

ANTHROPOLOGY

Mixing of Races Brought Greatness to Nations

Dr. Boas, A.A.A.S. President and Eminent Anthropologist, Defends Theory of Melting-Pot Before Pasadena Meeting

RACIAL MIXTURES are not the unmitigated evil imagined by many propagandists and politicians. They may, on the contrary, be the source of great national vigor and progress, with degeneration setting in only when a given group has closed its gates, stabilized itself, and "settled down."

This is, in essence, a major thesis defended before the opening session of the American Association for the Advancement of Science at Pasadena, by its president, Prof. Franz Boas of Columbia University, one of the foremost anthropologists in the world.

Taking a whole-world and an all-time view, Prof. Boas pointed out striking instances of the beneficent working of the "melting-pot" process.

Race Mixtures of History

"Let us recall to our minds the migrations that occurred in early times in Europe," he said, "when the Kelts of Western Europe swept over Italy and eastward to Asia Minor, when the Germanic tribes migrated from the Black Sea westward into Italy, Spain and even into North Africa; when the Slavs expanded northwestward over Russia, and southward into the Balkan Peninsula; when the Moors held a large part of Spain, when Roman and Greek slaves disappeared in the general population, and when Roman colonization affected a large part of the Mediterranean area. It is interesting to note that Spain's greatness followed the period of greatest race mixture, that its decline set in when the population became stable and immigrations stopped. This might give us pause when we speak about the dangers of the intermingling of European types. What is happening in America now is the repetition on a larger scale and in a shorter time of what happened in Europe during the centuries when the people of north Europe were not yet firmly attached to the soil."

The present leaders in European life and culture, Prof. Boas pointed out, are already products of the melting pot.

"The high nobility of all parts of

Europe can be shown to be of very mixed origin," he reminded his audience. "French, German, and Italian urban populations are derived from all the distinct European types. It would be difficult to show that any degeneracy that may exist among them is due to an evil effect of intermating.

Results of Inbreeding

"Biological degeneracy is found rather in small districts of intense inbreeding. Here again it is not so much a question of type, but rather that of the presence of pathological conditions in the family strains, for we know of many perfectly healthy and vigorous intensely inbred communities. We find these among the Eskimo and also among many primitive tribes among whom cousin marriages are prescribed by custom.

"These remarks do not touch upon the problem of the effect of intermarriages upon bodily form, health and vigor of crosses between races that are biologically more distinct than the types of Europe. It is not quite easy to give absolutely conclusive evidence in regard

to this question. Judging merely on the basis of anatomical features and health conditions of mixed populations there does not seem to be any reason to assume unfavorable results, either in the first or in later generations of offspring."

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PSYCHIATRY

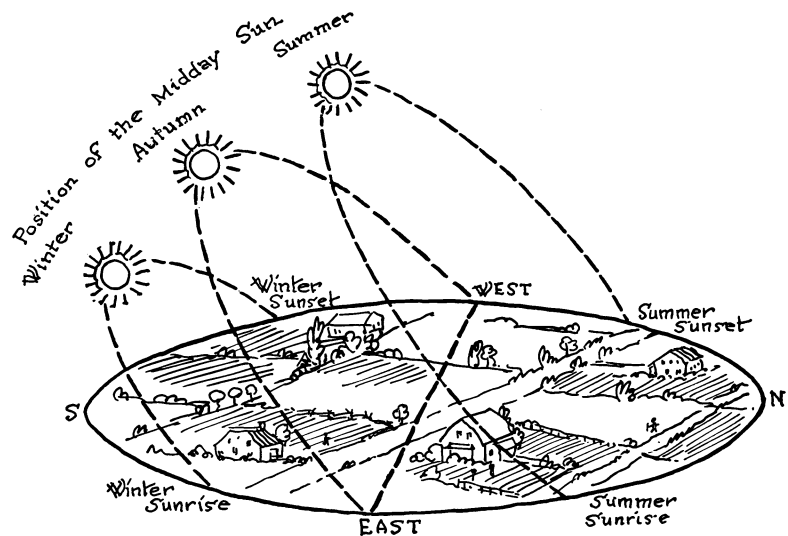
Difficulty in Birth May Cause Dullness

MANY DULL school children may trace the origin of their difficulty to the painful hour of their birth. For a definite relation exists between difficulty in labor and dull or low normal intelligence, it is indicated by a study of more than 20,000 persons made by Dr. Neil A. Dayton, director of research of the Massachusetts State Department of Mental Diseases, Boston. However, he found no significant relation between birth difficulties and the lower grades of mental deficiency.

"The negative finding of a lack of association between abnormal labor and the great bulk of cases of mental deficiency is of little moment in comparison with the positive finding of an association between abnormal labor and the dull normal or low normal groupings," Dr. Dayton commented.

"The far-reaching significance of the latter finding lies in the fact that the bulk of our population lies in these higher levels of intelligence."

