

Prof. Boutry observes. The experiments of a mathematician are dangerous only to his paper supply. Those of a physicist or chemist may raise the roof of his laboratory and reduce him to small particles. Those of a biologist or pathologist may be fatal to thousands of people. Wars have shown that mistakes in the

science of ruling nations have led to the death of millions and the misery of generations. They may be dangerous to the spiritual qualities of mankind, about which we know next to nothing.

All of which are good reasons why careful and competent studies of social relations of science should be pursued.

Science News Letter, January 7, 1939

MENTAL HYGIENE

Must Work Fast To Beat Forces Returning Us To Middle Ages

Scientists Warned at Mental Health Symposium That Psychiatrists Should Unite With Social Scientists

SCIENTISTS studying the conduct and mind of man must push their work forward fast if they are to outdistance the "forces that now threaten to herd us back into the middle ages."

With this warning, Dr. Harry Stack Sullivan, President of the William Alanson White Psychiatric Foundation, Washington, D. C., summarized the reports at a special session of the Symposium on Mental Health held in connection with the meeting of the American As-

sociation for the Advancement of Science in Richmond.

"We have come a long way indeed," said Dr. Sullivan, "from the days, now reappearing in Europe, when everyone had to subscribe to an official account of what is right to believe and proper to do."

"The spirit of free inquiry is especially profitable in terms of human happiness when it brings about the union of the psychiatric and the social sciences."

"Man is far more a product of culture, of the forces that make up civilization, than is he a creature of the natural science."

"We need to know all that we can learn about his heredity, physical make-up, nutrition, and physiology. But even more important in these days of alarm and excursion, of international misdemeanor and crime, we must hurry to an understanding of man living as a person among others."

Neither psychiatry alone, nor the social sciences alone can hope to solve current urgent problems, Dr. Sullivan said.

"By a pooling of techniques, however, and a redefinition of fields, a great deal can be accomplished quickly," he said.

Bodyguards To Be Obsolete

PROPHECY that political leaders armed with bodyguard and machine gun will some day be as obsolete as is now a physician loaded with ropes and manacles for restraint of disordered minds, was voiced by Dr. Harold D. Lasswell, of the University of Chicago and the White Psychiatric Foundation.

Manacles and ropes were discarded by the psychiatric pioneer, Dr. William Alanson White, when he saw that force was a substitute for thought.

This has now become a truism in the hospital. The attitude may become more general among leaders in business and party life, Dr. Lasswell said.

"Methods can be perfected of exploring the distribution of discontent among large numbers of persons, and of controlling such reactions," he declared. "Too often it is true that responsible leaders are stampeded by their personal anxieties, into costly and dangerous means of coping with collective insecurities."

Propagandists are useful to both leaders and followers, Dr. Lasswell said.

"When the Great Depression struck, millions of people were cast into the discard heap of the unemployed. These millions had been educated to have faith that the world would reward them if they worked. Propagandists diverted their aggressions away from themselves and supplied a new sense of self-esteem by absolving them from blame, and encouraging them to take a hand in the preparation of a better world."

"Isolated crimes against persons and property were reduced by enabling the masses to discharge their insecurities in parades, meetings, and discussions."

The propagandists, catering to the



THIAMIN

The chemical model of vitamin B₁ is here being shown by F. J. Ruland (left) and W. O. McCarthy to Miss Alys d'Avesne at the Merck and Company exhibit at the meeting of the American Association for the Advancement of Science. Above may be seen part of a photomicrograph of the crystals themselves.

masses, also contributed to the mental health of the leaders.

"Men who held responsible positions suffered severely in self-deference when their leadership seemed to have brought society to the very slough of economic disorganization. Like generals in a defeated army, some took to suicide. But many found at least temporary surcease from anxiety by projecting blame upon the 'agitators.'"

Physicians have found, Dr. Lasswell pointed out, that in treating a patient consideration must be given also to his family, his friends, and the community as a whole where conditions may be found that contributed to the individual's disease.

Political scientists can aid psychiatrists by giving them an understanding of powerful forces for mental health or illness as they occur in the state.

Germany May Lose

THE MASS migration of Jews from Germany may be expected to result in severe loss to that country and in a net gain to the nations to which they migrate.

This conclusion may be drawn from a report by Dr. J. D. Reichard, senior surgeon of the U. S. Public Health Service, who has studied and examined immigrants to this country.

People usually migrate because they have not enough to eat and they hope to find a region with a better, or more easily obtainable, food supply, Dr. Reichard said. Such migrations have a complicated result in the country to which the people move. It is the less successful who are "squeezed out" of the old group, but the more aggressive of the submerged groups succeed in migrating and establish themselves in the new region.

But religious and political pressure tend to give good elements to the new community, Dr. Reichard declared. He cited the settlement of the Pennsylvania German regions in the 18th century as an important migration motivated by religious difference. The large German migration into the United States following the failure of the liberal movements of 1848 was politically motivated.

