Soap Recipes From A Hundred Years Ago

We are pleased to present these interesting natural soap recipes from yesteryear. Some are for purposes needed only in bygone times; other soaps are still used even to this day. Most soaps contain pure essential oils, rather than synthetic fragrances and harmful chemicals.

When you look at these soap recipes, you realize what hardy people our ancestors were, and how much work went into making everyday needs. It makes you thankful to be to still obtain these soaps, which can be as gentle and free of harshness as a newborn baby, and as easy to come by as a click of the computer mouse or a trip to a specialty store.

Some of these soap ingredients might be hard to come by these days. For instance, where would we get a pound of ox gall today? How much is a drachm or a minim? Can you find one of those in your measuring instruments? And the huge batches that were made would take a Hercules to pour the soaps from the kettle.

We hope you enjoy the information. It is intended for entertainment and historical education.

A glossary at the end helps explain some old words and terms.

But you don't need to make these to get away from chemicals. We think that you will enjoy the soaps, creams and lotions etc. available at http://www.all-naturalsoap.com. The soaps, lotions, creams, lip balms, and bath salts and teas, like the ingredients in some of these old soap recipes, are all made from natural ingredients and are gentle to the skin. Even the mechanics' soap available there is made of all-natural grease 'cutters'.

TOILET SOAPS.

[For face, hands, and body. Not for washing your toilet!]

The question as to the qualities of toilet soaps has a high therapeutical significance. Impurity of complexion and morbid anomalies of the skin are produced by the use of poor and unsuitable soaps. The latter, chemically regarded, are salts of fatty acids, and are prepared from fats and a lye, the two substances being mixed in a vessel and brought to a boil, soda lye being used in the preparation of toilet soaps. In boiling together a fat and a lye, the former is resolved into its component parts, a fatty acid and glycerine. The acid unites with the soda lye, forming a salt, which is regarded as soap. By the addition of sodium chloride, this (the soap) is separated and swims on the residual liquid as "kern," or granulated soap. Good soaps were formerly made only from animal fats, but some of the vegetable oils or fats have been found to also make excellent soap. Among them the best is cacao butter.

From a hygienic standpoint it must be accepted as a law that a good toilet soap must contain no free (uncombined) alkali, every particle of it must be chemically bound up with fatty acid to the condition of a salt, and the resultant soap should be neutral in reaction. Many of the soaps found in commerce today contain free alkali, and exert a harmful effect upon the skin of those who use them. Such soaps may readily be detected by bringing them into contact with the tongue. If free alkali be present it will make itself known by causing a burning sensation—something that a good toilet soap should never do.

The efficiency of soap depends upon the fact that in the presence of an abundance of water the saponified fat is decomposed into acid and basic salts, in which the impurities of the skin are dissolved and are washed away by the further application of water. Good soap exerts its effects on the outer layer of the skin, the so-called horny (epithelial) layer, which in soapy water swells up and is, in fact, partially dissolved in the medium and washed away. This fact, however, is unimportant, since the superficial skin cells are reproduced with extraordinary rapidity and ease. When a soap contains or carries free alkali, the caustic effects of the latter are carried further and deeper reaching below the epithelial cells and attacking the true skin, in which it causes minute rifts and splits and renders it sore and painful. Good soap, on the contrary, makes the skin smooth and soft.

Since the employment of poor soaps works so injuriously upon the skin, many persons never, or rarely ever, use soap but wash the face in water alone, or with a little almond bran added. Their skins cannot bear the regular application of poor soap. This, however, applies only to poor, free-alkali containing soaps. Any skin can bear without injury any amount of a good toilet soap, free from uncombined alkali and other impurities. The habit of washing the face with water only, without the use of soap, must be regarded as one altogether bad, since the deposits on the skin, mostly dust particles and dead epithelial cells, mingling with the oily or greasy matter exuded from fat glands of the skin —excellent nutrient media for colonies of' bacteria —cannot be got rid of by water alone. Rubbing only forces the mass into the openings in the skin (the sweat glands, fat glands, etc.), and stops them up. In this way are produced the so called "black heads" and other spots and blotches on the skin usually referred to by the uneducated, or partially educated as "parasites." The complexion is in this manner injured quite as much by the failure to use good soap as by the use of a poor or bad article.

