Through a left rectus incision under chloroform, the abdominal cavity was found full of blood with a slight odor. The upper portion of the rectum and all of a very redundant sigmoid were split along the free margin of the intestine. Above the sigmoid and in the lower portion of the descending colon two transverse tears crossed the bowel. The effects of the air-blast, by the stretching and checking of the peritoneum as well as by the congestion of the blood-vessels, could be seen as far as the cecum. The small intestines were collapsed and were not congested. The tear in the intestine was not completely through it. The serous and muscular coats were torn through, but the mucous coat was stretched to the thinness of tissue-paper and filled a 10-inch gap.

The mucosa was folded in by interrupted stitches of sea-island cotton placed in the muscular and serous layers of the bowel. A double row of stitches was used throughout. The intestine was opened well above the traumatic area of the bowel in the descending colon. A No. 24 French catheter was passed out of the rectum and fastened in the bowel by one stitch of chromic catgut. The bowel was closed by interrupted stitches of sea-island cotton and a drain was placed in the pelvis. The patient made an uneventful recovery.

In the postoperative treatment the head of the bed was slightly elevated and gas was expelled through the tube in thirty-six hours, when water by the mouth was begun and retained without distention. The pelvic drain was removed in one week and the rectal tube was expelled at the same time. The patient was nourished on liquids for fourteen days and at the end of that time the bowel movements became normal with the aid of an ounce of glycerin injected high up in the sigmoid through a small catheter. No medicine, opiates or purgatives were used by mouth or by hypodermic injection. By palpation the condition of the sigmoid could be judged at all times, and the tube in the intestine drained off the gas and some fecal matter continuously. I made no attempt to rush fecal matter over a very much sewn intestine; consequently, the stretched mucosa of the sigmoid did not slough.

A CASE OF AMEBIC DYSENTERY TREATED WITH EMETIN HYDROCHLORID

R. E. CLOUD, M.D., ENSLEY, ALA.

History.—S. J. G., aged 34, white, male, was born in Kentucky and moved at the age of 17 to Decatur, Ala., where he lived about ten years. From Decatur he came to Birmingham (Ensley), which has been his residence continuously for the past seven years. Eight years ago he spent a month in Houston, Tex., which single trip constitutes the extent of his travels.

The present trouble began three and a half or four years ago with frequent movements of bowels (fifteen or twenty stools in twenty-four hours), straining, pain in hypogastrium and over sacrum and tenderness in epigastrium. Movements consisted mostly of blood and mucus. Attacks of this kind, more or less severe, recurred three or four times a year, usually lasting a month or more. Stools would number two or three a day during intervals between severe attacks, never being entirely free from mucus and blood and practically all accompanied by tenesmus.

At the time that the patient consulted me, September 15, he was suffering with a moderately severe attack which had developed four or five days previous and just reached the point where he had to discontinue work.

Physical Examination.—Height 5 feet 8½ inches, weight 140 pounds (formerly his weight averaged about 160). No evidence found of pathologic condition in thorax. Tenderness in epigastrium and hypogastrium. Stool (passed in a vessel in my office), macroscopically, seemed to consist of only blood and mucus; microscopically, motile amebas were found in the first field.

Treatment and Results.—September 15 the patient had six or eight movements from early morning to noon. Milk diet was prescribed and ½ grain emetin hydrochlorid given hypodermatically.

September 16. Four stools since the day before; a little blood in the first two, mucus in all. Emetin 1 grain.

September 17. Three stools in last twenty-four hours but no red blood in any. General appearance yellow with some mucus. Emetin 1 grain.

September 18. Two well-formed yellow movements, a little mucus, no blood. No emetin given; supply exhausted.

September 19. One stool about 11 a. m., yellow and perfectly normal in appearance. Patient says that this is the first morning that he has not been forced to go to the toilet immediately on rising in probably a year. No pain or straining and only slight tenderness in epigastrium. A final dose of 1½ grains emetin was given, although the case, clinically, seemed cured.

September 24. Returned to work on Monday, September 22; all symptoms absent since the 18th and only one movement per day since that date. Feels "remarkably" well. Stool perfectly normal in appearance, well formed, no suggestion of blood or mucus.

All treatments were given in my office. There was not the least nausea or, in fact, any noticeable constitutional effect following injections although patient had to go home on the car (about a mile) after each dose.

After the second day soft diet was allowed and on the fifth patient was told to eat whatever he desired.

1903½ Avenue E.

A SIMPLE AND PRACTICAL METHOD FOR THE PREPARATION OF PURE BUTTERMILK

SVERRE OFTEDAL, M.D., CLIMAX, MINN.

The rôle of buttermilk, particularly in the artificial feeding of infants and in the treatment of gastro-intestinal disorders of the first two years of life, has made its use a matter of necessity among rich and poor alike. A practical method for its preparation seems, therefore, to be a matter of considerable importance.

