PHARMACEUTICAL FORMULAS

PROPOSED FOR A. PH. A. RECIPE BOOK.

A complete list of these Proposed Formulas since February 1912 was published in an index in the December 1916 number of the JOURNAL. The Committee will continue its work in monthly instalments in this Department of the JOURNAL. Members of the A. Ph. A. are earnestly requested to send suitable formulas and also criticisms of those published to the Chairman.

Otto Raubenheimer, Brooklyn, N. Y.

Contributed by Irwin A. Becker, Michael Reese Hospital, Chicago.

The following is a copy of a circular which has been distributed among the members of the Society of Clinical Surgery, according to a vote at the Baltimore meeting, Oct. 20, 1916.

No. 500.

CARREL'S FORMULA FOR MAKING DAKIN SOLUTION.

Preparation of Dakin Solution. Technique of Dr. Maurice Daufresne.

Preparation of Dakin Solution.

The solution of sodium hypochlorite for surgical use must be free of caustic alkali: it must only contain 0.45 to 0.50 percent of hypochlorite. Under 0.45 percent it is not active enough and above 0.50 percent it is irritant.

With chlorinated lime (bleaching powder) having 25 percent of active chlorine the quantities of necessary substances to prepare 10 liters of solution are the following:

Chlorinated Lime (bleaching powder) 25 percent of Cl	200 Gm.
Sodium Carbonate, dry (soda of Solvay)	100 Gm.
Sodium Bicarbonate	80 Gm.

Put into a 12-liter flask the two hundred Gm. of chlorinated lime and five liters of ordinary water; shake vigorously for a few minutes, and leave in contact for six to twelve hours: one night for example.

At the same time dissolve in five liters of cold ordinary water the sodium carbonate and bicarbonate.

After leaving from six to twelve hours, pour the salt solution into the flask containing the macerated chlorinated lime; shake vigorously for a few minutes and leave, to allow the calcium carbonate to be precipitated. In about one-half hour, siphon the liquid and filter with a double paper to obtain a good clear liquid. This should always be kept in a dark place.

Titration of Chlorinated Lime (Bleaching Powder).

Because of the variation of the products now obtained in the market, it is necessary to determine the quantity of active chlorine contained in the chlorinated lime which is to be used. This is in order to employ an exact calculated quantity according to its concentration.

The test is made in the following manner: Take from the different parts of the jar a small quantity of bleaching powder to have an average sample weigh 20 Gm., mix as well as possible in a liter of water and leave in contact a few hours. Measure 10 mils of a clear fluid and add 20 mils of a 10 percent solution of potassium iodide, 2 mils of acetic acid or hydrochloric acid; then put drop by drop into the mixture a decinormal solution of sodium thiosulphate (2.48 percent) until decoloration. The number of mils of thiosulphate employed, multiplied by 1,775, will give the weight N of active chlorine contained in 100 Gm. of chlorinated lime.

The test must be made every time a new product is received. When the result obtained differs more or less than 25 percent, it will be necessary to reduce or enlarge the proportion of the three products contained in the preparation. This can be obtained easily by multiplying each of the three numbers, 200, 100, 80 by the factor $\frac{25}{N}$ in which N represents the weight of the active chlorine percent of chlorinated lime.

Titration of Dakin Solution.

Measure 10 mils of the solution, add 20 mils of potassium iodide 1 in 10, 2 mils of acetic acid, and drop by drop a decinormal solution of sodium thiosulphate until decoloration. The number

of mils used multiplied by 0.03725 will give the weight of sodium hypochlorite contained in 100 mils of the solution.

Never heat the solution; and if in a case of urgency one is obliged to resort to the trituration of chlorinated lime in a mortar, emply water only, never salt solution.

Test of the Alkalinity of Dakin Solution.

To easily differentiate the solution obtained by this process from the commercial hypochlorites, pour into a glass about 20 mils of the solution and drop on the surface of the liquid a few centigrammes of phenolphthalein in powder. The correct solution does not give any coloration, while Labarraque's solution and Eau de Javelle will give an intense red color, which shows in the last two solutions existence of free caustic alkali.

No. 501.

SPECIES BECHICAE.

Cough Species.

Hustentee.

D. M.

Althaea	45 Gm.
Glycyrrhiza	45 Gm.
Fennel	10 Gm.

Make a coarse species.

No. 502.

SPECIES AD ENEMA.

