and thousands of worms were passed, followed by speedy and complete recovery. The first dose of thymol given was not finely powdered and the results were negative but on repeating the dose I ordered it finely powdered and the results were satisfactory. I heard from this patient in August, 1907, and he was at that time in perfect health.

TRICHOMONIASIS.

CASE 2.—History.—The patient, a female aged 42, single, was by occupation a domestic. The family history was negative. She had always resided in Utah and for the past eight years had been troubled with diarrhea alternating with constipation. She had consulted several physicians who had told her that she had intestinal indigestion. The history, aside from this, was negative. For three months before I saw her, she had been troubled with diarrhea, colicky pains, indigestion, poor appetite and a feeling of general weakness.

Examination.—The patient was fairly well nourished, but anemic. The heart and lungs were apparently normal, the tongue furred and the abdomen tender. Urine examination was negative. The blood gave a hemoglobin percentage of 64. Examination of the stools showed large numbers of the *Trichomonas intestinalis*; no other organism was found.

AMEBIASIS.

CASE 3.—History.—The patient a male, aged 30, married, was by occupation a photographer. Family history was negative. He had always resided in Utah, though for a short time one year previously he had been in Idaho. He had one or two previous attacks of diarrhea within the past five or six years. Otherwise the history was negative. Seven weeks before he was seen, he had passed blood from the bowels and the bleeding was associated with diarrhea and the passing of some mucus. He consulted a homeopathic physician who treated him for hemorrhoids by the injection method, but as he grew weaker he went to a regular physician who pronounced the condition one of abscess of the rectum and advised an operation. This was refused and the patient came to Salt Lake City to consult other physicians. He was referred to me and after going over the history of the patient and making a careful physical examination I reached the conclusion that it was a case of *amebiasis*. Repeated examinations of the stools by myself and my laboratory assistant confirmed this diagnosis.

From these cases it will be seen that these parasitic diseases of the intestines are more common to this part of the country than is commonly thought, and the fact should inspire us to make more careful examinations of our patients and to leave nothing undone that will help us to arrive at a correct diagnosis.

217 I Street.

A CASE OF APPENDICITIS, ASSOCIATED WITH HYPEREMESIS GRAVIDARUM.

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While I have no idea of advocating the removal of the appendix as a cure for pernicious vomiting of pregnancy, I take this opportunity of calling attention to the fact that an inflamed appendix may at times be a form of peripheral irritation sufficient to cause hyperemesis.

History.—The patient, a primipara, aged 20, gave the following history when she first came under my observation: There had never been any marked irregularity in menstruation, although she was hysterical and had somewhat marked exacerbations at the periods. For two years previous to my first visit there had been occasional attacks of cramps, with pain in the region of the appendix, attended with vomiting and fever. A diagnosis of appendicitis had already been made by other physicians and operation had been advised. When I saw

the patient she was about four months pregnant and had had repeated attacks since conception had taken place. She vomited incessantly both during and between attacks and her general nutrition had suffered markedly. She was bedridden, her tongue dry and brown, pulse 120, temperature 103 F. In a few days the symptoms subsided—all but the vomiting—but almost immediately another attack supervened and the patient was removed to the hospital for operation.

Operation.—This presented no particular difficulty. The McBurney muscle-splitting incision was made, the appendix ligated, and invaginated with a purse-string suture. Although deeply congested and indurated there were no adhesions. The appendix was about 9 centimeters ($3\frac{1}{2}$ in.) in length, and on laying it open presented a necrotic occlusion involving the mucous membrane, situated about 3 centimeters ($1\frac{1}{4}$ in.) from its distal extremity, beyond which was a pocket containing about 3 grams of bloody pus. The uterus and adnexa were normal.