All of the skin troubles referred to may be totally avoided by the daily use of a neutral, alkali-free soap, and the complexion thus kept fresh and pure. Completely neutral soaps, however, are more difficult to manufacture requiring more skill and care than those in which no attention is paid to excess of alkali— and consequently cost more than the general public are accustomed, or, in fact, care to pay for soaps. While this is true, one must not judge the quality of a soap by the price demanded for it.

Some of the manufacturers of miserable soaps charge the public some of the most outrageous prices. Neither can a soap be judged by its odor or its style of package and putting on the market.

To give a soap an agreeable odor the manufacturers add to it, just when it commences to cool off, an etheric oil (such as altar of rose, oil of violets, bergamot oil, etc.), or some balsamic material (such as tincture of benzoin, for instance). It should be known, however, that while grateful to the olfactory nerves [your sense of smell], these substances do not add one particle to the value of the soap, either as a detergent or as a preserver of the skin or complexion.

Especially harmful to the skin are soaps containing foreign substances, such, for instance, as the starches, gelatin, clay, chalk, gums, or rosins, potato flour, etc., which are generally added to increase the weight of soap. Such soaps are designated, very significantly, "filled soaps," and, as a class, are to be avoided if for no other reason, on account of their lack of true soap content. The use of these fillers should be regarded as a criminal falsification under the laws regarding articles of domestic use, since they are sold at a relatively high price yet contain foreign matter, harmful to health.

RECIPES FOR COLD-STIRRED TOILET SOAPS.

	Parts by weight
I.—Cocoanut oil	30
Castor oil	3
Caustic soda lye (38° Be),	17 1/2

Pink Soap.—II. Parts by weight

Pink No. 114	10
Lemon oil	60
Cedar-wood oil	60
Citronella oil	50
Wintergreen oil	15

Pale-Yellow Soap. —Parts by weight

Orange No. 410.	10
Citronella oil	60
Sassafras oil	60
Lavender oil	45
Wintergreen oil	15
Aniseed oil	25

Toilet Soap Powder.—

Marseilles soap, powdered	100 parts
Bran of almonds	50 parts
Lavender oil	5 parts
Thyme oil	3 parts
Spike oil	2 parts
Citronella oil	2 parts

Soft Toilet Soaps.—Soft toilet soaps or creams may be prepared from fresh lard with a small addition of cocoanut oil and caustic potash solution, by the cold process or by boiling. For the cold process, 23 parts of fresh lard and 2 parts of Cochin cocoanut oil are warmed in a jacketed pan, and when the temperature reaches 113° F. are treated with 9 parts of caustic potash and 21 parts of caustic soda solution, both of 38° Be. strength, the whole being stirred until saponification is complete. The soap is transferred to a large marble mortar and pounded along with the following scenting ingredients: 0.15 parts of oil of bitter almonds and 0.02 parts of oil of geranium rose, or 0.1 part of the latter, and 0.05 parts of lemon oil. The warm process is preferable, experience having shown that boiling is essential to the proper saponification of the fats. In this method, 80 parts of lard and 20 parts of Cochin cocoanut oil are melted together in a large pan, 100 parts of potash lye (20° Be.) being then crutched in by degrees, and the mass raised to boiling point. The combined influence of the heat and crutching vaporizes part of the water in the lye, and the soap thickens. When the soap has combined, the fire is made up, and another 80 parts of the same potash lye are crutched in gradually. The soap gets thicker and thicker as the water is expelled and finally throws up "roses" on the surface, indicating that it is nearly finished. At this stage it must be crutched vigorously, to prevent scorching against the bottom of the pan and the resulting more or less dark coloration. The evaporation period may be shortened by using only 50 to 60 parts of lye at first, and fitting

with lye of 25° to 30° strength. For working on the large scale iron pans heated by steam are used, a few makers employing silver lined vessels, which have the advantage that they are not attacked by the alkali. Tinned copper pans are also useful. The process takes from 7 to 8 hours and when the soap is finished it is transferred into stoneware vessels for storage. Clear vegetable oils (castor oil) may be used, but the soaps lack the requisite nacreous luster required.

