

# SCIENCE :

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## EDISON'S METHOD OF PRESERVING ORGANIC SUBSTANCES.

In a recent number of this JOURNAL,\* we published a report by Mr. Otto Hehner, an official analyst of London, England, who had endeavored to trace the cause of the gastric disturbances, which were traceable in persons who had consumed preserved articles of food put up in tin cases. This poisoning had been attributed by some to traces of lead dissolved from the solder with which the tins were closed, but Mr. Hehner, although admitting the occasional presence of lead in such cases, found on a careful analysis of both vegetable and animal foods thus prepared in tin cases, that the trouble was caused by tin.

With one exception he found that the whole of the samples contained more or less tin, many to such an extent that abundant reactions could be obtained from two or three grammes of the vegetable substances; whilst of the animal foods one of the soups contained thirty-five milligrammes, one of the condensed milks eight milligrammes, and oysters forty-five milligrammes of tin to the pound.

In reply to the question whether tin when thus taken up in the system was injurious or not, he states that as forensic literature does not furnish a positive and satisfactory reply, he endeavored to settle the question by making a few experiments.

These experiments which will be found on page 507 of this JOURNAL, produced results which caused him to draw the following conclusions: "it plainly follows that while stannic compounds are not injurious in the doses given, tin in the stannous condition, is a virulent irritant poison."

These facts induced Mr. Hehner to demand some other and improved method of packing preserved food other than by the use of tin cases.

A remedy appears to hand at a most opportune moment. In the Patent office reports for October 18, last, we find that Mr. Edison has invented a method of preserving articles of food in glass vessels from which the air has been exhausted and a high vacuum produced. The glass vessel is then hermetically closed by sealing off the channel to the air pump, the envelope produced being essentially a homogenous piece of glass. This invention appears to meet the difficulty experienced in the use of tin cans and promises great results in offering a method of preserving fruits and other organic substances in which their original purity and freshness is maintained to a great degree, and the introduction of mineral poisons rendered an impossibility. The specification, as usual, is very brief and we hope to present our readers with a more detailed description of this interesting invention, on a future occasion.

## ALCOHOLIC TRANCE.

At a meeting of the New York Medico-Legal Society, held at the Hall of the Academy of Medicine, November 2, Dr. Crothers read a paper on "Alcoholic Trance." The main point of the paper consisted in an attempt to establish the existence of a trance-like condition in inebriates. In this condition they were supposed to commit all sorts of ridiculous, or injurious, or even criminal actions, without a subsequent recollection of what they had done. Dr. Crothers related cases, the like of certain of which no other physician has yet seen or reported, and the like of which it may be quite safe to say no other physician is likely to record in the future. One was that of an engineer who ran a Mississippi steamer an entire trip without knowing it; another of a gentleman who regularly woke out of his "trance" at a railroad station, and was compelled to ask his fellow passengers where he was; a third, a house-painter, who would regularly climb to the top of a house, paint a whole story correctly, come down and "wake up." Other cases were still more complicated, and evidently called into action the *risorius* muscles of the Doctor's audience. Among the less remarkable instances was one of a hack-driver who became a confirmed drunkard, and several times went to States Prison, finally dying there, after being convicted of stealing horses; and of a solicitor, who had fits of jealousy and suspicion concerning his wife, and made a number of wills in a trance-like state.

Dr. Spitzka stated that he would like to ask the reader of the paper two questions. As far as he could gather, the reports were all obtained from third parties. His first question was whether Dr. Crothers had ever himself seen patients in this alcoholic "trance?"

Dr. Crothers replied that he had.

Dr. Spitzka reiterated that in that case the attendant phenomena had not been described by the Doctor in a convincing manner. His second question was, whether the hack-driver referred to had exhibited any inequality or anomaly of the pupils, the facial folds or tremor of the tongue and hands?

Dr. Crothers replied that he had manifested none of these symptoms, after some hesitation.

Dr. Beard took the floor. His remarks were not of such a nature as to permit the reporter to follow him, but

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