Postoperative History.—Immediately following the operation the vomiting practically ceased; there being no more than is ordinarily experienced after ether anesthesia. Nevertheless, there was some vomiting until the third day, when a satisfactory bowel movement not having been attained by enemata, a free evacuation followed the administration of fractional doses of calomel. Thereafter the vomiting ceased entirely and did not recur. The skin was closed with subcutaneous catgut suture and had entirely united by the eighth day. There were no apparent uterine contractions and not the slightest threat of abortion. At this writing, two months after operation, the gestation is progressing normally.

ATTACKS OF SYNCOPE, VERTIGO AND APHONIA OF UNCERTAIN ORIGIN,

POSSIBLY DUE TO LIGHTNING STROKE.

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ERIE, KAN.

The following case presents a syndrome, apparently either of intracranial or intrathoracic origin, the genesis of which seems very difficult to explain.

History.—A. A., aged 54, married, a carpenter and farmer, was born in America. The family history was negative. He had had no severe illness in childhood, although never considered exactly strong, and he says that as a boy everything seemed to go to his head. He had no injury in early life and his habits had been good. At the age of 31 he had an attack of acute inflammatory rheumatism from which he recovered. Fifteen years ago he was shocked by a stroke of lightning, but after a few minutes recovered so that he was able to ride one of his horses to the barn, although for twenty-four hours he was dazed or partially stupefied. About a year after this the first symptoms of the present trouble appeared, with pain and tenderness in the posterior occipital region, which were at first confined to a spot about the size of a silver dollar.

Six years ago on rising to close a door he fell forward, striking but not injuring his head. After a few minutes he arose with assistance, but his mind was confused all that night. All that fall he had more or less vertigo. Three years later he suddenly became unconscious and fell from his wagon striking on his head and neck. After about ten minutes he got up and drove his team to the house. From this time he experienced pain and tenderness over the spinous processes of the cervical vertebrae, and these symptoms had extended to the middle of the dorsal region, although the suffering was not as severe as in the cervical. At the time of the last injury aphonia appeared and has followed subsequent attacks, the voice being reduced to a whisper for several days. There was no interference with deglutition, but a constant desire to swallow. The patient said he could tell when he was about to lose his voice by a feeling commencing in the back of his neck. Several attacks had occurred since the time of his last injury. When seen he complained of a feeling of vertigo on assuming the erect position or on lying down, which passed off in a few

moments. The vertigo was more severe on lying down; the patient felt as if he himself were moving.

Examination.—The patient was well nourished and not of a nervous type. Height 6 feet, weight 190 pounds. The muscular system was well developed, with no excess of adipose tissue; he walked firmly with erect posture and did not readily tire. The skin was normal, with the exception of two small patches of eczema on one leg; he was almost bald. He had a slight tendency to suffusion of the face. There was no evidence of syphilis. The eyes and ears were normal; there was no deafness nor tinnitus. The pupils were equal, slightly contracted, but responded to light and accommodated to distance. There was occasional congestion of the sclerotic. Vision was 20/40 in each eye. The larynx was free from symptoms except when aphonia was present. The lungs and heart were normal. The pulse was 80, soft, compressible, but of fair volume. An intermission of the radial pulse was noticed several times, but this was not a constant condition. There were no disturbances of sensation and the nutrition, tone and power of the muscles were unimpaired. The superficial reflexes were normal, but the patellar reflex and also the wrist jerk were absent; the knee jerk could not be obtained by re-enforcement. Vasomotor and trophic disturbances were absent. The motor and sensory powers of the glossopharyngeal were normal. Romberg's symptom was negative and no other symptoms of ataxia were present. Urinalysis showed a sp. gr. 1.022; color, light straw; normal amount; reaction neutral; neither sugar nor albumin; no sediment.

EPIDIDYMO-ORCHITIS COMPLICATING TYPHOID FEVER.

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The following case is reported because epididymo-orchitis is a comparatively rare complication in typhoid fever, being discussed by most writers as orchitis, occurring after convalescence has begun, and usually with a previous history of specific urethritis. This case is unusual in its differences.

