this article was taken off in 1835, a very puri kind of carbonate of soda is obtained from it; and one advantage attending its use is that the smell of waste less at soap-houses is less offensive than formerly.

Carbohydrate of soda contains carbonic acid; this is removed by mixing it with lime, water is then poured in to form a lye, and this is afterward carried into the large copper or boiler provided for the purpose at soap manufactories.

With the lye a quantity of tallow is put into the boiler, from ten to fifteen hundred weight of the one, and from 300 to 300 gallons of the other, which, on the average, will give a ton of soap. The whole is boiled together for about four hours, by which time it is generally found that a combination has taken place, and the fat is converted into soap. The fire is withdrawn, and when so done to the lye is removed, and fresh lye added, followed by another boiling, and so on, three or four times, a little common salt being thrown in toward the last, to assist the separation of the soap. The fire is then put out, the melted material left to stand a short time, after which it is carried in large ladles or buckets and poured into the frames, which may be compared to a sort of wooden well from three to four feet long, fifteen inches wide, and ten or twelve feet high. Some of them will hold several thousand pounds weight. In these, the soap remains two or three days, until it is hard and solid, when the wooden frames are lifted off, the mass is cut into slices about three inches thick with wires, and these, being cut across, form the bars such as are sold in the shops. After being cut in this way, they are piled up in stacks for further drying.

Such is a general description of the method of making soap, and in the main it applies to all kinds; the variations are chiefly in the materials. To make the best soap, but the best and purest tallow is used, and sometimes olive oil. Mottled soaps are made of coarser kinds of tallow and kitchen stuff; and the mottled veils are produced by having very strong lye poured over and stirred into it, just before it is taken out of the copper. Different colors may be given in this way. Yellow soap requires a different mixture; tallow, with a considerable quantity of resin broken small, and a small quantity of palm oil. The best yellow soap should not contain more than one fourth part of resin, and when cut it has a bright, glossy appearance, produced mostly by the palm oil. It makes a better lather than mottled soap. If, however, there is too much resin and too little tallow, it is bad, irritating to the skin, and especially injurious to woolens which may be washed with it. Buyers of this article should always remember that low-priced soap is never cheap; the most stinking fat is generally melted up with the resin to make yellow soap; and the commoner it is in quality, the more water does it contain; so that those who buy cheap and bad soap pay at the rate of eight or ten cents a pound for the water inside of it. Dishonest manufacturers will sometimes increase their quantity of soap by throwing dead pigs into the boiler with the fat, and make the lye so strong as to dissolve all the bones. No one who has smelt the offensive odors of bad soap can believe that it is made of good materials.

The best Windsor soap is made of about nine parts tallow to one of olive oil and soda lye. The scents or perfumes are always added during the mowing of the soap, and nothing can replace all the fragrances of customers. Some of them are made with olive oil; and others are improved in appearance by being pounded in a mortar after the first process of making, and made up a second time.

Soft soap is made with palm or oil and lye. Soda is the alkali always used for hard soap; palm or oil for soft soap. In this the lye is not separated after boiling, as with the other; and it is said that the making requires greater care, and is more difficult. Two hundred pounds of oil, seventy-two pounds of potash, and the lye will produce nearly five hundred pounds of soap. The most of oil is used, and the like figure of appearance of soft soap is caused by a small quantity of tallow being mixed with it, and forming into small grains during the boiling. For the best sorts pure oils are used: among them are poppy, mustard, connon, and olive oils.

There are also medicinal soaps; some combined with mercury or other metals. One is made with olive oil and oxide of lead; the result is diaphoric, so much known and used as plaster. Emulsions and balsams are species of liquefied soap formed by mixing hartshorn, potash, soda, or linseed-water with oil; they present a milky appearance. A mixture of oil and lime-water is a good remedy for burns. At some of the large ironworks a supply is always kept in readiness against the accidents which so frequently occur.

Spanish or Castile soap is made from soda and the best olive oil, mottled by the addition of oxide of sulphate of iron. The purest kind is used for pills; their effect is slightly aperient and corrective of acidity of the stomach, and, combined with carbonate of soda, they are sometimes prescribed in small quantities and affections of the bladder. In some forms, too, Castile soap is an antiseptic to certain kinds of polii. But when used as a curative, special pains should be taken to have it pure. The wickedest as well as the best adulterations are those of medicinal substances.

Soft soap, when made of pure materials, potash, and olive oil, is also valuable for medicinal purposes: some kinds of skin diseases, scabs, and ringworm may be much better cured by it than by all other medicines. The latter not unfrequently aggravates the disease by creating dirt, while soft soap tends to cleanliness. Sulphur is occasionally mixed with it to assist its curative effect; but this should only be done under the advice of a medical practitioner.

The most harmless adulterations which are practised in the manufacture of soap are the mixing of certain kinds of earth or clay and potato-starch with the fat.

---

**Women Many and Various.**

**The Belles and the Wall-flowers.**

By Caroline A. MERRILL

**ALTHOUGH I can recall more occasions than I care to enumerate on which I have been told by the affectionate offering of lady friends that "Mammy was the belle of her day," I have yet made up my mind that, however great the claims of these ladies, belles as a general rule may be catalogued as the girls who do not marry, or who do not marry well.

