(not over 10 mg.) it is perfectly safe and of great value. The general practitioners must be depended on to detect incipient curable cases. For example, there are 365 beds at the Massachusetts State Sanatorium at Rutland. It is impossible to obtain more than one-third incipient cases, though the authorities have the pick from among 14,000 consumptives in the state. The same condition exists in other sanatoriums. The Rutland Sanatorium receives patients in whom the diagnosis is doubtful, and keeps them under observation, and it is in such cases that the tuberculin test is a valuable aid. Dr. Otis is convinced that the prevention of tuberculosis is largely a sociologic and economic problem. Sanitarians must have ample means if they are going to eradicate this disease. The public, he said, is coming to realize these facts, and as time goes on larger and larger amounts of money will be available to institute more extensive and sweeping methods of prevention, isolation and treatment. Dr. Otis has had better results in telling patients frankly what is the matter with them, and not permitting them to go away without being clearly informed of the exact nature of their disease, and the treatment necessary. Then they are ready to respond to the rigorous exactions of the treatment.

Clinical Notes, New Instruments, Etc.

A TISSUE JOINT OF THE LITTLE FINGER.

GEORGE B. LAKE, M.D.

WOLCOTTVILLE, IND.

The accompanying illustration shows a hand-print of the middle, ring and little fingers of a young man.

Between the metatarso-phalangeal joint and the distal end of the first phalanx of the little finger is what

appears to be a joint. The bone is intact, but the tissue creases at this point when the man closes his hand. There are no symptoms and the peculiarity was discovered accidentally.

DEATH FROM BROMO-SELTZER.

CASE OF ACETANILID POISONING.

HENRY BIXBY HEMENWAY, M.D.

EVANSTON, ILL.

On Oct. 12, 1906, about 5:20 p. m., I was called to attend Mrs. K. H.

Patient.—Female, white, Irish-American, aged 31.

Family History.—Father was found dead at age of 50; he possibly died of alcoholism. Mother died of childbirth at 38; father's mother died at 99, and paternal grandfather reached old age. Mother's parents died young. Cause of death of grandparents is unknown.

Personal History.—Within the past eight years, the patient had had four children and four miscarriages. She has suffered from profuse menstrual hemorrhages, and in June, 1906, was in St. Francis Hospital for curettement. Except at the menstrual period, she had never been subject to headaches, until within the last month. Her husband being away on business during that time she had "grieved much" and had several severe headaches, which had been relieved by bromo-seltzer. Wednesday evening she had a headache. Friday for dinner the family ate canned baked beans; after eating the beans,

though no other member of the family was sick, she had signs of indigestion, with severe headache. She took the bromo-seltzer, but how much or when I do not know. Her husband told me that so far as he can find she never had more than the one smallest size bottle of bromo-seltzer. Before I arrived the patient had vomited after taking a drink of water.

Examination.—The patient was very poorly nourished, her teeth poor. I found her dressed as for work and lying on the bed. She was breathing regularly and deeply. The eyes were shut, the body was relaxed; the lips were slightly blue, and the fingers very blue. The pulse was full, soft, regular and about 80. The heart action was full, but not hard; the area of dulness was slightly increased, and the right ventricle was dilated, bringing the apex beat about one inch below and half an inch to the right of the left nipple. There was no bruit, but the valvular sounds were slightly softened. Anterior auscultation and percussion of the lungs showed fairly normal conditions. No rales were heard. The abdomen was flat, with very slight gaseous distension of the stomach. The colon was empty and the liver possibly slightly enlarged. At my request the patient promptly protruded the tongue, which was clean. Her eyes were not congested, but the pupils were dilated. (The room was not light).

Treatment.—My diagnosis was acetanilid poisoning from bromo-seltzer. I prescribed, but when the medicine arrived it was impossible for her to take it. I left immediately after writing the prescriptions and heard no more of the case until I reached home at 9 p. m. I learned then that the woman sank rapidly and died about 7:45 p. m.

Autopsy.—The postmortem examination made by the coroner's physician, Dr. O. W. Lewke, received the following conditions:

Heart contracted, left side empty; small soft clot in right side, heart muscle soft, permitting entrance of fingers on pressure. Valves normal, evidences of chronic myocardial degeneration. Lungs completely engorged; condition typical of acetanilid poisoning. Liver enlarged and engorged. Spleen engorged. Kidneys engorged and softened from parenchymatous inflammation. Stomach and intestines empty; mucous membrane engorged and showing slight capillary hemorrhage.

Verdict.—Death from acetanilid poisoning from taking bromo-seltzer.

Remarks.—It is my opinion that the taking of the headache remedies had weakened the circulatory apparatus, so that a dose usually harmless finally became lethal.

Her family physician and husband both assured me that the previous existence of nephritis had not been suspected. In view of the postmortem findings, in another case I should depend on oxygen for treatment, combined possibly with bloodletting and the use of normal salt solution. Alcohol, strychnin, digitalis and nitroglycerin are contraindicated.

EDITOR'S NOTE.—Several months ago we had analyses made of bromo-seltzer as sold in original bottles to the trade. These analyses show that 100 parts of the effervescent salts contain:

Potassium bromid	10.53 parts
Acetanilid	4.58 parts
Caffein	1.20 parts

Assuming an average dose of the article—a teaspoonful—to weigh 76 grains (5.0 gm.), each dose would contain:

Potassium bromid	7 grains (0.5 gm.)
Acetanilid	3 grains (0.2 gm.)
Caffein	0.8 grains (0.05 gm.)

Since a half-ounce of this preparation is often taken at a dose, and since many women especially are taking it daily, it is anything but harmless.

