which is rich in arsenic (54.35 per cent.), and has a physiologic limit greater than the ordinary forms and dosage. The organic group to which this chemical belongs is composed of such modifications of arsenious acid, that they are almost deprived of active pernicious properties. A half gram of cacodylate of soda, corresponding to 0.33 gm. (5½ gr.) of arsenious acid, has been given to a dog without injurious consequences.

Having studied the value of Professor Ehrlich's now famous salvarsan, which belongs to this group, though materially different chemically, one may the more readily consent to my statement of the worth of the cacodylate of soda. I have used the cacodylate of iron but see no advantage in it over the other. I use the hypodermic injection in normal salt solution, first, because there is little pain, which may not be said of succinimid of mercury or the arsen-phenol-amin of Ehrlich; second, because the dosage may be more exact, and third, because there is less of the alliaceous odor than when given by the mouth. Sometimes there is a slight local reaction, but, as a rule, very little. The effects of cacodylic acid in augmenting the number of red corpuscles to a certain standard and increasing nutrition and consequent weight and strength, were noted by Professor Gautier and Dr. Danlos⁶ as early as 1899. For over three years I have employed it in a large percentage of my cases and believe it has a definite place in our therapeutics. One important requirement in its use is the need of individualizing the case. I find that some patients can be given three times as much as others, but it is probably safer to begin with a grain daily.

IODIN

Iodin is indicated in many phases of tuberculosis. It is an ideal germicide, and its action in stimulating metabolism and nutrition are well known. I use iodine in tuberculosis directly to meet these two indications. Possibly its most direct result is shown when brought into direct contact with the air-passages in influenza, acute pharyngitis, tonsillitis or laryngitis. Much depends on the method of application; and here the most direct is the simplest. A few drops of the tincture in a small glass is placed in a larger glass containing hot water. The direct heat of the water bath causes the rapid evaporation of the iodine, which when inhaled reaches every portion of the respiratory tract. This cannot be so well accomplished by the spray or the vapor, and the effect is almost immediate in the conditions above mentioned. In tuberculosis of the upper air-passages and of the lungs when there are ulcerated surfaces, this direct method has been of value to me. Its simplicity should not prevent a trial.

Flick advocates iodine inunctions by iodized oil or eucalypti in oil and this may be used especially in cases of slow resolution. I prefer 20 per cent. iodine, or in persistent high temperature, 20 per cent. of guaiacol.

Were it not that time forbids I would emphasize as an additional therapeutic agent the fixation of the chest in hemorrhage and acute tuberculosis with rapid absorption and consequent fever. This was described in my paper of last year before the Missouri State Medical Association. Another year's experience has added to my appreciation of it. I beg that the catalogue may not be considered complete. There are many other indications, such as the care of the heart, vasomotor instability, excessive cough, etc., but I have mentioned only those in which I believe I have been able to work out some helpful deductions.

In conclusion, I wish to express my sympathy with a statement made in the report of a "Symposium on Tuberculosis," by Professor Zwick⁷ of Cincinnati. He says that physicians, it would seem—feeling that they have taught the general public and the politicians who preside over our destinies even in matters of health and sanitation, sufficient for the present, enough to go on, as it were, in the way of the underlying economic causes, hygiene and general measures—are now again turning to their own particular domain, the care and cure of tuberculosis.

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FINE SILVER WIRE AS DRAINAGE MATERIAL

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I have been using fine silver wire, in the form of wicks, for abdominal drainage after operation for acute appendicitis, but my clinical data are as yet too incomplete to report, and the suggestion is submitted for the following reasons:

1. Wicks of silver wire consisting of 90 to 100 strands almost as fine as horse-hair firmly twisted like a tobacco twist, possess marked capillarity, which is more marked as the material increases in fineness. This can be illustrated by taking such a wick and inserting it into a test-tube, in the form of a siphon. While not equal in capillarity to gauze, it seems to retain capillarity longer. I have found that, after removing such a wick from an abdominal wound containing a seropurulent discharge in forty-eight hours, capillarity was as marked as it was originally. Furthermore, silver wire can combine the effect of tubular drainage with capillarity if the spaces between the outer strands are increased, while the harder the twist the greater degree of capillarity; or else the outer layers of the wick may be made of coarser wires.

2. Fine silver wires in twists, with cut ends to the periphery, are sufficiently pliable to avoid trauma, yet firm enough to retain the original shape, and can thus be adjusted to drain a tortuous tract and can be well applied for draining the postecum. A rubber tube and gauze of corresponding size weighs 100 gr., while the silver wire wick weighs 128 gr., making only a slight difference in weight. The wick may also be made to bifurcate so as to reach more than one focus. Of course it is necessary for the wick to be firmly twisted, so that no omentum, etc., can enter the meshes, and one revolution of the twist is sufficient. The physical properties of silver wire as a drainage material make it adaptable to meet a great variety of indications.

3. In the presence of the fluids of the body metal silver perhaps develops feeble antiseptic (?) properties and possibly stimulates the formation of antibodies, and in the pre-antiseptic days of surgery these properties perhaps explained the great virtue of Marion Sims' discovery, in 1857, which, he concluded, "was based on the principles of rational inductive philosophy." In clean wounds such properties are unnecessary and in the presence of active suppuration would be impotent, but in the presence of mild and beginning infections, within the abdomen, the query arises: Would not this effect of silver wire, as a drainage, tend to antisepticize a mildly infected wound that would subsequently develop active infection? My own observations seem to warrant such an assumption, and this suggestion is offered for the purpose of further study.

7. Tr. Miss. Valley Med. Assn., 1910, Lancet-Clinic, Oct. 10, 1910.