How is this? Simply thus: Fate is against her; for she is adjudged for her beauty, or wit, or talent, to be placed upon a pinnacle so dangerous that few, if any, of any value, succeed in winning them. The right man, the man of men, the "heart-satisfier," is as rare as he is sought, and the girl or woman who is most surrounded; and she, pushing to the front, brilliant and dazzling though she may seem, has often heart enough—out of sight for the nonce—to aspire only to him, while she holds back in fear. I am not talking of the savagely respectable masculine who thinks it a crime in a woman who is admired. I talk of him who does not wear his heart upon his sleeve, and yet, oftimes, fails to penetrate the truth that the beauty of the hour is, in this, like him.

Then, again, the belle is often a mother whose every effort to attain the goal of her ambition, the final placing of her daughter, defeat their purpose. The right man, him for whom the soul of the belle vainly yearns, after bravely bearing the asperities of several if not of numerous rivals, the baux looks of a homely sister, the frowns of an unfavorable father, will kiss the dust of defeat at last, if not a man of wealth, only because of that most terrible of all his enemies—the belle's maternal parent!

Two chances already—grave ones, too—against the belle's marrying.

A third is the inevitable malice of lesser women. By lesser I do not mean merely women less handsome—since the belle's belle's
founded upon her beauty; less witty—yet at least, she has the gift of being a wit; less talented—if she be a literary or musical wonder, or a girl who promises great things in other arts. I mean women of mind so inferior, of disposition and nature so beneath her own, that her superiority is looked upon by them as a wrong or an insult. These, to use a most expressive phrase, "pick her to pieces," and—spiritually—she is obliged to get herself together again!

And, alas! there are women in society that have so cultivated this aggressive art, that, without betraying their visage ostentatiously, they do the subtlest work of destroying their rival's chances—alarming, and saluting! oftimes the "heartfully-wished-for" right man—and lessening her charms by destruction of one kind and another, till all seem to melt away and fade, without a tear or a sigh, and she has so much to be believed—"is all, or to a great degree, artificial; her sweetness is presumed—"she has an awful temper at home!"—her talent has been doubted—to hear them believing—by this one or that one "who is a judge, you know," as for her wit, "it is wickedness."

If she plays or sings, "she has no decided school;" if she recites, "her voice does not move them." These, it is true, are not the subtlest weapons I have spoken of above, not the moles of walls, but the vultures, the empty vultures. These openly attack, and yet they do mischief. Poor belle! many are the forces against her strength; many the waters ready to whelm her; many the thorns in her flower-garden.

Think of it! . . . Besides her own mother nine times out of ten harrying in lies of helping, there are the mothers of all the belle's rivals! Is it not a wonder that such a girl or woman ever marries, or, if she does, that she ever marries the one she would have preferred?

Among my own friends in Belle- 
down, two curious instances of final "success"—which I take to be marrying the right man—have lately occurred. In the first of these, the lady's papa lost every farthing, and the right man came to the front. "On my honor as a blondy," said the belle, "I'll reward him, and she did; and he is a happy fellow, so he tells me. In case number two, the young lady was confronted by a rival, who proved to be the bridegroom's cousin. The belle consented to be married, and the last time I saw her, looked radiant. So did the bridegroom.

Again, plain girls expect much less in a marriage than does the belle. She will take offence at an awkward bow, a phallicide, or at any proof of want of aesthetic taste. The plain girl passes over these things. She does not demand, as does the beauty, a high position, wealth, or expectations of wealth.

And there are men, even in these degenerate times, as some call them, who still look for those who will be good heads of families, domestic women, housekeepers, and good heart companions besides, and who fear that the belle, after so much admiration, will find it hard to settle down. And here let me say in passing, that the American woman almost invariably does settle down. Whatever her day of glory and grandeur, she is almost always content to glide gracefully behind a cloud and suffer another sun to rise and shine in the place that hovers there.

Another advantage in the worldly war which tells on the side of the plain girl is, that all men fear to be deceived. Every man of any, of human feeling, knows that he may develop this passion. With the blond girl as a wife he has nothing of the kind to dread. Under the shade of his vine and his fig tree his heart is at peace. But with the belle, how different! He would have seen her eyes in his very lodgers and looking away from him.

I do not think, by-the-by, that any plain girl ever won her bridegroom by sewing for a Doriae society. I know that this has been set forth as infallible, and that, after being jilted by the belle, young men of high tone are apt to rush—according to the statements of some—and fall at the feet of the wall flower just as she is finishing up some charity patchwork, or helping a blind woman over a gutter. I have seen this thing tried, and it has proved a failure. Therefore it is that I give the plain girls credit for having discovered frankness and nubility means of attraction.

At all events, it is a fact that if all the women were plain, instead of being pretty, as two thirds of them are—in America at all events—there would be just as much marrying as there is now.

And, once more, one more remark. It has always seemed to me that the girls who marry best are those who appear to bestow the least thought upon their future. I find that the girls and women who have the energy and good taste to devote themselves to some useful and noble aim are sought for and married almost in spite of themselves, and this whether homely or handsome. Indeed, some good and noble work has been done, and for women there surely dwells, at last, a brighter day. I mean a day in which, whether married or single, they are allowed to peep over the tops of their work-baskets without hearing, "Cast down your eyes, Chloe, cast down your eyes!"