Bessie looked round. Lettice had been reading over her shoulder. Bessie saw her great eyes dilate more and more, and then the sudden weakness pass over her from head to foot as she sank heavily to the ground in a fainting-fit.

The insensibility did not last long, and when it passed off Lettice was full of a feverish activity. "Bessie," she cried, "let us go to Liverpool at once! See, he writes from there; let us try to find him. Oh! if he will give me one chance more, only one! Bessie, he says he loathes me." Her voice rose up in a kind of wailing cry. "Oh! he cannot loathe me more than I loathe myself."

She flung herself on her knees, clasping her sister-in-law's waist. "You won't desert me, Bessie? You will help me to find him? Oh, if he will only kill me with his own hand it will be more merciful than to cast me out like this! Will he forgive me? Say, will he forgive me?"

"I cannot say," answered Bessie, still stunned and trembling under the blow. "He has forgiven much."

Lettice twisted her hands in her long black hair. "Don't! don't say it!" she cried. "Don't say it, or I shall go mad."

The two women lost no time. They took nothing with them but a little food, which neither could touch, and they started for Liverpool.

All day long they travelled; all day the quick express rushed on its dull monotonous way. The houses and trees and hedges seemed to fly past the windows.

Lettice was very weak. Lying back in the corner she half slept, her clear white profile looking like exquisitely chiselled marble on the dark background. But Bessie sat upright, her hands clasped tightly together, her attitude rigid as the strong tension of her mind.

When it grew dark Lettice awoke to the full sense of her misery again, and began to moan plaintively to herself. The journey was so long, so very long, and every nerve ached and throbbed with a sickening neuralgia.

It was the middle of the night when they reached Liverpool, and the two shivering women came out upon the busy platform.

Tom had dated his letter from the Golden Lion, and they found a cab and desired to be driven there; but there was more than one inn of that name in Liverpool, and the first one to which they went was the wrong one.

When Bessie falteringly said that the inn would probably be near the docks, the cabman caught her up sharply, asking her why she had not said so before, and they began their quest again.

It seemed a very long way, but they arrived at last just as some harsh-sounding clock in the neighbourhood clanged out three.

Lettice caught hold of her sister-in-law's arm. "Hark!" she cried; "that is what I am always hearing—the clang, the alarm bell!"

The people at the inn were astir, gas flaring, porters standing about. When Lettice and Bessie arrived, several sauntered up in curiosity.

Bessie's lips were so dry that she could scarcely frame the words. Was a Mr. Brandreth there? they had something very important to tell him—a matter of life and death. Did anyone know when he sailed? Was he at the hotel still, or gone?

There was an appeal to the bar, and the landlord came out.

"Brandreth," he said, consulting a paper he had in his hand, "has been here, but started to-night. Boat sails at three-ten—the South Western."

"Does it sail punctually?" gasped Bessie.

"Sometimes; never sure to half-an-hour or so. Got five minutes yet. Can you do it?" said the landlord, addressing the cabman.

The man shook his head.

"I will give you a sovereign if you will try," said Bessie, eagerly.

"'Tain't only for the sovereign," said the man, gruffly. "Here, get in."

The landlord gave the name of the dock, and they started.

Five minutes! There were only five minutes to spare, and it seemed like hours before the cab pulled up with a jerk, and the cabman roughly bade them get out.

"Here, you!" he cried, catching hold of a young porter, who was swinging by on his way home. "Is the South Western out yet?"

"Can't say; she's done loading."

"Here! these ladies will give you eighteenpence if you will pilot 'em there sharp."

"Come along," said the lad, and he went off whistling as he led the way.

It was very dark, in spite of the flaring gas lamps here and there. They had to thread their way through great open buildings, in and out among huge bales of goods and piles of casks, stumbling after their guide.

There was the strong fresh smell of the tar and asphalte, and the sound of the lapping of harbour water. A vision of tall masts and skeleton-like rigging stood out against the sky, and here and there the huge bulk of a great merchantman towered overhead.

They came in sight of the sea, dark and still, save where red and green lights from the mighty shipping lying all round flung quivering paths across it.

Suddenly a hoarse low whistle, like a deep mournful roar, broke on the silence.

"No need to hurry, ladies," said the porter. "It's too late, she's off."

