Risked Life to Prove Theory

Medicine

Dr. Joseph Goldberger, hunger fighter, surgeon of the U. S. Public Health Service, has lost his last fight against disease. He died at the Naval Hospital on January 17, following an illness of several weeks Dr. Goldberger did not succumb to pellagra, as reported erroneously in some accounts of his death. Sarcoma that had spread throughout his system was the cause of his death.

This modest, unassuming man saved thousands of lives and untold suffering among others, but he was unable to save his own life. Many times Dr. Goldberger risked his life, even courted disease and death for the sake of his fellowmen. This time disease came uncourted and death followed despite all the efforts of fellow scientists and his colleagues of the U. S. Public Health Service.

Dr. Goldberger was born in Austria-Hungary in 1874, coming to this country with his parents at the age of 6. Brought up in New York's lower East Side, this immigrant lad achieved the greatest public health research of any country within the last generation. His connection with the U. S. Public Health Service started just twenty years after his arrival in the Promised Land, to which he contributed so much. His first work was the examination of immigrants at Ellis Island. Routine duty at other immigration stations and U. S. consulates followed. However, his unusual qualifications for research work were soon recognized and in 1904 he was attached to the Hygienic Laboratory at Washington. His connection with this branch of the service continued until his untimely death.

Dr. Goldberger's greatest contribution to science and to humanity was the discovery of the cause, cure and prevention of pellagra. This disease was not recognized in our country until 1907, but it had been known in Europe for hundreds of years. Other scientists had theorized and looked for germs and written countless treatises on the subject to no avail. Dr. Goldberger's love of humanity detected the clues which led to the solving of this distressing public health problem.

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Chemical Shorthand System Devised

Chemistry

A new system of chemical shorthand, which promises to be a time saver for stenographers and reporters who take chemical dictation, has been developed by Louis A. Leslie of New York City and Dr. C. A. Jacobson, professor of chemistry at West Virginia University. Thoroughly mastered, this system saves time and makes for greater accuracy in reporting.

Dr. Jacobson listed the names and symbols of all the chemical elements, as well as the acid radicals occurring in all but the most complex inorganic compounds, and he suggested that a distinctive shorthand character for each be made, in order to simplify their writing.

For the chemical elements and the initial set of radicals this has now been eccomplished by Mr. Leslie. The Gregg shorthand character which has been ascribed to each is not only distinctive but easy to write, so that the salt obtained by the combination of any two of them may be represented by two characters instead of several as heretofore. For example, if a stenographer were obliged to write magnesium pyrophosphate, ammonium thiomolybdate, or praseodymium thioaluminate he could do so by two simple characters for each instead of by four or more rather complex ones.

The lists thus far prepared cover the names of thousands of inorganic compounds, yet when the system is complete it will include the characteristic nomenclature in all the different fields of chemistry. It will also include shorthand characters for the numerous syllables, prefixes, and suffixes found in chemical nomenclature.

The chemist is now employing a well established system of shorthand to represent the names of elements by one or two letters called symbols, and compounds by small groups of these symbols called formulas, Prof. Jacobson explained. He also represents chemical reactions by equating the formulas representing the compounds reacting with the formulas of the compounds produced. The present proposed system of chemical shorthand goes still further by abbreviating the chemist's abbreviations.

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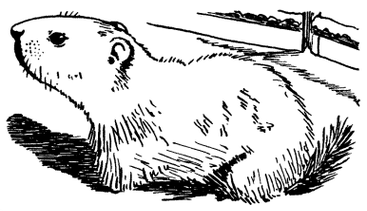
Nature Ramblings

By Frank Thone

Natural History



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A Poor Weather Prophet

Winter will last six weeks longer. We shall have an early, pleasant spring. The coming of spring is a matter of doubt; it may be soon or it may be late.

All three of these prophecies are equally good, and they were all made by the same prophet in different parts of the country. For in places the day was clear, so that the groundhog saw his own shadow. Elsewhere it was cloudy, so that he didn't see it. And in still other localities the weather was partly cloudy, so that we don't know whether he saw the shadow or not.

As a matter of fact, even where he saw his shadow plainly, it's only an even-money bet that he was right and where he didn't see it at all the same odds hold. Meteorologists who have made a statistical examination of the weather records for years back have found that there is no discernible correlation between the state of the sky on February 2 and the state of the weather for six weeks thereafter.

Anyway, the groundhog doesn't care at all about the wagging heads or the arguing tongues. He's getting in the last sound licks of his beauty sleep, which began some time last fall. And he'll come out, shadow or no shadow, when he gets good and ready, and not before.

The groundhog is the same animal we call the woodchuck. He has another alias, marmot, which has been adopted as his scientific name, latinized into *Marmotus*. There are three main species of him on this continent, split up into numerous subspecies by naturalists who know their groundhogs. The lowland species are, respectively, the common or red-haired marmot and the yellow-bellied marmot. Up in the Rockies there is a bigger animal, the hoary marmot or rock-chuck, which lives in among the tumbled rocks on (*Turn to next page*)

Groundhog—*Continued*

the mountains instead of in burrows underground.

