our humble mission there, Russia feels grateful. She feels she has our friendship and she asks for more, but not greedily and not for very much. For certain things she desires to pay. This is America's opportunity. If America will help Russia at this time not only with money, but with the means whereby she can start a Russian propaganda to obtain news from America as the other allies are doing, great good will be accomplished. I am happy to say to you that we have already started that propaganda through the generosity of Col. W. B. Thompson, vice chairman of the mission. It was put before our President, and he has accepted it and has further agreed that it will be supported until Russia has adequate information of what is going on in America, and that America is her friend.

I want to repeat: I have come back full of optimism about Russia. She is doing a great work. She has a large army that must be properly cared for. She has a lot of fine men; even though they are socialists they are intensely patriotic, and are learning to be rational through the responsibility that has come to them as members of the government. We owe to them our help to form a stable democracy, and we can do it. If we do that, we shall save American lives in France; if we do that, we shall finally cement the friendship of Russia, which is already ours.

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DEVICES FOR THE SANITATION OF TRENCHES

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Any enhancement of the comfort, hygienic condition and safety of our defenders merits speedy attention. For this reason I venture to suggest some devices that presented themselves to me while reading the description of trench sanitation by Dr. C. C. McCulloch.¹

McCulloch writes: "It naturally adds much to the efficiency of this system if the urine can be handled separately, particularly in incinerator methods. This is done in some cases by separate urine buckets, in others . . . by urine soakage pits."

Fig. 1.—Emergency bucket, used in early trench construction: F, feces; U, urine.

PLAN 1.—A method of separating the liquid from the solid excreta is illustrated in Figure 1 as applicable to the bucket now in use according to McCulloch's illustrations.

A separate bucket for the solids is suspended by a strong flange from the posterior upper rim of the large bucket now in use. It will be noted that the anterior rim of the feces bucket is flattened to increase the space for urinating. The urine flows downward and is thus separated completely.

The entire apparatus may be carried to the disposal pit, as indicated in McCulloch's Figure 3. The solids may be dumped into the pit and the fluid poured anywhere that the sanitary officer may direct.

1. McCulloch, C. C.: Sanitation in the Trenches, THE JOURNAL A. M. A., July 14, 1917, p. 81; July 21, 1917, p. 183.

PLAN 2.—A better apparatus may be made (Fig. 2) of a strong metal bucket the size of that now in use, with metal seat and hinged lid.

Mr. Penfrase of the J. L. Mott Iron Works suggests that a pressed steel bucket would be more economical, because lighter and more durable than galvanized iron.

The advantage of this metal arrangement is obvious. Even the cost, if this deserves to be considered when

Fig. 2.—Metal bucket: A, section; B, top section; a, hinged cover; b, stop to make cover self closing; c, detachable cover; d, support holding feces bucket; e, opening, 8 by 9½ inches; f, feces bucket, with a capacity of 1½ gallons; g, urinal, with a capacity of 2 gallons; h, cover of bucket; i, front of feces bucket.

the welfare of our boys is to be promoted, must be less. Transportation and sanitary conditions also are improved by avoiding wood. This applies to the succeeding devices.

The foregoing buckets may readily be conveyed to the trenches when they are first constructed. When, however, the trenches are fairly well established, the following devices present advantages that appear to me obvious.

PLAN 3.—Noting in McCulloch's diagram (Fig. 1) showing arrangements for food, water and the handling of excreta that under "conservancy" the buckets are placed in close proximity to the urine pits, it occurs to me that Figure 3A presents an ideal plan. It shows a septum with sufficient space for urinating, leaving the entire posterior compartment for the solids. The urinal portion terminates in a tube sufficiently long to fit loosely in a wooden, earthenware or galvanized iron box or in one of the cones illustrated in Figure 4 of McCulloch's article rising from the urine pit.

The bucket and covers now in use may be continued with the exception of the added urinal septum, which is easily soldered on or riveted to the anterior part of the bucket. In this plan, the urine soakage pit must obviously be made larger.

So far I have suggested the continuation of the buckets now in use. I venture to add the following for the careful study of our military hygienists:

PLAN 4.—When the bucket is carried to the disposal pit, the wooden fly proof cover may be left in the trenches, if the feces are covered by a cardboard shaped to the bucket. This would prevent odor and access to flies. A rack for holding a supply of these light covers is provided on the frame support.

A still greater improvement would be to place a waterproof paper container within the feces bucket. This would obviate the disagreeable and unwholesome

scraping and cleansing of the bucket after the mass has been dumped into the disposal pit, and save its wearing.

Before removal, the solid excreta are covered with the cardboard cover, and other refuse of light character is thrown on it to fill the bucket. The bucket, now holding at least threefold more material than in the method illustrated in McCulloch's Figure 3, may be conveyed just as readily to the disposal pit and there dumped for incineration, etc.

Care must be taken not to break off the tube at the lower end of the urinal compartment. It should be made strong, rectangular, and should fit loosely into the urine soakage pit entrance.

PLAN 5.—For trenches that are being occupied for long periods, as now in Flanders, the following arrangement offers obvious advantages:

As indicated in Figure 3B, the urinal portion is made separate, and is secured to the corner supports of the frame anteriorly. The feces bucket is flattened to have its anterior wall correspond to the shape of the posterior wall of the urinal. For additional security and prevention of spilling between the two walls, a

Fig. 3.—Permanent bucket, used in established trench construction: F, feces bucket; U, urinal; s, septum forming a urine conduit anteriorly; in B, separate urinal is secured to frame, and feces bucket is united to it by a flange; e, anterior part of feces bucket hooked on posterior portions of stationary urinal; a, anterior wall of feces bucket; f, posterior wall of separate stationary urinal.

flange is cut in the anterior wall of the septum to fit firmly but loosely over the posterior cut out wall of the urinal. The latter is so arranged that it terminates in a strong tube. In this plan the feces bucket alone is removed, the feces being covered with a paper or metal lid. If the bucket has been lined with paper, the arrangement is obviously ideal.

