

**REVIEW OF DOMESTIC POTASH PRODUCTION**  
(Continued from page 2)

estimated the potash in the Lucite Hills at 197,000,000 tons. Butier's figures indicate that in 1914 more than 100,000,000 tons of mill tailings had accumulated in the dumps at copper and gold mines and that many hundred millions of tons of unmined ore had been developed. These data are sufficient to show the magnitude of the supply of this class of raw materials.

Miscellaneous Brines.—Production of potash has been reported from Owens Lake, sea-water bitterns, Great Salt Lake water and the Salduro Salt Marsh, Utah. No estimate of the amount of potash in these brines has been made but the deposits in Salduro Marsh cover a large area to a depth of several feet and may develop into one of the important potash resources of the country.

Nebraska Lakes.—The Nebraska lakes located in the sandhills region in Sheridan and Garden counties have developed into one of the most important sources of potash in the country. Potash brines are obtained both from the surface ponds and lakes and from the sub-surface sands. They vary markedly in concentration and in their content of potash but in general the dissolved salts in most of the brines throughout the sand-hill region are remarkably similar in composition. They consist essentially of the mixture of sulphates, carbonates, and chlorides of sodium and potassium, a comparatively small amount of chlorides being present. The brine from Jesse Lake contains about 12 per cent of solids, of which about 28 per cent is potash. It is one of the best producing brines in the region. The lowest grade of the brine worked is said to contain about 2 per cent of solids of which about 20 per cent is potash. Between these two extremes all grades of brines are represented.

Sufficient data are not at hand to justify an estimate of the quantity of potash available in the sand-hill region. The problem is difficult because the greater part of the potash brine comes from the sub-surface sands and has little relation, as regards quantity, to the lake waters at the surface. Early in 1918 Condra thought it factories already built or in contemplation should run at full capacity, the available supply of high-testing potash brines in this region would be greatly reduced in four years. This estimate now seems low.

Searles Lake, Cal.—Searles lake contains the most important segregation of soluble potassium salts known in the United States. The estimate of 20,000,000 tons of potash (K<sub>2</sub>O) in the brine now seems conservative. Furthermore, the solid salts contain potash, much of which will probably be dissolved as dilute underground waters come into the deposit to replace the brine pumped for working. It is certain that the lake contains enough potash to supply the United States for many years. It is believed that valuable brines may be pumped from an area of more than 13,000 acres. About 1,000 acres of this are at the north end of the lake is patented land is a part of the 2,240 acres owned by the Great Western Borax Company. A little more than 2,000 acres are owned or claimed by the American Irons Corporation. The other portion of the lake amounting to about 9,000 acres has been leased to several different companies under the act of October 2, 1917 (40 Stat. 297).

The American Troma Corporation has already spent about \$4,000,000 in connection with the property. It has built a railroad spur 31 miles long from the Southern Pacific Railroad to the property and has erected a potash plant at a cost of more than a million dollars at the lake and a refining plant at San Pedro, California.

The Solvay Process Company has erected a potash plant and a refinery at the lake at a cost of about \$700,000 and is working brine obtained from the patented land owned by the Pacific Coast Borax Company.

The Crude product obtained at Searles Lake contains about 60 to 65 per cent potassium chloride and about 15 per cent borax. A few carloads of refined salts have been shipped, but so far practically the whole output has been marketed without refining. Sodium chloride, sodium sulphate, sodium carbonate, and borax are all present in the brine and are marketable salts, so that a process whereby these salts are produced as by-products deserves development.

Potash Required by the United States.—In 1912, the year before the war, the United States imported a little more than a million tons of crude and refined salts of various grades, representing 270,720 short tons of potash (K<sub>2</sub>O), valued at \$18,073,865, or an average value as stated in important returns of about \$67 a ton of potash (K<sub>2</sub>O). Of this quantity 44 per cent came as potassium chloride (muriate), 24 per cent as kainite containing 12.4 per cent of K<sub>2</sub>O, 18.5 per cent as manure salts, containing about 20 per cent of K<sub>2</sub>O, 8 per cent as potassium sulphate, and the other 5.5 per cent as various salts, including nitrate, carbonate, caustic, cyanide, and other salts.

