Lecture on Washing and Labor-Saving Soap.

Quackery assumes every shape and appears in every garb. Patent pills and patent medicines of every description are saintly looking monitors, but they remind us of what Pollock says about the hypocritical preacher, who "robbed heaven of its livery to serve the devil in." It is a great pity that the word *patent* should be so much abused—but it shows the value of a name, and the craft of those who know its importance. But quack medicines are not allowed to occupy the whole field of gullibility. Other things have just as good a right to do so as they have, and who can find fault with them for standing on their privileges. As it is charity to be indulgent, (but sometimes of a very questionable sort) our gentle women folks are made the tender subjects of listening to the plausible stories of all the quacks, and taking all they say for gospel. Oh, what a fall of quackery there would be if chemistry ruled the kitchen, parlor, and hall. What nostrums in boxes and bottles would be tumbled into the gutters, if at one glance, a true knowledge of their contents was to be revealed to those who think they effect a saving in family expenditures, by a little reduction in the yearly consumption of such trash. But a truce to medicines—the bugle sounds to the charge of labor-saving-soap. The conflict may not be very glorious to men folks, but it is just as honorable for women to charge with broomsticks as men with bayonets, when an enemy invades their soil, and so with *labor-saving* soap in its line. Within the past year we have seen more notices of new discoveries having been made to bless good housewives, by washing their clothes for them in a twinkling, without either pounder or scrub-board, than we ever remember to have seen in the same space of time before. One ingenious soul down East here finds out a substance to wash clothes without pounding; another out West finds out a substance to wash the clothes without the scrubbing, and another out North, not to be behind, discovers some plan and some substance, to wash, dry, bleach, and iron the clothes at one operation, just by tumbling them into a box and turning a crank. What philanthropists, noble, magnanimous, ingenious men.

The principle of washing clothes, is to remove all dirt and impurities from them, such as greasy matters, &c. The most sensible way to do this and the scientific way, is to find out a plan to separate these impurities from the clothes, in the easiest manner. For this purpose some substance is required for which the dirt, &c., has a greater affinity than for the clothes, and which, when they come in contact, will leave the clothes and unite with the said substance or substances. A third substance is required to act as a detergent, (cleanser) which, when mixed along with the clothes, the chemical compound formed by the dirt and the substance spoken of, will unite; and which, when poured out of the vessel in which the clothes are placed, will carry the impurities all away, and leave the clothes clean. Well, the best substance ever discovered to remove the dirt from clothes, by uniting with it, is good soap, which is soluble in water, and therefore it removes the dirt, which, by mixing with water, is carried away with it in the rinsing, leaving the clothes clean. Soap is made of *grease* and an alkali. Grease or oil will not mix of themselves with water, but when combined with an alkali, the *grease* becomes soluble in water. (I use the common terms to render the matter plain to all.) This should teach us that it is the alkali—such as soda or potash—that *dissolves* the animal substance, and makes it soluble in water. It is reasonable, then, to suppose that if clothes are steeped for about an hour or two before washing, in clean milk-warm water, in which has been dissolved some salts of soda, that it will soften the *grease* matters in the clothes, and render them more susceptible of having all the other impurities removed by the soap and finally, by rinsing in clean water. It would be a saving in the tear and wear of scrubbing clothes, if the expense of an extra pound of good soap, was not grudged in washing.—Camphene and turpentine have been recommended as a mixture, with dissolved soap, but it is not so good as soda. We recommend the soda, because it is clear in color, and potash is not. In camphene, there is always a little resin in solution, and brown soap contains resin also. Soap and soda, and washing will only remove those substances from clothes, which are mechanically combined with clothes.

The labor in washing clothes can be performed, with much ease, by some labor-saving machine,—but there are some machines with this name that are arrant hypocrites, being both less effective and requiring more severe labor than pounding and scrubbing. Plenty of clear rinsing water is the life of clothes. All the soap must be completely washed away, or else there will be zebra streaks in the goodman's linens, and then for sour looks, especially on *Sabbath morning*.

TO REMOVE IRON SPOTS.

The best thing to take out iron spots is oxalic acid. This acid looks like salt and is a poison. It should therefore be placed out of the reach of children. To use it, put some of the salts on the iron spot and pour hot water out of a jug on it, till the salts are dissolved, and the spot will disappear. The spot should then be well washed in water.