Enema Species or Herbs.

Klistierkraeuter.

D. M.

Linseed	1 part
Matricaria	1 part
Althaea Leaves, N. F.	2 parts

Crush the seed and cut the herbs. Used as an infusion for enemas.

No. 503.

SPECIES AD FOMENTUM.

Foment Herbs.

Blächungskraeuter.

D. M.

Humulus	40 Gm.
Lavender Flowers	
Serpyllum	
Rosemary	
Matricaria, of each	15 Gm.

Make a coarse species. Prepare an infusion and use this as a hot application against colic and wind colic.

No. 504.

SPECIES DIAPHORETICAE.

Diaphoretic Tea.

Muenchen.

Tilia Flowers	
Sambucus, N. F.	
Verbascum, N. F.	equal parts

Cut the mullein flowers and mix with other ingredients.

Used in the form of an infusion as a diaphoretic, being superior to linden flowers alone.

No. 505.

SPECIES HERBARUM ALPINARUM.

Species Alpinae.

Alpine Herb Tea. Alpine Tea.

Alpenkraeutertee.

Muenchen.

Frangula	40 parts
Senna	20 parts
Tilia Flowers	
Sambucus, N. F., of each	10 parts
Verbascum, N. F.	
Acacia Flowers	
Rest Harrow Root	
Lovage Root, of each	5 parts

Prepare coarse species.

A very popular remedy, also in the United States, for which reason the publication of a reliable formula is desirable. Used as a laxative by making an infusion from about 2 teaspoonfuls of the species. Also recommended against chronic constipation.

No. 506.

SPECIES INFANTIUM.

Infant Tea. Kindertee.

Beruhigungstee.

Muenchen.

Matricaria	
Fennel, of each	10 parts
Althaea	
Glycyrrhiza	
Triticum, of each	20 parts
Parsley Fruit, U. S. P. IX	5 parts

Mix the cut roots with the flowers and fruits.

Soda Fountain Requisites.

It has been decided that the A. Ph. A. Recipe Book will contain Formulas for Soda Fountain Syrups, Flavorings, Ices, Ice Creams, etc., etc. This subject has been referred to a Sub-Committee of which Mr. Wm. Gray, Chicago, contributes the following formulas, accompanied with

the comments: "The formulas are the result of long experience with high-grade trade. They have been thoroughly tried and I can guarantee that they will give the utmost satisfaction."

It will be noticed that in the contributed formulas the quantity of some of the solids, such as sugar and fruits, are *not given by weight but by volume*, namely in mils. This procedure is also followed in other recipes, especially in cook books.

No. 507.

CARAMEL SYRUP.

Syrupy Caramel.

Sugar Coloring.

Sugar	4000 mils
Water	2000 mils

Melt sugar in an iron frying pan. By the time the sugar is melted it is caramelized. Then add the water, previously heated to boiling point and boil to the consistency of a syrup.

No. 508.

ESSENTIAL TINCTURES.

For Flavoring.

From time to time as convenient, place thin sliced outer Orange, Lemon or Tangerine Orange Peel (free from the white inside peel), into a wide mouth bottle about half filled with Alcohol "190 proof preferred," always keeping the alcohol above the peel. After bottle is filled with closely packed peel, allow to stand for one week, then filter.

No. 509.

EXTRACT OF VANILLIN.

Synthetic.

Vanillin	30 Gm.
Coumarin	0.33 Gm.
Alcohol	150 mils
Glycerin	180 mils
Caramel	40 mils
Water, a sufficient quantity,	
To make	4000 mils

No. 510.

SYRUP OF ORANGE.

For Fountain.

Essential Tincture Orange Peel	45 mils
Orange Flower Water	15 mils
Solution Citric Acid, 50%	60 mils
Syrup, a sufficient quantity,	
To make	4000 mils

No. 511.

RED CURRANT ICE.

Red Currants	2000 mils
Water	2000 mils
Sugar	1000 mils
Gelatin	15 Gm.

No. 512.

TANGERINE ORANGE SYRUP.

For Fountain.

Essential Tincture Tangerine Orange Peel	45 mils
Solution Citric Acid, 50%	90 mils
Tincture Cudbear	4 mils
Syrup, a sufficient quantity,	
To make	4000 mils

Note.—Especially fine for Orange Phosphate.

No. 513.

SYRUP OF LEMON.

For Fountain.

