculation with virulent tuberculosis bacilli inadvertently introduced into the Calmette vaccine. While the court admitted

the theoretical possibility that vaccines might revert to virulence, it held this was not practically admissible in this case. In the Luebeck Hospital laboratory Calmette cultures were prepared side by side with human tuberculosis bacilli, he said, and these two must have been accidentally confounded.

Such a mistake, the court held, was indicated by expert opinions, especially those regarding conditions in the hospital laboratory. The laboratory, while good enough for ordinary purposes, was unfit for the preparation of vaccine, and the court was convinced that the catastrophe had been caused by defects in the institution. The responsibility, therefore, rested primarily on Dr. Deycke, who as an expert bacteriologist knew the danger of a possible mistake or contamination. The precautionary instructions he had given were inadequate for certainly preventing them, the court held, the more so since, being overworked, he could not always supervise the laboratory personally.

The court held further that it had been established with a probability bordering on certainty that the catastrophe would have been averted had the vaccine been tested on animals before it was administered and that the tuberculosis outbreak would not have reached such dimensions had control through inoculation of animals been established. The responsibility for the omission was therefore held to rest also on Dr. Altstaedt, whose duty it was as chief health officer to make sure of the safety of the laboratory procedure.

Professor Albert Calmette, of Paris, the originator of the Calmette anti-tuberculosis serum, did not appear at the trial, but pleaded for the German physicians, saying that the hospital equipment was inadequate and that his colleagues should not be blamed. The serum was provided from the Pasteur Institute in Paris in July, 1929.

THE INTERNATIONAL SCIENTIFIC EXPEDITION

THE Department of the Navy has issued a statement to the effect that the *U. S. S. S-48* and the *U. S. S. Chewink*, naval ships on board which scientists of the International Scientific Expedition will cruise for two months while measuring ocean depths and the pull of gravity in the vicinity of the West Indies and the Bahamas, sailed on Sunday, February 7, from Guantanamo Bay on the first loop of their cruise.

The part of this first loop to be covered by the two ships lies southward of the Island of Jamaica and around the west end of Cuba, including 18 gravity stations, cruising about 1,125 miles and ending at Key West on February 11. There, computation of recorded data and a check-up with shore

gravity stations were undertaken, after which the two ships left on the second portion of this loop, extending up the Florida Straits and the Old Bahama Channel.

Investigators embarked in the *S-48* and the *Chewink* are Dr. F. Vening Meinesz, member of the Geodetic Commission of the Netherlands; Mr. Harry Hess, proctor fellow in geology at Princeton University, and Mr. Townsend Brown, of the United States Naval Research Laboratory. Lieutenant Commander Allen H. Gosnell, U. S. Naval Reserve, is accompanying this unit of the International Scientific Expedition in the capacity of historian.

Professor Richard M. Field, director of the expedition, has sailed from Miami for study of the structural geology of the outer Bahamas, this study to be supplemental to the gravimetric survey being made beneath the sea by Dr. Meinesz.

In commenting in his dispatch on preparations made since the Meinesz unit of the expedition sailed on January 27 from Norfolk on board the *U. S. S. Tarbell*, destroyer, Lieutenant Commander Gosnell reports as follows:

Set up gravity apparatus on deck of *Tarbell* in lee of Crooked Island January 29. Dr. Meinesz, Hess and Brown in Santiago during earthquake of February 3. Escaped safely from hotel and spent remainder of night on bench in Plaza. *S-48* and *Chewink* arrived at Guantanamo February 4. Commenced work on iron framework for apparatus.

On February 5, ships successively at sea testing all depth-finding installations. February 6, charging batteries and completing preparations for test of all gravity apparatus. This test in progress February 7 alongside dock. Prior to arrival of ships, party was engaged in working up results of tests made at Naval Research Laboratory.

SCIENTIFIC PROBLEMS OF THE ARCTIC

THE United States has been slow about joining the other nations in plans for studying scientific problems in the colder regions of the earth during August, 1932, to August, 1933, but Science Service reports that it will probably take part and establish a station at Fairbanks, Alaska. All that is needed is the money—\$30,000—and the Senate Foreign Relations Committee has reported out the bill authorizing this expenditure. It is expected to pass, despite the depression, and the economy program of the administration. Recommendations in its favor were made to the committee both by President Hoover and Secretary of State Stimson.

Twenty-six nations have arranged to take part in this "Second Polar Year Program." The United States will make the number twenty-seven. Subjects to be studied are the magnetism of the earth; the