This idea was suggested through a study of the recent work of Clock and others along the lines of the lactic acid bacillus principle of treatment, and its use is largely based on the administration of the culture of the *Bacillus lactis bulgaricus*, Type A (Grigoroff), although its preparation is not necessarily dependent on this form of lactic acid bacillus culture preparation.

There are two methods for the preparation of buttermilk according to this principle, the choice of which would depend on whether the physician or trained nurse is able to carry out the work in person, or must leave it to the mother or some one else in charge who has no knowledge of bacteriologic or dietetic principles:

1. In carrying out this method I have obtained the kind assistance and cooperation of the buttermaker in charge of a local creamery. It is a well-known fact that the buttermaker uses a pure culture of lactic acid bacillus in the process of "ripening" the cream. This culture is kept fresh by frequent renewal or "propagation." The mother or nurse is instructed to obtain a small amount of this culture in a bottle or hermetically sealed jar, which has previously been placed in boiling water for a few minutes and then corked or sealed. This must, of course, be kept in a cool place at the home. A pint of whole or skimmed milk, as the case may indicate, is placed in a boiler, preferably a double boiler, brought to a boiling point over a slow fire and then cooled down to room temperature without the lid of the boiler being removed. A teaspoonful of the culture (the spoon which is used having been held in boiling water for a minute or two) is then put into the milk and the whole allowed to stand at room temperature for eight hours, after which it is cooled down and kept ready for use. This method may be carried out in any household which has access to a creamery. It has been my experience that the buttermaker is very willing to cooperate with the physician in the work, and some remuneration may easily be arranged for.

2. This method requires a little more scientific detail, and is best carried out by the physician or trained nurse in person. Whole milk is cooled down to about 50 F. immediately after milking by the vessel being immersed in ice-water. It is then pasteurized at 180 F. for thirty minutes. After cooling down to 80 F. implantation is carried out by the use of the tablets of *B. lactis bulgaricus*, Type A (Grigoroff), in the proportion of six tablets to a half pint of milk. It is kept at this temperature for eight hours, or until the milk is coagulated. If used before coagulation has taken place it will have a bitter, disagreeable taste. After coagulation, however, it assumes a very agreeable odor and taste. The culture, after being thus prepared, may be further propagated, according to the first method, by simple transplantation every twenty-four hours, and an indefinite amount of buttermilk be thus prepared. A culture may be safely carried along for two weeks, when a fresh culture should be prepared.

New and Nonofficial Remedies

THE FOLLOWING ADDITIONAL ARTICLES HAVE BEEN ACCEPTED BY THE COUNCIL ON PHARMACY AND CHEMISTRY OF THE AMERICAN MEDICAL ASSOCIATION. THEIR ACCEPTANCE HAS BEEN BASED LARGELY ON EVIDENCE SUPPLIED BY THE MANUFACTURER OR HIS AGENT AND IN PART ON INVESTIGATION MADE BY OR UNDER THE DIRECTION OF THE COUNCIL. CRITICISMS AND CORRECTIONS ARE ASKED FOR TO AID IN THE REVISION OF THE MATTER BEFORE PUBLICATION IN THE BOOK "NEW AND NONOFFICIAL REMEDIES."

THE COUNCIL DESIRES PHYSICIANS TO UNDERSTAND THAT THE ACCEPTANCE OF AN ARTICLE DOES NOT NECESSARILY MEAN A RECOMMENDATION, BUT THAT, SO FAR AS KNOWN, IT COMPLIES WITH THE RULES ADOPTED BY THE COUNCIL.

W. A. PUCKNER, SECRETARY.

ACNE VACCINE.—(See N. N. R., 1913, p. 221.)

The Abbott Laboratories (The Abbott Alkaloidal Co.), Chicago.

Acne-Bacterin Polyvalent.—Marketed in four syringes containing respectively 25 million, 50 million, 100 million and 200 million killed *Bacillus Acne*.

BACILLUS COLI VACCINE.—(See N. N. R., 1913, p. 221.)

The Abbott Laboratories (The Abbott Alkaloidal Co.), Chicago.

Coli-Bacterin Polyvalent.—Marketed in four syringes containing respectively 50 million, 100 million, 200 million and 400 million killed *Bacillus Coli Communis*.

FRIEDLAENDER VACCINE.—(See N. N. R., 1913, p. 222.)

The Abbott Laboratories (The Abbott Alkaloidal Co.), Chicago.

Friedlander Bacterin Polyvalent.—Marketed in four syringes containing respectively 50 million, 100 million, 200 million and 400 million killed *Friedlander bacilli*.

GONOCOCCUS VACCINE.—(See N. N. R., 1913, p. 223.)

The Abbott Laboratories (The Abbott Alkaloidal Co.), Chicago.

Gonococcus-Bacterin Polyvalent.—Marketed in four syringes containing respectively 50 million, 100 million, 200 million and 400 million killed *Gonococci*.