TRANSPARENT SOAPS.

The mode of production is the same for all. The fats are melted together sifted into a double boiler, and the lye is stirred in at 111° F. Cover up for an hour, steam being allowed to enter slowly. There is now a clear, grain-like soap in the kettle, into which the sugar solution and the alcohol are crutched, whereupon the kettle is covered up. If cuttings are to be used, they are now added. When same are melted, the kettle will contain a thin, clear soap, which is colored and scented as per directions, and subsequently filled into little iron molds and cooled.

Rose-Glycerine Soap.—

I.—Cochin cocoanut oil	70,000 parts
Compressed tallow	40,000 parts
Castor oil	30,000 parts
Caustic soda lye, 38° Be	79,000 parts
Sugar	54,000 parts
Dissolved in Water	60,000 parts
Alcohol	40,000 parts
Geranium oil (African)	250 parts
Lemon oil	200 parts
Palmarosa oil	1,200 parts
Bergamot oil	80 parts

Benzoin-Glycerine Soap.—

II.—Cochin cocoanut oil	66,000 parts
Compressed tallow	31,000 parts
Castor oil	35,000 parts
Caustic soda lye 38° Be	66,000 parts
Sugar	35,000 parts
Dissolved in Water	40,000 parts
Alcohol	35,000 parts
Brown, No. 120	200 parts
Powdered benzoin (Siam)	4,200 parts
Styrax liquid	1,750 parts
Tincture of benzoin	1,400 parts
Peru balsam	700 parts
Lemon oil	200 parts
Clove oil	70 parts

Sunflower-Glycerine Soap.—

III.—Cochin cocoanut oil	70,000 parts
Compressed tallow	50.000 parts
Castor oil	23,000 parts
Caustic soda lye, 39° Be	71,000 parts
Sugar	40,000 parts
Dissolved in water	30,000 parts
Alcohol	40,000 parts
Brown, No. 55.	250 parts
Geranium oil	720 parts
Bergamot oil	300 parts
Cedar-wood oil	120 parts
Palmarosa oil	400 parts
Vanillin	10 parts
Tonka tincture	400 parts

Miscellaneous FORMULAS:

Szegedin Soap.—Tallow, 120 parts; palm kernel oil, 80 parts. Saponify well with about 200 parts of Lye of 24° Be. and add, with constant stirring, the following fillings in rotation, viz., potash solution, 20° Be., 150 parts, and cooling salt solution 20° Be., 380 parts.

Instrument Soap.—A soap for cleaning surgical instruments, and other articles of polished steel, which have become specked with rust by exposure, is made by adding precipitated chalk to a strong solution of cyanide [*deadly poison!*] of potassium in water, until a cream-like paste is obtained. Add to this white castile soap in fine shavings, and rub the whole together in a mortar, until thoroughly incorporated. The article to be cleaned should be first immersed, if possible, in a

solution of 1 part of cyanide [*deadly poison!*] of potash in 4 parts of water, and kept there until the surface dirt and rust disappears. It should then be polished with the soap, made as above directed.

Stain-Removing Soaps.—These are prepared in two ways, either by making a special soap, or by mixing ordinary soap with special detergents. A good recipe is as follows:

I.—Ceylon coconut or palm seed oil	320 pounds
Caustic soda lye 38° Be	160 pounds
Carbonate of potash, 20° Be	56 pounds
Oil of turpentine	9 pounds
Finely powdered kieselguhr	280 pounds
Brilliant green	2 pounds

The oil having been fused, the dye is mixed with some of it and stirred into the contents of the pan. The kieselguhr is then crutched in from a sieve, then the lye, and then the carbonate of potash. These liquids are poured in in a thin stream. When the soap begins to thicken, add the turpentine, mold, and cover up the molds.

II.—Rosin grain soap	1,000 pounds
Talc (made to a paste with weak carbonate of potash)	100 pounds
Oil of turpentine	4 pounds
Benzine	3 pounds

Mix the talc and soap by heat, and when cool enough add the turpentine and benzine, and mold.

