slightest trace of lead. The quantity of tin found increased from year to year, as would have been inferred from the greater corrosion in the interior of the can in the older specimens. Wirthle concludes that the tin was in the form of the basic chlorid, and due to the action of the common salt in the meat, though in one instance the sulfid of tin was found. On the other hand tin was found by Cowan in canned fruits and tomatoes, and by Weber in canned pumpkins. It is greatly to be wished that a series of experiments should be carried out with a view of determining the effect of tin in small quantities upon the human organism, for little is known of its physiological action. From the amounts which are constantly ingested with canned goods, and seemingly without injury, it is to be inferred that it has little if any deleterious action, but it would be well were this established.

In this connection, Roman and Delluc call attention in the Journal de Pharmacie et de Chimie to the presence of zinc in some samples of 95 per cent. alcohol examined by them. Since similar alcohol showed a reaction for zinc after being kept in contact with galvanized iron scrap for two days, the presence of the zinc in alcohol was accounted for by its having been kept, as is often the custom, in a galvanized iron vessel.

J. L. H.

THE U.S. NAVAL OBSERVATORY.

THE Naval Appropriation Bill, as passed by the Senate, contains the following provisions, authorizing the appointment of a board of visitors to the Naval Observatory and incidentally requiring the superintendent to be a line officer of the Navy:

For the expenses of the board of visitors to the Naval Observatory, two thousand dollars. There shall be appointed by the President from persons not officers of the United States a board of six visitors to the Naval Observatory, four to be astronomers of high professional standing and two to be eminent citizens of the United States. Appointments to this board shall be made for periods of three years, but provision shall be made by initial appointments for shorter terms so that two members shall retire in each year.

Members of this board shall serve without compensation, but the Secretary of the Navy shall pay the actual expenses necessarily incurred by members of the board in the discharge of such duties as are assigned to them by the Secretary of the Navy or are otherwise imposed upon them. The board of visitors shall make an annual visitation to the Observatory at a date to be determined by the Secretary of the Navy, and may make such other visitations not exceeding two in number annually by the full board or by a duly appointed committee as may be deemed needful or expedient by a majority of the board. The board of visitors shall report to the Secretary of the Navy at least once in each year the result of its examinations of the Naval Observatory as respects the condition of buildings, instruments, and apparatus, and the efficiency with which its scientific work is prosecuted. The board of visitors shall prepare and submit to the Secretary of the Navy regulations prescribing the scope of the astronomical and other researches of the Observatory and the duties of its staff with reference thereto. When an appointment or detail is to be made to the office of astronomical director, director of the Nautical Almanac, astronomer, or assistant astronomer, the board of visitors may recommend to the Secretary of the Navy a suitable person to fill such office, but such recommendation shall be determined only by a majority vote of the members present at a regularly called meeting of the board held in the city The Superintendent of the Naval of Washington. Observatory shall be a line officer of the Navy of a rank not below that of captain.

This is what Senator Chandler promised as legislation to improve the management of the Observatory, but it is not likely to meet with the approval of those interested in the efficiency of the institution. A board of visitors of this character has but little real power, whereas it would serve as an excuse for any shortcomings there may be in the work of the Observatory. The board may recommend persons to fill vacancies in the staff, but it is not clear that the Secretary of the Navy is under any obligations to follow its recommendations. The astronomers apparently remain naval officers and the superintendent must be a line officer. These provisions make it still more desirable to urge the passage of Senator Morgan's bill, presented in the last issue of this JOURNAL.