An average of 269,656 short tons of potash (K<sub>2</sub>O) was imported annually during the years of 1910 to 1913, inclusive, and 207,059 tons imported in 1914, making an annual average importation for the five years immediately preceding the war, including 1914, of 257,144 tons. During 1915 approximately 45,867 tons were imported.

On the assumption that a surplus of at least \$6,000 tons had accumulated at the end of 1914—and this assumption is believed to be warranted—more than 143,000 tons were available for consumption during 1915. After making the deductions for the oversupply that had permitted the accumulation of a reserve of potash just before the war, the former normal consumption is estimated at 240,000 tons of potash K<sub>2</sub>O a year. Approximately 5 per cent of this quantity (12,000 tons) was used in manufactures, and the remaining 228,000 tons was used in agriculture. The United States produced very little potash before the outbreak of the European war. Practically the entire supply came from the German potash mines in the vicinity of Strassfurt. The importation in recent years are shown in the accompanying tables.

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**W. J. LEO**  
**PLUMBER**  
PHONE  
**1-6-1**

**WHEN HER BACK ACHES**

**A Woman Finds All Her Energy and Ambition Slipping Away.**

Alliance women know how the aches and pains that often come when the kidneys fail make life a burden. Backache, hip pains, headaches, dizzy spells, distressing urinary troubles, are frequent indications of weak kidneys and should be checked in time. Doan's Kidney Pills are for kidneys only. They attack kidney diseases by striking at the cause. Here's woman's words:

Mrs. F. W. Buchman, 311 Yellowstone St., says: "I was pretty well run down with kidney trouble and had a dull, heavy ache in my back. My back was weak and lame and I couldn't stoop over without sharp pains shooting through it. At night I was restless and got up in the morning feeling all worn out. I often became dizzy and had to sit down. Colored specks came before my eyes and for days I had a steady ache through the back of my head. A few boxes of Doan's Kidney Pills, which I bought at Brennan's Drug Store, completely relieved me, putting me in good health."

Price 60c. at all dealers. Don't simply ask for a kidney remedy—get Doan's Kidney Pills—the same that Mrs. Buchman had. Foster-Milburn Co., Mfgs., Buffalo, N. Y. 38-21

If He's Not Too Big. If a millionaire tells you that he was far happier when he earned a dollar a day, remind him of what David said in his haste.

**GRANDMA USED SAGE TEA TO DARKEN HAIR**

She mixed Sulphur with it to Restore Color, Gloss, Youthfulness.

Common garden sage brewed into a heavy tea with sulphur added, will turn gray, streaked and faded hair beautifully dark and luxuriant. Just a few applications will prove a revelation if your hair is fading, streaked or gray. Mixing the Sage Tea and Sulphur recipe at home, though, is troublesome. An easier way is to get a 50-cent bottle of Wyeth's Sage and Sulphur Compound at any drug store all ready for use. This is the old time recipe improved by the addition of other ingredients.

While wispy, gray, faded hair is not sinful, we all desire to retain our youthful appearance and attractiveness. By darkening your hair with Wyeth's Sage and Sulphur Compound, no one can tell, because it does it so naturally, so evenly. You just dampen a sponge or soft brush with it and draw this through your hair, taking one small strand at a time; by morning all gray hairs have disappeared, and, after another application or two, your hair becomes beautifully dark, glossy, soft and luxuriant. This preparation is a delightful toilet requisite and is not intended for the cure, mitigation or prevention of disease.

**Timber in Burma.** Burma grows over a hundred varieties of every sort of timber. Yet up to last year she exported her rubber in packing cases made of wood imported from Japan. It has now been found that they can be made locally at about half the cost.

**Reviving Picture Frames.** Often the gilding on picture frames that are otherwise good has become cracked or soiled. Buy a bottle of liquid gold and apply it to the frame. If large bits have chipped off, remove all before retouching, otherwise the renewed surface will be uneven.

**THE MOST DANGEROUS DISEASE**

No organs of the human body are so important to health and long life as the kidneys. When they slow up and commence to lag in their duties, look out! Find out what the trouble is—without delay. Whenever you feel nervous, weak, dizzy, suffer from sleeplessness, or have pains in the back—take up at once. Your kidneys need help. These are signs to warn you that your kidneys are not performing their functions properly. They are only half doing their work and are allowing impurities to accumulate and be converted into uric acid and other poisons, which are causing you distress and will destroy you unless they are driven from your system.