III.— Cocoanut oil	600 pounds
Tallow	400 pounds
Caustic soda lye	500 pounds
Fresh ox gall	200 pounds
Oil of turpentine	12 pounds
Ammonia (sp. gr., 0.91)	6 pounds
Benzine	5 pounds

Saponify by heat, cool, add the gall and the volatile liquids, and mold.

Soap Substitutes.—

I.—Linseed oil	28 pounds
Sulphur	8 pounds
Aluminum soap	28 pounds
Oil of turpentine	4 pounds

II.—Aluminum soap	15 pounds
Almadina	25 pounds
Caoutchouc	50 pounds
Sulphur	6 pounds
Oleum succini	4 pounds

Shampoo Soap.—

Linseed oil	20 parts
Malaga olive oil	20 parts
Caustic potash	9 1/2 parts
Alcohol	1 part.
Water	30 parts

Warm the mixed oils on a large water bath, then the potash and water in another vessel, heating both to 158° by and adding the latter hot solution to the hot oil while stirring briskly. Now add and thoroughly mix the alcohol. Stop stirring, keep the heat at 158° F. until the mass becomes clear and a small quantity dissolves in boiling water without globules of oil separating. Set aside for a few days before using to make the liquid soap.

The alcohol may be omitted if a transparent product is immaterial.

Sapo Durus.—

Olive oil	100 parts
Soda lye, sp. gr., 1.33.	50 parts
Alcohol (90 per cent).	30 parts

Heat on a steam bath until saponification is complete. The soap thus formed is dissolved in 300 parts of hot distilled water, and salted out by adding a filtered solution of 25 parts of sodium chloride and 5 parts of crystallized sodium carbonate in 80 parts of water.

Sapo Mollis. -

Olive oil	100 parts
Solid potassium hydroxide	21 parts

Water	100 parts
Alcohol (90 per cent).	20 parts

Boil by means of a steam bath until the oil is saponified, adding, if necessary a little more spirit to assist the saponification.

Sand Soap.—Cocoa oil, 24 parts, soda lye, 38° Be., 12 parts, sand, finely sifted, 28 parts; cassia oil, .0100 parts; sassafras oil, .0100 parts.

Salicylic Soap.—When salicylic acid is used in soap it decomposes, as a rule, and an alkali salicylate is formed which the skin does not absorb. A German chemist claims to have overcome this defect by thoroughly eliminating all water from potash or soda soap, then mixing it with Vaseline, heating the mixture, and incorporating free salicylic acid with the resulting mass. The absence of moisture prevents any decomposition of the salicylic acid.

Olein Soap Substitute. - Fish oil or other animal oil is stirred up with sulphuric acid, and then treated with water. After another stirring, the whole is left to settle, and separate into layers, whereupon the acid and water are drawn off, and caustic soda solution is stirred in with the oil. The finishing stage consists in stirring in refined mineral oil, magnesium chloride barium chloride and pure seal or whale oil, in succession.

Mottled Soap.—Tallow, 30 parts; palm kernel oil, 270 parts; lye, 20°, 347 ½ parts, potassium chloride solution, 20° 37 ½ parts. After everything has been boiled into a soap, crutch the following dye solution into it: Water, 5 ½ parts blue, red, or black, .0315 parts; water glass, 38°, 10 parts; and lye, 38°, 1 ½ Parts.

Laundry Soap.—A good, common hard soap may be made from clean tallow or lard and caustic soda, without any very special skill in manipulation. The caustic soda indicated is a crude article which may now be obtained from wholesale druggists in quantities to suit, at a very moderate price. A lye of average strength is made by dissolving it in water in the proportion of about 2 pounds to the gallon. For the saponification of lard, to a given quantity of the grease is melted at a low heat, and ¼ its weight of lye is then added in small portions with constant stirring; when incorporation has been thoroughly effected, another portion of lye equal to the first is added as before, and the mixture kept at a gentle heat until saponification appears to be complete. If the soap does not readily separate from the liquid, more lye should be added, the soap being insoluble in strong lye. When separation has occurred, pour off the lye, add water to the mass, heat until dissolved, and again separate by the use of more strong lye or a strong solution of common salt. The latter part of the process is designed to purify the soap and may be omitted where only a cruder article is required. The soap is finally remelted on a water bath, kept at a gentle heat until as much water as possible is expelled, and then poured into frames or molds to set.