The water for washing should never be used too warm. This is what hurts the hands and spoils their looks, and the steam makes the labor more arduous. Washing is not such disagreeable work to some as to others, and will in no case be disagreeable, if common sense and the above suggestions be attended to.

Having had some experience in the line, and deeming chemistry a useful part of woman's education, I have studied the subject with some attention, because it is one of great interest to every family. I may at some other time seek the indulgence of your columns from which I have gained more information relating to such subjects, than by the perusal of many books. In the meantime I will subscribe myself

MRS. SOMEBODY.

Boston, Dec., 1849.

N. B.—If ammonia was not so dear, I am confident that if all white linen was handled in a weak solution of it for about five minutes before final rinsing, that a most astonishing benefit would be experienced—not a spot would it leave behind on the clothes.

Great Increase of London.

We have often thought that no city in the world, could show such a rapid increase as that of New York; but a recent Parliamentary paper proves conclusively that we were very much mistaken. In ten years, from 1839 to 1849, the increase of the inhabitants of London has been 325,904; and 64,058 houses have been erected, 1,642 new streets opened, of 200 miles in length. It now numbers 2,336,960 inhabitans. What a Babel! There are some districts in London occupied wholly by Jews, and other districts by other foreigners. There are vast masses of population aliens to each other in speech, occupation and social culture. It is believed in England that London is just as young and vigorous as ever, and that the population is likely to augment for many years; but it is believed that its increase must be spread over other areas beside the present city proper, and that cities like that of Brooklyn and Williamsburgh, somewhat distant from it, but as auxiliaries to drain off the press from the centre, will spring up. To the credit of London, be it said, that the habitations are more spacious, and that far fewer people are packed in the same space than there used to be two centuries ago—narrow lanes have given place to wide streets and spacious courts. In 1700, within the walls of London, there were 139,000 inhabitants, and in 1841 only 54,626 in the same space. But London and all other great cities has a large debased population. The late execution of the Mannings showed this:—Dickens declared that such another sight could not be witnessed in any heathen land; in that respect we believe that he is mistaken, more especially as he wrote from the impulse of the moment, and forgot that in some of her Majesty's dominions, women are sometimes yet devoted to the funeral pyre, amid the clashing of cymbals and the chaunts of heathen priests.

Oils.

The term oil is applied to two dissimilar and distinct organic products, which are usually called fixed oils and volatile oils. The fixed or fat oils are either of vegetable or animal origin; they are compounds of carbon, hydrogen and oxygen; the relative proportions vary but little in the several species. The following analyses of olive and spermaceti oil may be assumed as types of the rest:

	Olive Oil.	Spermaceti Oil.
Carbon - -	772	780
Hydrogen - -	133	118
Oxygen - -	95	102
	1000	1000

The fixed oils abound in the fruit and seed of certain plants: they are lighter than water, unctuous and insipid, or nearly so; some of these require a low temperature for their congelation, such as linseed oil; others, such as olive oil, concrete at a temperature higher than the freezing point of water; some are solid at common temperatures, such as cocoanut oil. Some of these oils when exposed to air absorb oxygen, and gradually harden, forming a kind of varnish; these are called drying oils, and are the basis of paints, such as linseed oil; others become rancid, as almond oil. All these oils, like the different kinds of fat, consist of two proximate principles, called stearine and elaine: the former is the fatty portion, which first concretes on cooling the oil, and from which the elaine, or oily portion, may be separated by pressure. These oils cannot be volatilized without decomposition. At a red heat they are resolved into volatile and gaseous products, among which carburetted hydrogen, in several of its forms, predominates; hence the use of these oils, when volatilized and burned by the aid of a wick, as sources of artificial light. The action of the alkali on the fat oils is highly important, as forming soap.

The volatile oils are generally obtained by distilling the vegetables, which afford them, with water; they fluctuate in density a little on either side of water; they are sparingly soluble in water, forming the perfumed or medicated waters, such as rose and peppermint water; they are mostly soluble in alcohol, forming essences. A few of them, such as oil of turpentine, of lemon peel, of copivi balsam, &c., are hydro-carbons, that is, consist of carbon and hydrogen only; the greater number, however, contain oxygen as one of their ultimate elements. They are chiefly used in medicine and in perfumery, and a few of them are extensively employed in the arts as vehicles for colors, and in the manufacture of varnishes; this is especially the case with oil of turpentine.

Asafœtida.

