

groups have been made, based on the data that were obtained.

LEADING metal-producing companies from all sections of the country will be represented by members of their staff at the meeting of the American Institute of Mining Engineers, which convenes in Arizona on September 18. The country's record production of metal during the past year has greatly stimulated the interest in those general mining topics which will be discussed at the institute's sessions. More than twenty corporations have already expressed a desire to be represented by institute members who may participate in the technical gathering. Some of these are Anaconda Copper Mining Co., the largest copper producing company in the country; American Smelting and Refining Co., the largest lead-producing company; Ray Consolidated Copper Co., Treadwell and Alaska Juneau mines, Miami Copper Co., and the New Jersey Zinc Co. Among the engineers who will be present are L. D. Ricketts, Benjamin B. Thayer, William L. Saunders, Sidney J. Jennings, George D. Barron and Philip N. Moore. A special train from New York will be the traveling headquarters, the train moving from point to point in Arizona each day during the week of the convention. Some seventy papers have been prepared for discussion at the meeting. These papers bear largely upon new methods of production and the mining outlook in various parts of the world.

UNIVERSITY AND EDUCATIONAL NEWS

UNDER the will of William Watson Lawrence, of Pittsburgh, Princeton University will ultimately receive the residue of his estate, estimated at more than \$750,000.

PROFESSOR CARL T. DOWELL, instructor of chemistry at the University of Texas, Austin, has been elected associate professor of chemistry at Tulane University.

THE following appointments and changes are announced from the University of Illinois:

Professor Richard C. Tolman, recently at the University of California, has been appointed professor of physical chemistry to succeed Professor E. W. Washburn, who has been appointed head of the department of ceramics. Dr. Roger C. Adams has been appointed assistant professor of organic chemistry to succeed Dr. C. G. Derick, who is organizing a research laboratory for the Schoellkopf Aniline and Chemical Works in Buffalo. Dr. Horace G. Deming, recently returned from the Philippines, has been appointed associate in chemistry to assist in the instruction in general chemistry and qualitative analysis. Professor C. W. Balke, formerly at the head of the division of general chemistry and qualitative analysis is organizing a research laboratory for the Pfanstiehl Company in North Chicago which is engaged in the application of rare metals to industrial uses.

DISCUSSION AND CORRESPONDENCE VITALISM

I HAVE read with much interest the addresses that have appeared in *SCIENCE*, forming part of a symposium on "The Basis of Individuality in Organisms." But I have not noted that two well-known facts, that seem to me of major importance to the discussion, have been jointly focused on the problem. May I mention them, and briefly suggest their bearing?

1. I assume all would agree that non-perceptual realities—Spencer's Unknowable, Kant's Ding-an-sich, Locke's Something, I know not what, that supports sensations—exist, and are the kernel of *all* matter, dead and living. These realities—whose natures remain so dim to our inquiries—it is that *behave* in the ways laboriously and skilfully discovered, described and formulated by natural science. Their existence and basal activity might, further, be thought to validate vitalism. For the active beings (*i. e.*, themselves) of which conscious organisms are aware are the very realities that behave after the conscious fashion, and their natures might reasonably be thought to throw light on their behavior, as has, in fact, been