Dog Soap.— Petroleum	5	Parts by weight
Wax	4	"
Alcohol	5	"
Good laundry soap	15	"

Heat the petroleum, wax, and alcohol on a water bath until they are well mixed and dissolve in the mixture the soap cut in fine shavings. This may be used on man or beast for driving away vermin.

Liquid Tar Soap (Sapo Picis liquidus).—

Wood tar	25 parts
Hebra's soap spirit	75 parts

Ox-Gall Soap for Cleansing Silk Stuffs.—To wash fine silk stuffs, such as piece goods, ribbons, etc., employ a soap containing a certain amount of ox gall, a product that is not surpassed for the purpose. In making this soap the following directions will be found of advantage: Heat 1 pound of coconut oil to 100° F. in a copper kettle. While stirring vigorously add 1/2 pound of caustic soda lye of 30° Baume. In a separate vessel heat 1/2 pound of white Venice turpentine, and stir this in the soap in the copper kettle. Cover the kettle well and let it stand, mildly warmed for 4 hours, when the temperature can be again raised

until the mass is quite hot and flows clear; then add the pound of ox gall to it. Now pulverize some good, perfectly dry grain soap, and stir in as much of it as will make the contents of the copper kettle so hard that it will yield slightly to the pressure of the fingers. From 1 to 2 pounds is all the grain soak required for the above quantity of gall soap. When cooled, cut out the soap and shape into bars. This is an indispensable adjunct to the dyer and cleaner, as it will not injure the most delicate color.

SOAP-BUBBLE LIQUIDS.

—White hard soap	25 parts
Glycerine	15 parts
Water	1,000 parts

II.—Dry castile soap.	2 parts
Glycerine	30 parts
Water	40 parts

"SOAP FLAKES":

Flaked soap	9 parts
Borax	1 part

To "flake" the soap, take hard, dry cakes of white soap and run them over an inverted plane, such as used by carpenters.

Perfumes for Soap.—From 1 to 2 ounces of the following mixtures are to be used to 10 pounds of soap:

I.—Oil of rose geranium	2 ounces
Oil of patchouli	½ ounce
Oil of clove	½ ounce
Oil of lavender Flowers	1 ounce
Oil of bergamot	1 ounce
Oil of sandalwood	1 ounce

II.—	Oil of bergamot	2 ounces
	Oil of orange flowers	2 ounces
	Oil of sassafras	2 ounces
	Oil of white thyme	3 ounces
	Oil of cassia	3 ounces
	Oil of cloves	3 ounces

III.—	Oil of citronella	1 ounce
	Oil of cloves	1 ounce
	Oil of bitter almonds	2 ounces

Pumice-Stone Soaps.—These soaps are always produced by the cold process, either from cocoanut oil alone or in conjunction with tallow, cotton oil, bleached Balm oil, etc. The oil is melted and the lye stirred in at about 90° F., next, the powdered pumice stone is sifted into the soap and the latter is scented. Following are some recipes:

I.—	Cocoanut oil	40,000 parts
	Cotton oil	10,000 parts
	Caustic soda lye, 38° Be	24,000 parts
	Caustic potash lye, 30° Be	1,000 parts
	Powdered pumice Stone	25,000 parts
	Cassia oil	150 parts
	Rosemary oil	100 parts
	Lavender oil	50 parts
	Safrol	50 parts
	Clove oil	10 parts

II.—Cocoanut oil	50,000 parts
Caustic soda lye, 40° Be	10 parts
Powdered pumice stone	50,000 parts
Lavender oil	250 parts
Caraway oil	80 parts

Shaving Soaps.

I.—Palm oil soap	5 pounds
Oil of cinnamon	10 drachms
Oil of caraway	2 drachms
Oil of lavender	2 drachms
Oil of thyme	1 drachm
Oil of peppermint	45 minims
Oil of bergamot	2 ½ drachms

Melt the soap, color if desired, and incorporate the oils.