Essential Tincture Lemon Peel	60 mils
Solution Citric Acid, 50%	120 mils
Syrup, a sufficient quantity,	
To make	4000 mils

No. 514.

SARSAPARILLA FLAVORING.

For Soda Syrup.

Methyl Salicylate	16 mils
Oil of Sassafras	12 mils
Oil of Anise	4 mils
Alcohol	360 mils
Distilled Water	120 mils

No. 515.

SARSAPARILLA SYRUP.

For Soda Water.

Sarsaparilla Flavoring	50 mils
Caramel	10 mils
Syrup, a sufficient quantity,	
To make	4000 mils

No. 516.

CRANBERRY ICE.

Cranberries	2000 mils
Water	2000 mils
Sugar	1000 mils
Juice of 1 Lemon	
Gelatin	15 Gm.

Note: Cranberries are cooked in water until soft, then strained and sugar added.

No. 517.

PINEAPPLE FRUIT ICE.

Grated Pineapple	1000 mils
Water	2000 mils
Syrup	1000 mils
Juice of 2 Lemons	
Gelatin	15 Gm.

No. 518.

STRAWBERRY FRUIT ICE.

Fresh Strawberries	3000 mils
Water	750 mils
Sugar	750 mils
Juice of 3 Lemons	

No. 519.

RASPBERRY FRUIT ICE.

Raspberries, fresh	3000 mils
Water	750 mils
Sugar	750 mils
Juice of 3 Lemons	

No. 520.

GRAPE ICE.

Grape Juice, unfermented	1000 mils
Water	1500 mils
Syrup	1000 mils
Orange Juice	250 mils
Lemon Juice	125 mils

No. 521.

LEMON SHERBET.

Milk	3500 mils
Sugar	1000 mils
Lemon Juice	135 mils

No. 522.

LEMON ICE.

Lemon Juice	600 mils
Syrup	2000 mils
Water	1500 mils
Essential Tincture Lemon	30 mils
Gelatin	15 Gm.

No. 523.

ORANGE FRUIT ICE.

Orange Juice	1000 mils
Syrup	1000 mils
Water	2000 mils
Essential Tincture Orange	30 mils

No. 524.

CHERRY FRUIT ICE.

Red Cherry Juice	3000 mils
Water	500 mils
Sugar	1000 mils
Juice of 2 Lemons	1000 mils

No. 525.

MIXED FRUIT ICE.

Orange Juice	750 mils
Lemon Juice	250 mils
Pineapple Juice	1000 mils
Water	1000 mils
Syrup	1000 mils

3 Bananas (washed through sieve).

No. 526.

PEACH SURPRISE.

Peaches, peeled and mashed	1000 mils
Sugar	250 mils
Water	500 mils

Add the beaten whites of 3 eggs. Freeze as any ice till quite stiff.

No. 527.

MAPLE ICE CREAM.

Cream	3500 mils
Sugar	750 mils
Mapeline	16 mils
Gelatin	15 Gm.

No. 528.

NEW YORK ICE CREAM.

Cream	3500 mils
Sugar	625 mils
Extract Vanillin	60 mils
Gelatin	15 Gm.
Egg Yolks	12

No. 529.

CHERRY SHERBET.

Milk	3500 mils
Sugar	500 mils
Red Cherry Juice	250 mils
Spirit of Almond, U. S. P.	10 mils
Essential Tincture Orange	8 mils
Extract Vanillin	120 mils
Solution Citric Acid, 50%	45 mils

No. 530.

CHERRY ICE CREAM.

Cream	3500 mils
Sugar	500 mils
Red Cherry Juice	250 mils
Spirit of Almond, U. S. P.	10 mils
Gelatin	15 Gm.

Coloring to suit.

No. 531.

PISTACHIO ICE CREAM.

Chopped blanched Pistachio Nuts	500 Gm.
Spirit of Almond, U. S. P.	4 mils
Sugar	1000 mils
Gelatin	15 Gm.
Cream	3500 mils

Color green.

No. 532.

CHOCOLATE ICE CREAM.

Cream	3500 mils
Chocolate or Cocoa	180 Gm.
Sugar	750 mils
Extract Vanillin	60 mils
Gelatin	15 Gm.

No. 533.

PEACH ICE CREAM.

Fresh Peach Pulp	1000 mils
Cream	2750 mils
Sugar	750 mils
Gelatin	15 Gm.

Juice of 3 Lemons.