information bearing on their possible mode of action should be welcome. In further comment the article states that arsenic action is not due to the element, but to the ion, of arsenous acid, H₃AsO₃. Organic arsenic compounds in which the metallic atom is attached directly to carbon are only feebly toxic. In the course of time, within the body they seem to yield more or less arsenous acid, a reaction which may suffice to explain any pharmacologic potency possessed by the organic derivatives. It is a somewhat unexpected fact that the closely related arsenic acid, H₃AsO₄, its anhydride and its salts are far less poisonous than is arsenous acid. This statement has now and then been disputed, but only recently again substantiated at the pharmacologic institute of the University of Berlin by Joachimoglu. The relatively greater toxicity of arsenous in comparison with arsenic acid could be demonstrated by the proportion of 10:6 in the case of the lethal dose required for intravenous injection in animals. Perfusion experiments with isolated frogs' hearts indicated the arsenous compounds to be 300 times as harmful as those of arsenic acid. In the case of the isolated intestine the contrast, though plain, was not equally striking. This has raised the question why there should be a marked disproportion in the relative toxicity of comparable quantities of arsenic and arsenous acids, depending on the mode in which the test is made. The explanation proposed is as follows: The toxicity of the arsenic acid depends on the reducing power of the tissues with which it comes into contact. By this means it is converted into the very poisonous arsenous compound. Some individual organs or tissues have comparatively slight reducing potency. In the isolated heart, for example, arsenic acid exhibits little toxicity. Throughout the living organism as a whole the reduction of arsenic acid appears to be far more readily accomplished; hence, after intravenous administra-

conversion to arsenous acid that the real difference between these related arsenic derivatives is no longer conspicuous. This may also explain some of the uncertainty or confusion which has existed in the past in respect to the comparative action of the two substances.

IMPROVING NEGATIVES FOR PRINTING.

Edgar Senior in Knowledge states that negatives which from faulty development or other causes are more or less imperfect in some parts may be considerably improved in many ways. For instance, suppose that the subject is one in which a heavy mass of foliage occurs in the foreground, together with a well-lit distance. Now in order to represent the distance correctly in the negative the foreground in many cases is almost entirely devoid of detail, and is shown in the print as a heavy black mass. In such a case, if the negative is coated (on the glass side) with matt varnish, containing a small amount of iodine dissolved in it (the quantity depending upon the circumstances of the case), heavy shadows in negatives can be made to print much lighter and the results improved to a great extent. The varnish, after it is applied, will dry in a few minutes, and then over the parts not required to be lightened it is removed with a penknife or a piece of rag, moistened with a little methylated spirit of benzole. The same means may be applied in the case of portraits and groups, only greater care is required in scraping away the varnish from the parts where it is not needed in order to prevent any marks from showing. Portraits taken out of doors frequently show very heavy shadows under the eyebrows and chin: these may be considerably lessened by applying a little color (either red or blue) on the glass side of the negative, and then dabbing it with the finger, so as to form a kind of stipple caused by the texture of the skin. If carefully applied, the method is very satisfactory, and will tend greatly to reduce the heaviness of such shadows.

OBITUARY

DAVID STRAUSS.

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it may become more toxic so promptly by

Another champion for better pharmacy and for higher education passed away on Saturday, August 19th, Taking his first plunge in the ocean at Squan Beach, Manasquan, N. J., on the first day of a wellearned vacation, David Strauss was swept away by the undertow, and after a series of mishaps in the attempts of his rescue, namely the breaking of a rope and the upsetting of a boat, his body was recovered.

Born in Elizabeth on October 15, 1866,

the son of Louis Strauss, David attended the schools in his native town, entered pharmacy and graduated from the New York College of Pharmacy in 1888, as a member of the celebrated "Blizzard Class." The New Jersey "trio" of that class were Strauss, of Elizabeth; Raubenheimer, of Irvington, and Reed, of Long Branch. In 1904 David Strauss bought the Garrigan Pharmacy, at the corner of Springfield Avenue and High Street, Newark, and became one of the most widely-known druggists in the State. He worked exceedingly hard for the betterment of trade conditions, and during the administration of Sheriff Frank Sommer, of Essex County, he gave valuable aid in the crusade against cocaine traffic,

In association work, David Strauss was particularly active in the New Jersey Pharmaceutical Association, which he joined in 1898. He did valuable work on the membership committee and also on the legislation committee, making frequent trips to Trenton to secure the passage of a new pharmacy law. He was a forceful speaker and the writer remembers with pleasure the many strong arguments which Strauss brought forth on various occasions. He served as president of the New Jersey Pharmaceutical Association during 1912-13.

David Strauss was appointed a member of the New Jersey State Board of Pharmacy in 1904, and was reappointed in 1909, and again in 1914. He was elected treasurer in 1907 and became president of the Board in 1913.

He joined the American Pharmaceutical Association in 1910, and he looked forward . with pleasure to attending the Atlantic City Convention this year. Among his literary contributions we want to point out his Presidential Address at Allenhurst, published in Proceedings, N. J. Ph. A., 1913, and his article "Pharmacy is not going backward, but the character of some of the men is sadly deteriorating," published in Practical Druggist, April, 1913, pp. 23 and 24.

As a citizen, David Strauss was connected with many building and loan associations, with Beth Israel Hospital and the Hebrew Benevolent Association in Newark. He was also a member of Tyrian Lodge of Elizabeth. The funeral services were held at his home, 450 High Street, Newark, Rabbi Sol. Foster officiating. He is survived by his widow and his daughters, Mina and Mrs. Jacob Harris.

David Strauss will be missed by his many friends, especially by the members of the New Jersey Pharmaceutical Association and his classmates of the "Blizzard Class." He will forever be remembered by the New Jersey State Board candidates for his friendly manners and his encouraging ways. Let us hope that his words "Pharmacy is not going backward" will remain true.

Peace to his ashes. O.R.

THEODORE G. E. OTTO.

Theodore G. E. Otto, aged 53 years, member of the American Pharmaceutical Association, died August 6, 1916, at his home in Columbus, Ind.

He was born in Ripley County, Indiana, January 7, 1863, the son of Frank E. and Marie T. Otto. He was educated in the public schools of Friendship, Indiana, and the Lutheran school at Farmers' Retreat. In 1877 he entered the Friemelt Drug Store in Cincinnati. Later he attended the Cincinnati College of Pharmacy, graduating in 1883. The same year he came to Columbus and bought the drug store at Fourth and Washington Streets, in which store he successfully conducted his business until the time of his death.

Mr. Otto was the first member named for the Indiana Board of Pharmacy, and was successively reappointed. He was a member of the school board of his home city and also trustee of Wittenberg College, Springfield, Ohio. He was active in fraternal circles.

Mr. Otto is survived by his widow and two daughters.

SOCIETIES AND COLLEGES

THE 1916 PHARMACEUTICAL ASSO-CIATION MEETINGS.

The conventions of the American Conference of Pharmaceutical Faculties and National Association of Boards of Pharmacy were successful in every rcspect. The attendance was not up to the expected for the reason that the contemplated railroad strike deterred many from starting on their journey, fearing that their return would be delayed.