II.—Soap	10 pounds
Alcohol	1 ounce
Oil of bitter almonds	1 1/4 ounces
Oil of bergamot	3/4 ounce
Oil of mace	3 drachms
Oil of cloves	1/2 ounce

Melt the soap with just enough water to convert it into a soft paste when cold; dissolve the oils in the alcohol, mix with the paste, and rub up in a mortar, or pass several times through a kneading machine.

III.—White Castile soap	5 parts
Alcohol	15 parts
Rose water	15 parts

SOAP POWDERS.

The raw materials of which soap powder is made are soap and soda, to which ingredients an addition of talcum or water glass can be made, if desired, these materials proving very useful as a filling. An excellent soap powder has been made of 20 parts of crystallized soda, 5 parts of dark-yellow soap (rosin curd), and 1 part of ordinary soft soap. At first the two last mentioned are placed in a pan, then half the required quantity of soda is added, and the whole is treated Here it must be mentioned that the dark-yellow curd soap, which is very resinous, has to be cut in small pieces before placing the quantity into the pan. The heating process must continue very slowly, and the material has to be crutched continually until the whole of the substance has been thoroughly melted. Care must be taken that the eating process does not reach the boiling point. The fire underneath the pan must now be extinguished, and then the remaining half of the crystallized soda is added to be crutched with the molten ingredients' until the whole substance has become liquid. The liquefaction is assisted by the residual heat of the first heated material and the pan. The slow cooling facilitates the productive process by thickening the mass, and when the soda has been absorbed, the whole has become fairly thick. With occasional stirring of the thickened liquid the mass is left for a little while longer, and when the proper moment has arrived the material contained in the pan is spread on sheets of thin iron, and these are removed to a cool room, where, after the first cooling, they must be turned over by means of a shovel, and the turning process has to be repeated at short intervals until the material has quite cooled down and the mixture is thoroughly broken. The soap is now in a very friable condition, and the time has now come to make it into powder, for which purpose it is rubbed through the wire netting or the perforated sieves. Generally the soap is first rubbed through a coarse sieve, and then through finer ones, until it has reached the required conditions of the powder. Some of the best soap powders are coarse, but other manufacturers making an equally good article prefer the finer powder which requires a little more work, since it has to go through three sieves, whereas the coarse powder can do with one or at most two treatments. But this is, after all, a matter of local requirements or personal taste.

The powder obtained from the above mentioned ingredients is fine and yellow colored, and it has all the qualities needed for a good sale. Instead of the dark-yellow soap, white stock soap can also be used, and this makes only a little difference in the coloring. But again white stock soap can be used, and the same color obtained by the use of palm oil or other coloring ingredients, as these materials are used for giving the toilet soaps their manifold different hues. Many makers state that this process is too expensive, and not only swallows up all the profit, but some of the color materials influence the soap and not to its advantage.

Soft soap is used only to make the powder softer and easier soluble, and for this reason the quantity to be used varies a little and different manufacturers believe to have a secret by adding different quantities of this material. As a general statement it may be given that the quantity of soft soap for the making of soap powder should not overstep the proportion of one to three, compared with the quantity of hard soap, any excess in this direction would frustrate the desires of the maker, and land him with a product which has become smeary and moist**,** forming into balls and lumping together in bags or cases, to become discolored and useless. It is best to stick to the proportion as given, 5 parts of hard and 1 part of soft soap, when the produced powder will be reliable and stable and not form into balls even if the material is kept for a long while.

This point is of special importance since soap powder is sold mostly in weighed-out packages of one and a half pounds. Most manufacturers will admit that loose soap powder forms only a small part of the quantities produced, as only big laundries and institutions purchase same in bags or cases. The retail trade requires the soap powder wrapped up in paper, and if this has to be done the powder must not be too moist, as the paper otherwise will fall to pieces. This spoils the appearance of the package, and likely a part of the quantity may be lost. When the powder is too moist or absorbs easily external moisture, the paper packages swell very easily and burst open.

