

## HISTORY OF SCIENCE

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### ABSTRACTS

**The Influence of Salt in the Early Life of America.** CHARLENE RECTOR and FLOY HURLBUT, Ball State Teachers College.—Salt is essential to animals and to human beings, especially the herbivorous animals and vegetarian man.

In the beginning, the settlement of the interior of our continent was dependent upon this essential salt being carried inland from the coast. This was an expensive and time-consuming process. Discovery of salt licks helped speed the westward movement of the white man; Kentucky and southern Indiana provide excellent illustrations of this fact.

Kentucky, unoccupied by Indians, was used as a hunting ground by all surrounding tribes. The many salt licks seemed to make possible a concentration of wild game in that area. Salt licks were the stopping places on buffalo traces and early trails. They also served as foci for the congregating of wild animals, as shown by the numerous animal bones found mixed with mud and earth around the licks.

Many of the skirmishes between the early settlers and Indians were struggles for control of salt licks; and our highways which follow buffalo traces show the influence of the location of salt licks. Early settlements were located where fresh and salt springs occurred. French Lick, Indiana, is an illustration.

**David Starr Jordan and John P. D. John in the Development of the Science Major in Indiana.** WILL E. EDINGTON, DePauw University.—During most of the last quarter of the nineteenth century Indiana Asbury, after 1883 DePauw University, was the largest university in the State of Indiana, so far as enrollment is concerned, and DePauw and Indiana Universities set the educational pattern for the State. During the middle half of the nineteenth century the struggle for the recognition of the sciences as having equal educational value to the classics caused considerable unrest, and the denial to the students of the privilege of choosing or electing certain subjects for study led to much educational dissatisfaction. However, Indiana University gave its first Bachelor of Science degree in 1854, and Indiana Asbury followed in 1858 with a four-year scientific course of study and gave its first B.S. degree in 1861. But these degrees implied no specialization in any one science but rather the completion of a non-classical course of study. In 1879 Indiana Asbury offered a scientific course of study in which students interested in science were advised to "choose all the studies of a few departments rather than a few from all," and the only "required subjects," after the prescribed Freshman year, were three quarters of Latin in the Sophomore year, two quarters of Belles-Lettres and one quarter of Philosophy in the Junior year, and one year of Philosophy in the Senior year.

David Starr Jordan came to Indiana University in 1879 as Professor of Zoology and he was elected President of the University in 1885. A student of Agassiz and a brilliant scientist of powerful personality, he revolutionized scientific study at Indiana University. In his "The Days of a Man," he writes: "In 1886 I made some sweeping changes, doing away with the fixed curriculum and adjusting the work so that practically all the subjects hitherto taught in the University, being elementary in their nature, were relegated to the first two years. Further than this we instituted the 'major subject' system, by which each junior or third year student was required to choose a specialty or 'major,' and to work under the immediate advice of his 'major professor,' whose counsel in details he was obliged to secure." Indiana University conferred its first Master of Science degree in 1882 and its first Ph.D. degree in 1883.

The first suggestions for specialization at Indiana Asbury appear in the Catalogue for 1874-1875 where the following statement is published: "A more extended course of instruction will be afforded those desiring to make Mathematics a specialty. Such classes will be heard in extra-collegiate hours." In 1879 a system of Departmental Honors was set up requiring of the recipient of such an Honor the completion of virtually the equivalent of a "major" in mathematics, chemistry, etc.

John P. D. John came to Indiana Asbury in 1882 as Professor of Mathematics, was made Vice-President of DePauw in 1885, and President in 1889. Like Jordan, John was a scholar with broad educational perspective and forceful personality who, upon becoming President, immediately made the "major subject" philosophy the educational policy of DePauw.

It is educationally significant that both Jordan and John were active in founding the Indiana Academy of Science. Jordan was the Academy's first President and John was its third President.