"Political and religious migrations have usually caused loss to the old country of energetic, intelligent, enterprising stock," Dr. Reichard said. "For example, the forced migration of the Jews and Moors from Spain had a profoundly harmful effect on the scientific, economic and social life of that country."

Man is one of the most inveterate of

migrants in all the animal and plant world, Dr. Reichard indicated. The universal tendency has been one of interbreeding.

"'Racial purity,' therefore, is a concept that has no place in scientific thought," he said. "It is an artificial concept, fostered by political leaders in an attempt to increase cohesion within the group and to increase national consciousness. 'Historical studies show that there has always been interbreeding of peoples with constantly changing racial characteristics. The thesis that there is a fundamental, biological difference between various political groups, and its corollary, that certain of these political groups are biologically superior to others, must be regarded as delusions," he declared.

The basis for anti-Semitism is probably largely economic, Dr. Reichard said.

"With an interest in finance and trade acquired by contact with and absorption of Phoenician groups, the Jew early acquired a skill in business which enabled him easily to dominate this field.

"This domination created a threat against the economic security of his Gentile neighbors and gave rise to hostile attitudes and activities.

"The influence of these attitudes and activities on the mental hygiene of both Jew and Gentile has had a profoundly harmful and demoralizing influence."

Another potent source of unhealthy mental attitudes is the threat to the security of the established groups in the new country of immigration of large masses of aliens, Dr. Reichard indicated.

"The fear of a lowering of economic status leads promptly to aggressive sadistic, paranoid attitudes," he warned and cited as examples from United States history the Ku Klux Klan, the Know Nothing Party and the American Protective Association, and the anti-Japanese movement.

"There is, of course, a reciprocal response in the alien group which leads to the establishment of a tradition of persecution and a tendency to magnify injustices and handicaps.

"This tradition has been strongly developed in many Jewish groups as a result of centuries of persecution and discrimination. There has resulted a feeling of group insecurity, which is not being allayed by present developments in Europe."

In general, immigration raises problems in the new country for both old and new residents, but these complications may be stimulating and healthful, Dr. Reichard concluded.

"In so far as we are able, we should prevent a volume of a widely different cultural group so great as to lead to a debacle," he advised. "We should, however, regard immigration as one of the great vivifying influences in the development of civilizations, and one which, whatever its immediate effects may be, finally helps to develop better cultural conditions and better mental hygiene."

Must Not Forget Man

THE tendency of scientists to become engrossed in the facts of their own particular field to the exclusion of the broader meaning of their findings was deplored by Dr. Edward Sapir, Sterling professor of anthropology and linguistics at Yale University.

The college professor earning \$1500 a year, the farmer getting only \$500, and the bank vice-president making \$500,000 are more than just parts of a table of statistics of income, as they may seem to the economist. They are men with diverse problems arising from these particular incomes.

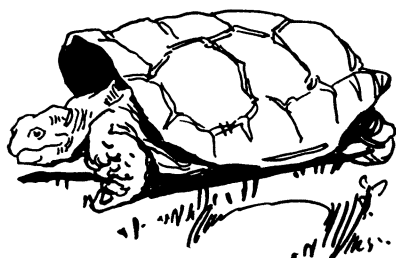
Professors who earn only \$1500 a year must go in for plain living and high thinking, Dr. Sapir said. Unless they have good health and are happily married and intelligent, it will be hard for them to stave off that corroding envy of the banker which "is not very good for either the digestive tract or the personality organization."

The farmer on \$500 is too busy to know whether his health is good or bad or whether he is happily married or not, he went on. "It is only when the sober, inevitable, corroding impoverishment of the farmer's personality is lit up by some spectacular morbidity of sex or religion that the psychiatrist or novelist or poet is attracted to him."

The banker probably has his troubles, too.

Perhaps he too inclines to suffer from an economic ill—that obscure, perverse, guilty feeling which, the psychiatrist tells us, so often festers in one's heart of hearts when one tries to balance one's usefulness to society with the size of one's income."

Economic laws must not be allowed to seem more "real" than certain people who try to make a living. Otherwise, he warned, if we do not "value the nuclei of consciousness from which all science, all art, all history, all culture, have flowed as symbolic by-products in the humble but intensely urgent business of establishing meaning- (Turn to page 14)



"That Which Is Tired"

THERE has been a great deal of discussion about the use of the words tortoise, turtle, and terrapin. Dr. Raymond L. Ditmars, noted student of reptiles, has handed down a ruling. Tortoises are the land-living forms, he says, and the name turtle should be reserved for the kinds that spend a large part of their time in the water. Terrapins of course are the particular tortoises that have a high reputation as "quality eats."