The best filling material to be employed when it is desired to produce a cheaper article is talcum, and in most cases this is preferred to water glass. The superiority of the former over the latter is that water glass hardens the powder, and this is sometimes done to such an extent, when a large quantity of filling material is needed, that it becomes very difficult to rub the soap through the sieves. In case this difficulty arises, only one thing can be done to lighten the task, and that is to powderize the soap when the mixed materials are still warm, and this facilitates the work very much. It is self-evident that friction under these conditions leaves a quantity of the soap powder material on the sieves, and this cannot be lost. Generally it is scraped together and returned to the pan to be included in the next batch, when it is worked up, and so becomes useful, a need which does not arise when talcum has been used as a filling material. Again the soap powder made with the addition of water glass is not so soluble, and at the same time much denser than when the preparation has been made without this material. It is thus that the purchaser receives by equal weight a smaller-looking quantity, and as the eye has generally a great influence when the consumer determines a purchase, the small-sized parcels will impress him unfavorably. This second quality of soap powder is made of the same ingredients as the other, except that an addition of about 6 parts of talcum is made, and this is stirred up with the other material after all the soda has been dissolved. Some makers cheapen the products also by reducing the quantity of hard soap from 5 to 3 parts and they avoid the filling; the same quantity of soda is used in all cases. On the same principle a better quality is made by altering the proportions of soda and soap the other way. Experiments will soon show which proportions are most suitable for the purpose.

So-called ammonia - turpentine soap powder has been made by crutching oil of turpentine and ammonia with the materials just about the time before the whole is taken out of the heating pan. Some of the powder is also scented, and the perfume is added at the same time and not before. In most of the latter eases mirbane oil is used for the purpose.

These powders are adaptable to hard water, as their excess of alkali neutralizes the lime that they contain:

I.—Curd (hard) soap, powdered	4 parts
Sal soda	3 parts
Silicate of soda	2 parts

Make as dry as possible, and mix intimately.

Borax Soap Powder.—

II.—Curd (hard) soap, in powder	5 parts
Soda ash	3 parts
Silicate of soda	2 parts
Borax (crude)	1 part

Each ingredient is thoroughly dried and all mixed together by sieving.

London Soap Powder.—

III.—Yellow soap	6 parts
Soda crystals	3 parts
Pearl ash	1 1/2 parts
Sulphate of soda	1 1/2 parts
Palm oil	1 part

Metallic Soaps.— Metallic soaps are obtained by means of double decomposition. First a soap solution is produced which is brought to a boil.

On the other hand, an equally strong solution of the metallic salt of which the combination is to be made (chlorides and sulphides are employed with preference) is prepared, the boiling solutions are mixed together and the metallic soap obtained is gathered on a linen cloth. This is then put on enameled plates and dried, first at 104° F., later at 140° F.

Aluminum soap is the most important. Dissolved in benzine or oil of turpentine, it furnishes an excellent varnish. It has been proposed to use these solutions for the varnishing of leather, they furthermore serve for the production of waterproof linen and cloths, paper, etc. Jarry recommended this compound for impregnating railroad ties to render them weatherproof.

Manganese soap is used as a siccative in the preparation of linseed oil varnish as well as for a drier to be added to paints. Zinc soap is used in the same manner.

Copper soap enters into the composition of gilding wax, and is also employed for bronzing plaster of Paris articles. For the same purpose, a mixture is made use of consisting of copper soap and iron soap melted in white lead [Poison!] varnish and wax. Iron soap is used with aluminum soap for waterproofing purposes and for the production of a waterproof varnish. By using wax instead of a soap, insoluble metallic soaps are obtained, which, melted in oils or wax, impart brilliant colorings to them; but colored waterproof and weather-resisting varnishes may also be produced with them. Metallic rosin soaps may be produced by double decomposition of potash rosin soaps and a soluble metal salt.

From these, good varnishes are obtained to render paper carriage covers, etc., waterproof; they may also be employed for Floor wax or lacquers.