PNEUMOCOCCUS VACCINE.—(See N. N. R., 1913, p. 224.)

The Abbott Laboratories (The Abbott Alkaloidal Co.), Chicago.

Pneumo-Bacterin Polyvalent.—Marketed in four syringes containing respectively 50 million, 100 million, 200 million and 400 million killed *Pneumococci*.

MIXED VACCINES.—(See N. N. R., 1913, p. 224.)

The Abbott Laboratories (The Abbott Alkaloidal Co.), Chicago.

Staphylo-Acne-Bacterin Polyvalent.—Marketed in four syringes. Syringe 1 contains 250 million mixed *Staphylococci* and 25 million *Acne Bacilli*. Total 275 million killed bacteria. Syringe 2 contains 500 million mixed *Staphylococci* and 50 million *Acne Bacilli*. Total 550 million killed bacteria. Syringe 3 contains 1,000 million mixed

Staphylococci, and 100 million *Acne Bacilli*. Total 1,100 million killed bacteria. Syringe 4 contains 2,000 million mixed *Staphylococci* and 200 million *Acne Bacilli*. Total 2,200 million killed bacteria.

STAPHYLOCOCCUS VACCINES.—(See N. N. R., 1913, p. 225.)

The Abbott Laboratories (The Abbott Alkaloidal Co.), Chicago.

Staphylo-Albus-Bacterin Polyvalent.—Marketed in four syringes, containing respectively 200 million, 400 million, 800 million and 1,000 million killed *Staphylococcus Albus*.

Staphylo-Aureus-Bacterin Polyvalent.—Marketed in four syringes containing respectively 200 million, 400 million, 800 million and 1,000 million killed *Staphylococcus Aureus*.

Staphylo-Bacterins (Human) Albus-Aureus-Citrus.—Marketed in four syringes containing respectively 200 million, 400 million, 800 million and 1,000 million killed bacteria.

STREPTOCOCCUS VACCINE.—(See N. N. R., 1913, p. 226.)

The Abbott Laboratories (The Abbott Alkaloidal Co.), Chicago.

Strepto-Bacterin (Scarlatina Bacterin) Polyvalent.—Marketed in four syringes containing respectively 50 million, 100 million, 200 million and 400 million killed streptococci from scarlet fever cases.

Antistreptococcic Vaccine (Scarlatina Prophylactic).—Marketed in packages of three syringes containing respectively 250 million, 500 million and 1,000 million killed streptococci from scarlet fever cases.

Strepto-Bacterin (Human) Polyvalent.—Marketed in four syringes containing respectively 50 million, 100 million, 200 million and 400 million killed streptococci.

TYPHOID VACCINE.—(See N. N. R., 1913, p. 227.)

The Abbott Laboratories (The Abbott Alkaloidal Co.), Chicago.

Typho-Bacterin Polyvalent.—Marketed in four syringes containing respectively 100 million, 200 million, 400 million and 800 million killed *Typhoid Bacilli*.

Typhoid Prophylactic.—Marketed in packages containing three syringes, containing respectively 500 million, 1,000 million and 1,000 million killed bacteria.

ARHEOL.—Arheol is santalol, $C_{15}H_{20}OH$, a sesquiterpenic alcohol, the chief constituent of sandalwood.

Actions and Uses: The action of arheol is the same as that of sandalwood oil. It is claimed that because of its purity it does not occasion disturbance of the stomach or the kidney. It is asserted to be useful in urethritis, cystitis and vesical catarrh, especially from gonorrhea.

Dosage: 0.40 to 0.60 gm. (6 to 9 grains). Arheol is marketed only in capsules containing 0.20 Gm. (3 grains) of which 9 to 12 capsules are to be taken daily.

Manufactured by Alexander Astler, Paris, France. No U. S. patent. U. S. trademark No. 72,513.

Arheol Capsules.—Each capsule contains Arheol 0.2 Gm. (3 grains).

Arheol is a colorless, oily liquid; specific gravity, 0.979 at 15 C. It is insoluble in water but soluble in alcohol. It boils under 11 mm. pressure at 169 degrees, and under ordinary pressure at about 500 C.

Therapeutics

PUERPERAL INFECTION

This discussion does not aim to be dogmatic, but suggestive. Though septic infection after parturition occurs much less often than even a few years ago, it is still sufficiently frequent to necessitate resort to every possible method of prevention and to the thorough consideration of effective but non-meddlesome treatment.

This infection occurs most frequently in one of two general forms. One is a typical blood-poisoning or septicemia, which is caused by the absorption of toxins or decomposition products of substances that are undergoing putrefactive or other chemical changes in the genital tract. Of course the most frequent substances causing such poisoning are retained fragments of the placenta or membranes, or, if there is any obstruction to the exit of the normal lochia, there may be absorption from this.