It is a little unfortunate that the confusion between tortoise and turtle should have arisen, for both words are originally the same. They come from the old French *tortue*, and back of that from the Latin word meaning twisted. The reference apparently is to the peculiarly turned feet of the tortoise of Mediterranean lands. Nor has turtle, as applied to our small friend in armor, anything to do with turtle, as applied to a dove. The turtledove's name comes from the Latin *turtur*, an obvious imitation of its own cooing note.

What impels us towards special friendship for the little tortoise that strolls on stumpy legs through the garden is not easy to guess. Perhaps, though, it is the fascination of something quite unlike ourselves yet still a living being. Per-

haps, too, there is the slight psychological elation we feel, unconsciously in the main, at our superiority over a creature so awkward and helpless-looking and so obviously harmless. Anyway, we do like him; and the Southwestern Indians' humorous name proves that the Indians liked him, too. They called him "That Which is Tired."

There is one belief about reptiles in general that has lately been proven quite false, and it may be of benefit to have it still more widely known, for the well-being of lizard, or snake, or tortoise that your children may capture and want to keep in a box for a while.

Whatever they do with their captives, do not let them put the poor thing in the full glare of the summer sun. The old idea that reptiles love to "bask" is only half true—and the higher-temperature half may result in a small tragedy if believed in too implicitly.

A California scientist, Dr. Walter Mosauer, has tried penning rattlesnakes and other kinds of serpents on bare rock and soil, so that they cannot find shade anywhere, and then leaving them to the full sunlight. Far from enjoying it, they soon show signs of discomfort, and presently die. They may like to bask in the sun when the weather is still cool, but there can be too much of a good thing. So if your kids decide to make pets of either Slip, the Lizard, or Slithery, the Snake, or That-Which-Is-Tired, see that they are not kept caged where the sun is too hot.

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From Page 6

ful relationships between actual human beings, we commit personal suicide."

Education Methods Blamed

OUR present educational methods were blamed for crime, marital unhappiness, and mental illness by Lawrence K. Frank, of the Josiah Macy, Jr.,

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Foundation in New York before the Symposium on Mental Health at Richmond.

"It is becoming clear," he said, "that the delinquents and criminals, the mentally sick, the sex offenders, prostitutes, celibates, unhappy wives and husbands, the harassed, insecure business men, politicians, professional workers, and those who are ill from anxieties and repressed feelings that they have turned against their own organ systems, are in most cases the products of the present educational programs in our homes and schools.

"They are the unhappy, frustrated anxious babies of yesterday, the misunderstood and neglected school children of yesterday, the bewildered and rebellious adolescents of yesterday, who are now expressing in these different ways what they suffered during their childhood and youth."

Mental hygiene gives no support for the doctrine of complete lack of restraint for the child, he said, but all the necessary deprivations and prescriptions should be made emotionally acceptable to the child since our whole social, economic and political organization is based upon learning these lessons without either resentment to endanger society or anxiety to defeat, if not destroy, the individual.

"The democratic aspirations of man cannot be achieved so long as individuals are warped, distorted and mentally sick," he declared, "since only the sane, integrated personalities, who have learned to accept themselves, can show that understanding and tolerance that is necessary to a democratic society.

"Whatever fosters and promotes mental health will guard and further democracy."

Social Customs Important

SOCIAL conditions may contribute to an individual's mental breakdown when the social institutions are such that

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the individual is humiliated, shamed, and rejected, Dr. Ruth Benedict, associate professor of anthropology at Columbia University told the symposium.

In attempting to find out what social conditions detract from mental health, the student of human psychology cannot do as the great physiologist Pavlov did with his dogs. Humans cannot be experimentally confronted with conditions that may cause mental breakdown.

The anthropologist can discover the information, however, by studying a variety of cultures to discover which customs and institutions are associated with a healthy people and which are accompanied by mental ill-health.

Cultural institutions have everything to do with whether an individual experiences a long series of humiliations even though he lives up to the demands of the mores, or whether he experiences humiliations only if he becomes a moral reprobate, Dr. Benedict said.

"In our own culture in certain cases and on certain income levels, as also in some primitive societies, an adolescent's economic dependence upon his parents is humiliating, while on the contrary in numberless cultures the child figures as the hope and future of the family and humiliation on this score is unthinkable."

When individuals are unnecessarily humiliated and for circumstances beyond their control, such as birth or poverty, they develop feelings of inadequacy that lead to mental breakdown.

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ANTHROPOLOGY

Patterns

● "The ancestry of Navajo silver ornament forms had its root in the silver trade jewelry distributed to the tribes east of the Mississippi River after 1750, and in the Mexican-Spanish costume ornaments and bridle trappings of the late 18th and early 19th centuries . . . Silver working by the Navajo themselves was learned from Mexican silversmiths, the first dated reference of such a smith in the Navajo country being November, 1853."—Arthur Woodward, in *NAVAJO SILVER* (*Northern Ariz. Soc. of Science and Art*).

Science News Letter, January 7, 1939

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