Aside from serving as an example of the fatal effects of small doses of the drug, the report calls attention to the therapeutic contraindications in the treatment. While we can not agree with Dr. Hemenway that strychnin or digitalis are contraindicated, his objections as to alcohol and nitroglycerin are, we think, sound, and,

as these drugs are very frequently administered as stimulants, the objection should be borne in mind. We presume that the objection which Dr. Hemenway has to nitroglycerin is that it is not a direct cardiac stimulant; at any rate this is not its chief action, but acts by dilating the capillaries and relieving the strain on an overworked heart. It also lowers the blood pressure considerably, and, as a lowered blood pressure is characteristic of acetanilid poisoning, it is, therefore, contraindicated. Alcohol is contraindicated, though to a less extent, for the same reason, and also on the general principle that it is unwise in case of poisoning to administer any substance which has marked solvent power over the toxic substance. The use of oxygen, and especially the blood-letting and injection of normal salt solution, are the most reliable means for combating acute acetanilid poisoning which are known as present.

A MONOCEPHALUS, TETRABRACHIUS, TETRAPUS.

J. J. GOODING, M.D.
GILMORE, OHIO.

The birth of this monster occurred in my practice, July 23, 1905.

The mother, a native of Ohio, white, and about 40 years of age, has a large family. The labor was normal, although it was thought to be seven weeks premature. The fetus lived ten minutes. It weighed eight pounds. It was a double female with single head and thorax, four arms and four legs. The two abdomens were separate. The head was normal, with a small spina bifida at the neck.

ANTIDOTE FOR SUPRARENAL PREPARATIONS.

L. M. ROBERTS, M.D.
LITTLE FALLS, MINN.

Relative to the case reported by F. C. Bennett in THE JOURNAL A. M. A., November 17, I recently had an experience with adrin. The patient was given tablets containing among other medicaments adrin gr. 1/500, with directions to let one dissolve slowly in the mouth every three or four hours. The patient used one every hour for six doses, and then telephoned that he was suffering greatly with his heart and that pulse was "very rapid and weak, with smothering." I at once ordered recumbent position and strong black coffee, with almost immediate relief. I have used adrenalin and adrin a great deal with cocaine, and have witnessed these phenomena before, but heretofore have attributed it to cocaine, but there was no cocaine in these tablets.

THE OPSONIC INDEX IN TYPHOID FEVER.

A PRELIMINARY REPORT.*

C. P. CLARK, M.D.
CHICAGO.

From a study of 33 cases of typhoid fever in which one or more estimations of the opsonic index were made, certain broad conclusions relative to the index in this disease may be deduced.

It has been demonstrated that there occurs during a typhoid infection a marked rise in the opsonic index: that the index varies from day to day; that there is early in the disease a high index; as the temperature

decreases this appears to fall and to rise again as convalescence approaches, but more cases must be studied before any final conclusions may be drawn.

That the high index is due to the presence of opsonin and not to the incorporation by the leucocytes of clumps of bacilli resulting from agglutination is demonstrated by a comparison of the number of phagocytes in the normal as compared with that of the patient's specimen. In many cases the index so obtained is very nearly the same as that obtained by the usual method of determination, i. e., by counting the number of bacilli incorporated. Furthermore, there may be marked agglutination and no increase in opsonin and vice versa.

The typhopsonin is thermostable, resisting a temperature of 60 C. for 30 minutes, being, however, destroyed almost entirely at a temperature of 75.

In order to counteract the lytic effect of the serum it is necessary in preparing the specimens always to first heat the serum to 56 C. for 30 minutes. The lytic effect is now destroyed but the opsonic activity of the serum remains apparently unchanged.

It seems likely that the opsonic index in typhoid fever will prove valuable from the standpoint of diagnosis, inasmuch as the index is high during the earliest part of the disease.

A POINT IN THE MANAGEMENT OF UVEAL SARCOMAS.

BROWN PUSEY, M.D.
CHICAGO.

Usually sarcomas arising in the uveal tract are slow in perforating the sclera and experience has taught us that, in their clinical course, they usually give rise to symptoms—interference with vision or glaucoma and the pain which goes with it—which attract attention to the condition before perforation of the sclera and extension to the orbital tissues take place. Accordingly the ophthalmic surgeon, as a rule, when he sees no gross perforation of the sclera, contents himself in dealing with uveal sarcomas by enucleating the affected eyeball. And this is good practice; for enucleation of the globe usually suffices, and the more radical procedure of exenterating the orbital contents, which theoretically, of course, would be more proper, is a far more serious operation and leaves the patient more deformed.

Sometimes, however, these growths go through the sclera comparatively early and sometimes macroscopically such extensions can not be made out. An experience with such a case has been instructive to me, suggesting a point in the management of cases of intraocular sarcomas which I think worthy of attention.

History.—The patient was a woman of about 60. The diagnosis of choroidal sarcoma was fairly certain. Clinically there was no sign indicating extension of the growth through the sclera. The eyeball was enucleated and macroscopically the globe showed no indication of extension of the growth externally. Just after the operation the eyeball was cut into two parts and the clinical diagnosis was verified. The tissue was preserved in formalin. After about one and one-half years the patient noticed a swelling in the orbit. Exenteration of the orbit was done and a pigmented tumor as large as a normal eyeball was removed.

Interested in this history I made sections of the eye, which had come into my possession through the courtesy of the operator, in order to see if I could find the place or places where the tumor cells had perforated the sclera. It took very little trouble to demonstrate an

* From the Memorial Institute for Infectious Diseases, Chicago.