Petroleum Soap.—

1.—	Beeswax, refined	4 parts
	Alcohol	5 parts
	Castile soap, finely grated	10 parts
	Petroleum	5 parts

Put the petroleum into a suitable vessel along with the wax and alcohol and cautiously heat on the water bath with an occasional agitation, until complete solution is effected. Add the soap and continue the heat until it is dissolved. When this occurs remove from the bath and stir until the soap begins to set, then pour into molds.

II.—The hydrocarbons (as petroleum Vaseline, etc.) are boiled with a sufficient quantity of alkali to form a soap, during which process they absorb oxygen and unite with the alkali to form fatty acid salts. The resulting soap is dissolved in water containing alkali, and the solution is heated along with alkali and salt. The mass of soap separates out in three layers, the central one being the purest and from this product the fatty acids may be recovered by treatment with sulphuric acid.

Many words used 100+ years ago are no longer in use. Some of the "translations" are listed below.

Adjunct:
Added or joined as an accompanying object

Bau·mé or °Be
Variants: also Bau·me or Beau·mé /bO-'mA, 'bO-(")mA/
Function: adjective: being, measured according to, or calibrated in accordance with a Baumé scale <a Baumé hydrometer>
Bau·mé /bO-mA,/ Antoine (1728–1804), French chemist. Baumé operated a pharmacy and dispensary and designed industrial and laboratory apparatus. In 1768 he designed a hydrometer with a scale having two fixed points (the density of distilled water and that of a salt solution of known concentration), thus enabling the production of properly calibrated instruments. The scale has been named after him, and his name serves as an adjective indicating relationship to or use of the scale.
Caustic soda Lye 38 °Be lye of 38° Beaumé (5 kilogrammes), ... soda-lye of 38° Beaumé (6 kilogrammes), ...

Bergamot oil:
A pear-shaped orange used in perfumery having a rind that yeilds an essential oil.

Caoutchouc:
India rubber, an elastic substance that is obtained by coagulating the milky juice of any of various tropical plants.

Castile soap:
A fine hard bland soap made from olive oil sodium hydroxide

Cochin:
part of French Indochina

Crutched:
Using the stirring spoon (known to soap makers as the "crutch").

Drachms or Dram:
16 dram = 0.0625 pound

Epithelial:
Having to do with the thin outer layer of skin that protects the body

Etheric:
Any organic compound characterized by an oxygen atom attached to two carbon atoms.

Friable:
Easy crumbles or pulverized

Gall:
Bile obtained from an animal and used in the arts or medicine

Gilding:
Gild to add an attractive but often deceptive appearance to.

Kieselguhr :
Loose or porus diatomite, diatomaceous earth or clay (used in swimming pool filters)

Marseilles:
A firm cotton fabric that is similar to pique

Minims:
1/60 of a fluid dram or 0.003612 cubic inch

(Mirbane oil):
NITROBENZENE: Mirbane oil Nitrobenzene

is the simplest aromatic nitro compound. Chemical Formula: $C_6H_5NO_2$

Na·cre·ous:

(nkr-s) Adj. Resembling mother-of-pearl; lustrous

Oleum succini:

Oil of Amber

Salicylic:

A crystalline phenolic acid used in the form of salt as an analgesic and antipyretic.

Saponification:

To convert fat into soap with alkali (lye). In good soaps, there is no lye left in the soap after the saponification process.

Siccative:

sic·ca·tive n. A substance added to paints and some medicines to promote drying; a drier.

Styrax:

A fragrant balsam obtained from the bark of an Asian tree, of the witch-hazel family, used in perfumery

Szegedin:

A town in Hungary. We assume the soap was originally made there.

Note that there are hazards involved in making any soap. If you choose to use these recipes, ingredients, or processes, you do so at your own risk. Comtech Reasearch LLC hereby disclaims any liability resulting from the use or misuse of any information herein.

In some of the recipes, forms of lead and cyanide are called for. *These are deadly poisons, even in very small amounts, and should never even be touched! The soaps here containing them were NOT for use on the body,* but for purposes such as making things waterproof or cleaning objects of polished steel.

This document is intended solely as a historical record and does not represent an endorsement of any recipe, formula, process, or medical uses described herein, nor do we vouch for any claims made within.

Although this document has been carefully checked against the original text, we are not responsible for any typographical errors.

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