The groundhog, of course, is in no way related to the squealing denizens of the pigpen. He is a cousin of that misnamed animal, the guinea-pig (which isn't a pig and never saw Guinea), and both of them are rodents. The groundhog, as a matter of fact, is simply a great big, oversized, short-tailed squirrel that prefers to dive into the ground for safety instead of climbing a tree.

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Frederick on Science

General Science

JOSEPH NEEDHAM in *Man a Machine* (Norton), quoting from the works of Frederick the Great:

"The majority of priests read literary works as if they were all treatises of theology; filled with this alone in mind, they see heresies everywhere, and thence spring so many false judgments, silly accusations, and complete misunderstandings. A medical book ought to be read with the outlook of a physician; Nature, Truth is his judge, she alone can absolve or condemn him. A book of astronomy must be read in the same manner. If some modest physician proves that a heavy blow on the head with a stick disarranges the mind, or that at a certain degree of external heat the reason is upset, one must either prove the contrary or keep one's mouth shut. If some clever astronomer shows, in spite of Joshua, that the earth and the celestial globes turn round the sun, one must either calculate better than he or suffer in patience the fact that the earth behaves in such a manner."

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Is There a "Jewish Type"?

Ethnology

FRIEDRICH HERTZ, in *Race and Civilization* (Macmillan):

Fischberg, after an intense study of the racial features of the living generation of Jews, came to the conclusion that there exists no such thing as one homogeneous Jewish type, but that there is a multitude of Jewish types, according to the nations among whom the Jews live and to whom, to a higher or lesser degree, they have assimilated. The German Jews are much more like the other Germans than they are to their coreligionists in Palestine. The similarity appears in the head form, the proportions of the body, pigmentation, and facial traits. And even in Jerusalem, a census taken of the Jewish children there showed that among the Aschkenazim there were 40 per cent. blonds and 30 per cent. blue-eyed, and among the Sephardim 10 per cent. blonds and still less blue-eyed, only the decidedly blond or brunet tints having been taken into account.

The census of school children in Germany, taken under the auspices of Virchow, revealed that among 75,000 Jewish children 32 per cent. had light hair and 46 per cent. light eyes. In Austria the proportion was 28 and 54 per cent. respectively, in England 26 and 41 per cent. and so forth. The purely brunet type has been preserved only by about half of the European Jews, while about 10 per cent. are pure blonds (fair complexion, light eyes and hair), the rest being of mixed racial features. As to noses, Fischberg, after examining 4,120 individuals, found out that but a small minority of Jews are blessed with olfactory organs of a crooked form, but it is just this small number of crooked noses which strike the eye, and not the large number of straight ones. A straight ("Greek") nose was found in 57 per cent. of the males and 59 per cent. of the females. Crooked noses were noted in 14 per cent. and 13 per cent. respectively. From this we may learn how unreliable popular ideas respecting racial types are. The fact is, that many of the traits commonly believed to be Jewish characteristics are in reality of the most diverse derivations.

These traits, moreover, are by no means restricted to the Jews, but are met with in a great many other peoples, a fact which has given rise to the manifold speculations respecting the whereabouts of the lost Ten Tribes of Israel. Peculiarly striking is the occurrence of Jewish types among the higher classes in Japan, even among the Imperial Family. One of the finest ladies of Tokio would be regarded in Europe as of Jewish blood (Ranke). The present King of Spain strongly reminds one of certain caricatures of Jews in our comic papers; in surveying the ancestral portraits of the House of Hapsburg one finds Jewish traits in a surprising multitude. A prominent German anti-Semite, Theodor Fritsch, detected Jewish types even among the Hohenzollern family. Like similarities seem patent in pictorial representations of the Incas of Peru, in some princely families of Java, in many German and French aristocratic families of the oldest standing, in Dutch patrician families, and furthermore, among many primitive races such as the Bakairis of South America, the Kaffirs of South Africa, the Papuans, some Polynesian and Micronesian and North American Red Indian tribes, etc. Stratz, from whom some of these statements are taken, therefore declares that Jewish appearance is the effect of protracted inbreeding, as indeed practised in ruling dynasties, castes, and aristocratic families, and also in areas of local isolation (e. g. small islands, forests, the Ghetto). It was the absence of crossings which, according to this author, developed in the Jews the characteristics of the white race to an extreme degree.

The fact that we nearly always can tell a Jew at a glance from other people seems very often due not so much to physical as to psychical and social characteristics, such as name, bearing, manner of speech, ocular expression, etc. That the outward appearance is influenced also by the mode of life becomes visible from the following instance given by Luschan: In the isle of Rhodes the Jews have monopolized for some 400 years the profession of porters, so that on Saturdays no ship can unload her cargo. The result has been that the Jews of Rhodes to-day count among the tallest people, their average stature being, he says, nearly as tall as that of the Scotch, and surpassing that of the Swedes. He sees in this an effect of unconscious selection.

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