In Plans 4 and 5 the feces bucket has its capacity increased about 33 per cent., which means less frequent emptying, and consequently less exposure to the enemy's fire, less labor, and more comfort for all concerned. The base under the bucket, shown in Figure 2 of McCulloch's article, is omitted in my device, in order to facilitate transportation in large quantities by sliding the bucket into the preceding one, forming nests.

The man behind the gun is made more efficient and more safe, the chief considerations:

Health a Community Asset.—Health is not the property of the individual who enjoys it, but of the community; disease menaces not only the sufferer, but all with whom he may come in contact.—BERTHA OTT, *Public Health News* (N. J.).

New and Nonofficial Remedies

THE FOLLOWING ADDITIONAL ARTICLES HAVE BEEN ACCEPTED AS CONFORMING TO THE RULES OF THE COUNCIL ON PHARMACY AND CHEMISTRY OF THE AMERICAN MEDICAL ASSOCIATION FOR ADMISSION TO NEW AND NONOFFICIAL REMEDIES. A COPY OF THE RULES ON WHICH THE COUNCIL BASES ITS ACTION WILL BE SENT ON APPLICATION.

W. A. PUCKNER, SECRETARY.

SILVER PROTEIN COMPOUNDS

Silver protein compounds possess the antiseptic action of silver nitrate to some degree. They do not precipitate proteins and are relatively or entirely nonirritant. They are frequently used as substitutes for silver nitrate, especially for the prophylaxis and treatment of the sensitive mucous membranes, particularly in gonorrhea, conjunctivitis and other infections of the urethra and of the eye, ear, nose and throat.

To prepare solutions of silver protein compounds the substance is sprinkled on distilled water and allowed to dissolve; in this way the formation of lumps, which dissolve slowly, is avoided.

SILVER PROTEIN-SQUIBB.—A compound of silver and gelatin, containing 19 to 23 per cent. of silver in organic combination.

Actions and Uses.—See general article on Silver Compounds, under Silver Protein Compounds.

Dosage.—Silver protein-Squibb is used in solutions containing 1 to 25 per cent., or more. It is also used in the form of bougies or suppositories.

Manufactured by E. R. Squibb and Sons, New York. No U. S. patent or trademark.

Silver protein-Squibb is produced by the interaction of silver oxide and gelatin in the presence of an alkali at a temperature of 80 to 100 C. When combination has occurred, the solution is concentrated in vacuo and the product scaled.

Silver protein-Squibb occurs in the form of black, lustrous, odorless, non-hygroscopic scales. It is very soluble in distilled water; insoluble in oils and alcohol.

No precipitate is produced when sodium chloride solution is added to an aqueous solution of silver protein-Squibb. An aqueous solution of silver protein-Squibb does not coagulate albumin; it is decomposed with precipitation by addition of free acids; ferric chloride decolorizes the solution.

Place about 0.5 Gm. silver protein-Squibb, weighed accurately, in a Kjeldahl flask together with 10 Gm. potassium sulphate and 10 Cc. of strong sulphuric acid and heat until the contents are colorless or only faintly yellow and allow to cool. Dilute the contents of the flask to about 100 Cc. with water, add ferric ammonium sulphate test solution as indicator and titrate with tenth-normal potassium sulphocyanate volumetric solution. The silver content corresponds to not less than 19 per cent. nor more than 23 per cent. of metallic silver (1 Cc. tenth-normal potassium sulphocyanate is equivalent to 0.010788 Gm. Ag).

ARSENPHENOL-AMINE HYDROCHLORIDE.—Arsenphenol-Aminae Hydrochloridum.— $\text{HCl} \cdot \text{NH}_2 \cdot \text{OH} \cdot \text{C}_6\text{H}_3\text{As} : \text{As} \cdot \text{C}_6\text{H}_4 \cdot \text{OH} \cdot \text{NH}_2 \cdot \text{HCl} + 2\text{H}_2\text{O}$.—The hydrochloride of 3-diamino-4-dihydroxy-1-arsenobenzene, corresponding to 31.57 per cent. arsenic (As).

Actions, Uses and Dosage.—The same as those of salvarsan (see New and Nonofficial Remedies, 1917, p. 45).

Arsenobenzol (Dermatological Research Laboratories).—A brand of arsenphenol-amine hydrochloride.

Manufactured by the Dermatological Research Laboratories, Philadelphia Polyclinic, Philadelphia, Pa. (General Drug Company, New York City). No U. S. patent or trademark.

Arsenobenzol (Dermatological Research Laboratories), 0.6 Gm. Ampules.—Each hermetically sealed ampule contains 0.6 Gm.

ACETYSALICYLIC ACID (See N. N. R., 1917, p. 265).

Acetylsalicylic Acid-Milliken.—A non-proprietary brand complying with the standards for acetylsalicylic acid. Sold only in the form of capsules and tablets (see below).

Acetylsalicylic Acid-Milliken Capsules, 5 Gr.—Each capsule contains acetylsalicylic acid-Milliken 5 grains.

Acetylsalicylic Acid-Milliken Tablets, 5 Gr.—Each tablet contains acetylsalicylic acid-Milliken 5 grains.

Manufactured by Jno. T. Milliken & Co., St. Louis.

Acetylsalicylic Acid (Aspirin), Monsanto.—A non-proprietary brand complying with the standards for acetylsalicylic acid.

Manufactured by Monsanto Chemical Works, St. Louis.