entity and that the activity of yeast growth extracts are due to this entity."

Dr. Eddy is professor of physiological chemistry in Teachers College, Columbia University. Dr. R. R. Williams is in charge of the chemical laboratories of the Western Electric Company and was in the Philippines when vitamin B was first discovered. Dr. Ralph W. Kerr is a recent graduate of Columbia.

Bios was first described by a French scientist, Wildier, in 1900. To similar substances shown to be present in various plant extracts Bottomley later gave the name of auximones. Neither of these authors actually isolated the substance, but they did show that the extracts contained something which stimulated the growth of yeast cells and other organisms.

Interest in the subject was revived in 1916 by Roger Williams who suggested that bios was actually vitamin B. It was finally discovered that while most substances rich in vitamin B do stimulate yeast growth, the stimulationg may be due not to the presence of vitamin B, but to some other factor accidentally associated with it. In 1922 Casimir Funk was able to show that when an extract rich in B was shaken with Fuller's earth the earth would remove all of the power of the extract to cure beri-beri, a property exclusively related to B, but did not remove the yeast growth stimulation factor. Funk interpreted his results to indicate that such extracts contained two vitamins, one the antineuritic factor for which he proposed to retain the name B, and the yeast growth factor which he called vitamin D.

This suggestion of Funk's originated a controversy in which various investigators have taken part. They attempted to show that the yeast growth factor, while highly stimulatory to yeast growth, is not essential to its growth. They would reserve the term vitamin to substances producing growth, but limit it to such as were absolutely essential to growth. Others believe the term vitamin should be restricted to such factors as are essential to mammalian nutrition. Thus the yeast growth factor has been described under the two names, bios and vitamin D.

READING REFERENCE - McCollum, E. V. The Newer Knowledge of Nutrition. New York, Macmillan Company, 1922.

RESEARCH FOR BETTER LIGHTING INAUGURATED

Thomas A. Edison, "the father of the electric lighting industry", has accepted the honorary chairmanship of the National Research Council Committee on Industrial Lighting, which is now being organized to conduct an extensive investigation of the relation of illumination to industrial production and the reduction of industrial fatigue.

This scientific investigation plans to increase production and decrease rejections of manufactured products, to better working conditions through the decrease of industrial fatigue and the increase of safety measuresand compensation, and to conduct an educational campaign urging better lighting. In administrative charge is a general directive board with Prof. Dugald C. Jackson of

the Massachusetts Institute of Technology as chairman.

Present plans contemplate a two year program and an expenditure of approximately $50,000. Test installations will be made in large manufacturing establishments in the principal industries. The field work will be supplemented by laboratory research under controlled conditions in the illumination research laboratories at the Massachusetts Institute of Technology.

TWO TYPES OF TEMPERAMENT

By Dr. Edwin E. Slosson.

Are you an extravert or an introvert?

That is the way the question is put today. The phraseology is new, for it was recently introduced by Jung. But the question is old, about two thousand years old, anyhow, for Galen made a similar effort to classify mankind by temperament. He distinguished between the "sanguine", who are quick, warm, impressionable and changeable, and the "phlegmatic", who are slow, quiet and persistent. When these two characteristic types are strongly marked they are called respectively "choleric" and "melancholic".

Another old classifcation of a similar sort is between "objective" and "subjective" or between "energetic" and "sentimental".

Professor William James devotes the first chapter of his book on "Pragmatism" to showing how our beliefs and reactions are unconsciously controlled by our temperamental bias and from this point of view he divides people into the "tough-minded" and the "tender-minded". The tough-minded, he says, are "empiricist (going by facts), sensationalistic, materialistic, pessimistic, irreligious, fatalistic, pluralistic and skeptical", while on the other hand the tender-minded are "rationalistic (going by principles), intellectualistic, idealistic, optimistic, religious, free-willist, monistic and dogmatical". And he says you can tell them apart because "they have a low opinion of each other. The tough think of the tender asssentimentalists and soft-heads. The tender feel the tough to be unrefined, callous and brutal." The tough-minded of James corresponds roughly with the extravert of Jung, and the tender-minded with the introverts.

Professor Wilhelm Ostwald of Leipzig in his study of great scientists divides them into the "romanticists" and the "classicists". The romanticist man of science is a good teacher; genial, versatile, expansive and pepular; fond of conversation and quick to publish. He jumps at conclusions, sometimes making amazing discoveries by a sort of intuition and sometimes making sad mistakes from his impatience of detail. The romanticist gets paid in current coin; in the devotion of his disciples and in honors from his colleagues, sometimes in applause and wealth from the public.

The classicist on the contrary has to put up with deferred payment. His services to science often receive no adequate recognition till his death, and not always then. He pursues a single line of thought persistently and systematically for years, often without outside aid or encouragement. His mind works