Asafœtida is obtained from a large umbelliferous plant growing in Persia. The root resembles a large parsnep externally, of a black color: on cutting it transversely, the asafœtida exudes in form of a white thick juice, like cream; which, from exposure to the air, becomes yellower and yellower, and at last of a dark brown color. It is very apt to run into putrefaction; and hence those who collect it carefully defend it from the sun. The fresh juice has an excessively strong smell, which grows weaker and weaker upon keeping; a single dram of the fresh fluid juice smells more than a hundred pounds of the dry asfœtida brought to us. The Persians are commonly obliged to hire ships on purpose for its carriage, as scarcely any one will receive it along with other commodities, its stench infecting every thing that comes near it.

The common asafœtida of the shops is of a yellowish or brownish color, unctuous and tough, of an acrid or biting taste, and a strong disagreeable smell, resembling that of garlic. From four ounces Neumann obtained by rectified spirit, two ounces six drams and a half of resinous extract; and afterward, by water, three drams and half a scruple of gummy extract, about six drams and a scruple of earthy matter remaining undissolved. On applying water at first, he gained, from four ounces, one ounce three scruples and a half of gummy extract.

Asafœtida is administered in nervous and hysteric affections, as a deobstruent, and sometimes as an anthelmintic. A tincture of it is kept in the shops, and it enters into the composition of the compound galbanum pill of the London college, the gum pill of former dispensatories.

The Chinese Chrysanthemum.

The method of cultivating the Chrysanthemum in China is as follows; cuttings are struck every year from the young shoots, in the same manner as they do in England. When they are rooted, they are potted off at once into the pots into which they are to grow and bloom; that is, they are grown upon what would be called by our gardeners', the one-shift system."

This soil used in potting is of a very rich description. About Canton it is generally obtained, in the first instanee, from the bottom of lakes or ponds, where the Nelumbeum or Water Lily grows. It is then laid up to dry and pulverise for some months, when it is mixed with old night-soil taken from the manure tanks found in every garden. A heap of this kind, after being laid up for some time and frequently turned over, is in a fit state for potting the Chrysanthemum. Manure water, taken also from the tank already noticed, is liberally supplied during the growing season, and the effects are visible in the luxurant dark green leaves which cover the plants.

In forming the plants into nice compact bushes, the plants are trained each with a single stem; this is forced to send out numerous laterials near its base, and these are tied down in a neat and regular manner with strings of of silk thread.

Artificial Flowers.

The art of representing by flowers, leaves, plants, &c., vegetable nature in her ornamental productions, constitutes the business of the artificial florist. The Italians appear to have been the first people in Europe who excelled in the art of making artificial flowers; but of late years the French have been most ingenious in this branch of industry. Ribands folded in different colors were originally employed for imitating flowers, by being attached to wire stems. This imitation soon gave way to that by feathers, which are more delicate in texture, and more capable of assuming a variety of flower-like figures. But a great difficulty was encountered in dyeing them with due vivacity. The savages of South America manufacture perfect feather flowers, derived from the brilliant plumage of their birds, which closely resemble the products of vegetation. The blossoms and leaves are admirable, while the colors never fade. The Italians employ frequently the cocoons of the silkworm for this purpose; these take a brilliant dye, preserve their color, and possess a transparent velvety appearance, suitable for petals. Of late years, the French have adopted the finest cambric for making petals, and the taffeta of Florence for the leaves.

Phenomena of the Brain.

One of the most inconceivable things in the nature of the brain is, that the organ of sensation should itself be insensible. To cut the brain gives no pain, yet in the brain alone resides the power of feeling pain in any other part of the body. If the nerve which leads from it to the injured part be divided, it becomes instantly unconscious of suffering. It is only by communication with the brain that any kind of sensation is produced, yet the organ itself is insensible. But there is a circumstance more wonderful still. The brain itself may be removed, may be cut away down to the corpus calasum, without destroying life.—The animal lives and performs all its functions which are necessary to simple vitality, but no longer has a mind; it cannot think or feed; it requires that the food should be pushed into its stomach; once there, it is digested, and the animal will even thrive and grow fat. We infer, therefore, that the part of the brain, the convolutions, is simply intended for the exercise of the intellectual faculties, whether of the low degree called instinct, or exalted kind bestowed on man, the gift of reason.—[Wagan on the Quality of the Mind.

The city of Utica, N. Y., does not owe a cent of debt, and has money in the bank.