History.—L. B., white, male, aged 25, book-keeper, was seen Sept. 28, 1907. The family history was negative. He was of good habits and did not use alcohol or tobacco. He had had the diseases of childhood but no serious illness. He positively denied a history of urethritis or other venereal disease. His present illness began with an attack of typhoid fever of mild type beginning six weeks previously. Temperature reached normal on twentieth day. Four days later, after indiscretion in diet, he suffered a relapse. This was uneventful with the exception of frequent attacks of marked pain over a greatly enlarged spleen until the nineteenth day of the relapse when the temperature appeared to be decreasing. On the morning of this day the temperature, which had been following a downward curve from 103 F., had reached 99.2 F. In the afternoon it was 102 F. and the following morning 103.5 F. At this time patient complained of dull, aching pain in scrotum.

Examination.—Examination revealed an enlarged, purplish-red scrotum. The right testicle was twice its normal size and exquisitely tender. The following morning, the temperature was 103 F., the testicle had increased in size, with tenderness most marked over the postero-inferior pole and along the enlarged spermatic cord. The testicle and epididymis now formed a mass the size of a goose egg.

Treatment.—Under treatment consisting of elevation and evaporating lotions of lead water and laudanum, the condition began to subside and three days later, after a septic run, the temperature reached normal. The patient's convalescence and recovery was otherwise uneventful.

Since the urinary examination was negative, it seems probable that the infection was due to the typhoid bacilli and through the vascular route. It is a mooted question as to whether the epididymis or testicle bears the pri-

mary infection. From examination it seems probable the testicle was first involved here. The prognosis in this condition is good inasmuch as suppuration is rare. The treatment is that of an ordinary orchitis.

416 Woodward Building.

A HELP TO HEMOGLOBIN DETERMINATION.

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LA PAZ, LEYTE, P. I.

The following method is suggested as a help to more accurate results with the Gower, Sahli and Haldanes hemoglobinometers. So far as I know it has not been otherwise described or used.

The beginner will frequently have trouble in determining the exact point when the dilution tube reaches the standard color. This difficulty is due partly to reflections and the lens effect of the tube as well as to distractions of the surroundings and is, of course, increased in those having a defective color sense.

I suggest the use of two mailing tubes $2\frac{1}{2}$ inches in diameter and 14 inches long, coated black on the inside and one end covered (the objective) with black paper having a pin-hole orifice centrally located. Three

Arrangement of tubes for use in hemoglobin determination. A, standard tube; B, mixing tube.

inches back from this end, in each mailing tube, an opening is made which will just permit the standard and dilution tubes to enter at right angles (see illustration).

Placing the open ends of the tubes to the eyes and directing them toward the light, images are obtained that are equally lighted and from which all extraneous reflections are eliminated. By rotating the tubes slightly inward the two images may be made to impinge one on the other and a more accurate comparison secured.

This device would be more satisfactory if the tubes were made of substantial material and so mounted on a base as to pivot at the ocular end.

Treatment of Ankylostomiasis.—J. Codina Castellvi writes from Spain to the September *Revue de Méd.*, to relate favorable experiences with beta naphthol treatment in 24 cases of ankylostomiasis. He agrees with previous investigators who report it harmless, remarkably effectual and free from by-effects, even when given for three or four days. Changes in lungs, heart or liver are no contraindication to its use. The dose was 2 gm., half taken at 6 a. m. and the balance an hour later, after a saline purge the evening before. Two hours later a purge is taken consisting of an infusion of senna leaves, 300 gm.; sodium sulphate, 30 gm., and syrup of rhubarb, 30 gm., this having been found the best prescription for completing the cure. Enormous amounts of the parasites are expelled the first day. He gives the tabulated findings in more than a hundred cases in respect to the products of the metabolism under treatment with male fern, with eucalyptol and with beta naphthol, the findings all proclaiming the superior efficacy and harmlessness of the latter.