Get some GOLD MEDAL Haaslem Oil Capsules at once. They are an old, tried preparation used all over the world for centuries. They contain only old-fashioned, soothing oils combined with strength-giving and system-cleansing herbs, well known and used by physicians in their daily practice. GOLD MEDAL Haaslem Oil Capsules are imported direct from the laboratories in Holland. They are convenient to take, and will either give prompt relief of your money will be refunded. Ask for them at any drug store, but be sure to get the original imported GOLD MEDAL brand. Accept no substitutes. In sealed packages. Three sizes.

**Bevo**  
THE BEVERAGE

The all-year-round soft drink

Serve your guests with Bevo—goes especially well with light repasts, buffet suppers, chafing dish dainties, fish and lobster dishes, wild game, cold cuts of meats, sausages, sardines, cheese or spaghetti. — Bevo is the friend of food and fellowship.

Sold everywhere—Families supplied by grocers, druggists and dealers. Visitors are invited to inspect our plant.

ANHEUSER-BUSCH ST. LOUIS

Wm. King Co., DISTRIBUTORS ALLIANCE NEWS 3-L

**WRIGLEY'S**

5c a package before the war

5c a package during the war

5c a package NOW

**THE FLAVOR LASTS SO DOES THE PRICE!**

UNITED STATES PATENT OFFICE COUPONS

**BEGIN HOT WATER DRINKING IF YOU DON'T FEEL RIGHT**

Says glass of hot water with phosphate before breakfast washes out poisons.

If you wake up with a bad taste, bad breath and tongue is coated; if your head is dull or aching; if what you eat sours and forms gas and acid in stomach, or you are bilious, constipated, nervous, sallow and can't get feeling just right, begin inside bathing. Drink before breakfast, a glass of real hot water with a teaspoonful of limestone phosphate in it. This will flush the poisons and toxins from stomach, liver, kidneys and bowels, and cleanse, sweeten and purify the entire alimentary tract. Do your inside bathing immediately upon arising in the morning to wash out of the system all the previous day's poisonous waste, gases and sour bile before putting more food into the stomach.

To feel like young folks feel; like you felt before your blood, nerves and muscles became loaded with body impurities, get from your pharmacist a quarter pound of limestone phosphate which is inexpensive and almost tasteless, except for a sourish twinge which is not unpleasant.

Just as soap and hot water act on the skin, cleansing, sweetening and freshening, so hot water and limestone phosphate act on the stomach, liver, kidneys and bowels. Men and women who are usually constipated, bilious, headachy or have any stomach disorder should begin this inside bathing before breakfast. They are assured they will become real cranks on the subject shortly.

**Put Up Every Pound of Fruit You Can Get This Summer**

Delicious Jams, Jellies and Preserves made by this recipe:

Many a woman hesitates to try putting up fruit at home. She fears she will only waste expensive materials.

It really is very simple. Just make your preserving syrup with 1/2 Karo (Red Label) and 1/2 sugar instead of sugar alone.

You can then be as sure of your results as the woman who always has "luck" with her preserving.

Nice fine, clear Karo Syrup has a natural affinity for the fruit juices. It blends the sugar with the juice—brings out the rich "fruity" flavor, and insures firm jams and jellies that never "candy" in the glass.

A well-filled fruit pantry will give you much pleasure this winter, when fresh fruits are scarce and high, if you just use Karo Syrup with your sugar.

For Cooking, Baking and Candy Making Karo (Red Label) is used in millions of homes. In all cooking and baking recipes use Karo instead of sugar. It is sweet, of delicate flavor, and brings out the natural flavor of the food.

**FREE** Preserving is easy when you have the sixty-eight page Corn Products Cook Book handy. Wonderful recipes—easy to follow. Beautiful illustrations. Write us today for it. It is free.

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P. O. Box 161 New York City

Use 1/2 Karo (red label) and 1/2 sugar

Makes perfect jams, jellies and preserves.

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