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THE SUN'S PATHS ACROSS THE SKY

This diagram shows how the sun rises higher in the sky, and is above the horizon longer, at the summer solstice than at other times of year. It reaches this position this year on June 22 at 4:28 a. m., Eastern Standard Time



ASTRONOMY

June 22 Gets Most Sun, But Hottest Weather Comes Later

An Amateur Astronomer Makes Interesting Observations On the Effect of Summer and Winter Solstices

SHINING above the horizon for fifteen hours and one minute, in middle latitudes of the United States, on Monday, June 22, the sun will be visible longer than on any other day of the year. Besides thus being the longest day, June 22 will mark the beginning of summer.

The day is longest because the sun is then at the northernmost part of its annual path through the sky—what is called the summer solstice. Astronomers have universally agreed that this shall mark the beginning of summer. It occurs on the 22d, at 4:28 a. m., Eastern Standard Time.

If the matter of clear or cloudy weather did not complicate the situation, the surface of the earth would on this day, receive more heat from the sun than on any other day of the year. Not only is this due to the fact that the sun is above the horizon longer, but the greater height of the sun in the sky causes a concentration of its light and heat over a smaller area. In winter, when the sun is low, even at noon, a yard square beam of sunlight may cover a couple of square yards. Now, at noon, the sun is well overhead, and the same yard square beam covers only a little more than a square yard.

An interesting observation of this phenomena has been made by Harry Paul Eichin, of Chicago. At noon on the day of the summer solstice in June, 1930, Mr. Eichin took a picture of a pipe casting a shadow on a nearby tank. Since the sun was at its maximum height in the heavens the shadow extended almost to the ground.

Six Months Later

Exactly six months later at the winter solstice he returned to the same spot and took another picture. Then, the sun at its lowest point in the heavens cast a shadow entirely unlike the one it threw on the tank six months previously. This shadow was not nearly so elliptical as the other and did not run to the ground. The two accompanying

pictures contrast the summer and winter shadows.

Along the tropic of Cancer, which crosses Mexico, the sun at noon is now directly overhead. This causes the curious phenomenon of vertical objects casting no shadow, or of the sun shining directly down a vertical well. The ancient Mexicans made use of this effect in their religious ritual. At such a time, they said, the sun-god comes to earth.

Heat Stored Up

While the earth receives more radiation at this time than in other parts of the year, it is not the hottest time, as we will realize only too well in August. The reason for this is that the days are so much longer than the nights. During darkness the earth radiates away the heat that it has received during the day, but at present the nights are so short that the sun rises again before all the heat received the preceding day has been lost. Thus, each day becomes a little hotter. Not until the end of the summer does the amount of heat radiated at night begin to surpass the

amount received during the day, thus making possible the advent of colder weather.

Because the movement of the sun in the southern hemisphere is just the reverse of what we observe, our summer solstice marks the beginning of winter in New Zealand, Australia and South Africa. Just now they are having the longest nights, and shortest days of the year. But by next Christmas they will be well into the summer.

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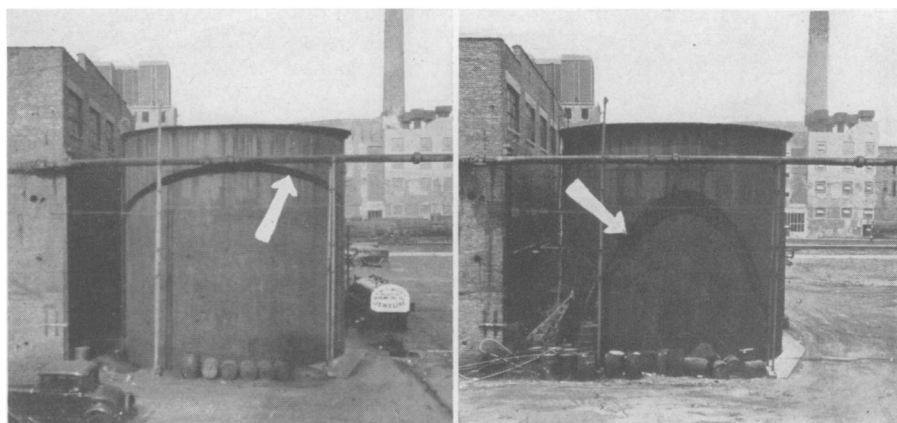
MEDICINE

New Epilepsy Test May Avert Train Wrecks

TRAIN WRECKS, often caused by unsuspected epileptic attacks on engineers, may be averted in the future as the result of a new test for epilepsy discovered by Dr. E. M. Josephson of this city and Dr. M. M. Teplitz of Brooklyn.

Dr. Josephson found he could produce the serious type of epileptic convulsions known as *grand mal* by pressure upon the principal artery of the neck of epileptic patients. In applicants for railroad positions unsuspected epilepsy may be detected by applying this method. If the applicant is suffering from epilepsy in mild form, which even he himself does not know about, pressure upon this artery will show the presence of the disease by producing the characteristic and unmistakable convulsions.

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SUMMER AND WINTER SHADOWS

Photographs taken from the same spot and at the same time of day six months apart. Such picture possibilities are innumerable; they occur wherever the sun casts a shadow. The photograph to the left was taken in Chicago at noon on the day of the winter solstice while that to the right was taken at noon on the day of the summer solstice. The difference in the height of the sun in the heavens at the two seasons caused the shadows to be unlike. Examination by astronomers of photographs containing shadows to determine the time a picture was taken or to check the statement of a witness has figured in important trials.