But they stumbled and struggled on. Ahead of them by many hundred yards they saw the mighty form of a great passenger ship moving slowly out; they saw the great lights flaring; they heard the rush of steam let off, and saw the dense smoke rolling from her funnels.

They strained on, strained every nerve and muscle. When they reached the quay, where the porters and seamen now stood idle to see her start, the gangway ropes seemed to be still quivering, but the great ship was gone beyond recall.

The men stood silent watching them, a consciousness of some great agony holding them still. The only sound was their own gasping breathing and the lapping of the harbour water on the green stones of the dock.

(*To be concluded.*)

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## SACCHARINE.

AMONGST the many triumphs achieved in chemical science during the present century, none should attract the attention of the general public more than the wonderful substance known as "saccharine," which now affords one of the best results of the great progress made in the coal-tar industry. Apart from the medicinal value of the coal-tar products, their money value is considerable. The annual value of the products now extracted from an unsightly and apparently worthless material amounts to several millions sterling, whilst the industries based upon these results give employment to thousands of men. We cannot but regard with wonder the synthetic power of modern chemistry, when we remember that not only the brightest and most varied colours can be obtained from this coal-tar, but also medicines, vieing in potency with the rare vegeto-alkaloids, some of the finest perfumes, and lastly, perhaps the most remarkable of all, "saccharine," which is possessed of sweetness three hundred times sweeter than sugar. It is marvellous that the same raw material should be capable of yielding so many important varieties. In bygone days the attainment of such results as these would have been looked upon as savouring of some wild dreams of the alchemist instead of expressions of sober truth.

The most astonishing feature in "saccharine" is its power of producing sweetness, yet it is not a sugar; it has a faint and delicate flavour of bitter almonds, is slightly saline, and possesses considerable antiseptic properties. It contains carbon, hydrogen, sulphur, oxygen and nitrogen; and in chemical science is known under the name of benzoyl sulphonic imide. It does not act as a nutriment as sugar does, but passes out of the body unchanged, and is non-poisonous. On this account it will be found so valuable for medical purposes, where cane sugar is excluded from the diet of certain patients, as in cases of diabetes, gout, etc. For the discovery of this great boon to suffering humanity we are indebted to Herr Fahlberg, who for eight years worked incessantly in order to battle successfully with the subtleties of the problem. The new drug is

at length patented in this country, and will doubtless soon receive numerous and careful trials. The mode of preparation is too complicated to set forth in detail, and would only prove of interest to those having some considerable knowledge of chemistry. Suffice it to say that it is obtained from toluene, which is obtained in the destructive distillation of coal, as employed in the manufacture of gas. An ample supply of the base from which "saccharine" is prepared is at all times secure, since it is a derivative of coal-tar, and as such will ever be forthcoming in great quantities.

In comparison with cane sugar, it will be found that the sensation of sweetness is much more rapidly communicated to the palate on contact with saccharine than on contact with sugar. This renders it valuable in disguising the taste of bitter and nauseous preparations, such as gentian, quassia, etc., when mixed in relatively large quantity. It is to be used largely in powders, both to disguise taste and in view of its preservative properties. For example, it has been found not to influence the digestive functions of pepsin, but protects that substance from fermentation.

In domestic uses it will be found useful in producing fruit preserves or jams, consisting of almost the pure fruit alone, the small percentage of saccharine necessary for sweetening these preserves being sufficient to prevent mouldiness. It is used, too, in confectionery and the manufacture of sweetmeats, and enables delicate children to partake of sweets without fear of their digestions becoming disordered. The constitution of saccharine is such as to negative the possibility of any fermentation arising from its use, and the sweet flavour which it imparts can be increased at discretion without undue addition of weight and bulk, with the fact that it will not detrimentally affect the substance into which it has been introduced. Saccharine is essentially different to the family known to chemists as carbohydrates; sugar is a carbohydrate, and for that reason liable to undergo fermentation when in solution, and in the presence of certain organisms which abound almost everywhere. Sugar solutions are liable to undergo decomposition in preparations where fermentation means absolute destruction to the manufacturer, such as preparations of pharmaceutical mixtures, wines, cyders, syrups, and many others too numerous to mention; and here saccharine will be used with considerable advantage. There is no doubt that to a great extent it will necessarily displace sugar in the preparation of jams, preserved fruits, etc., since it causes no waste in the process of preparation, no crystallisation, no scum, and no chance of fermentation owing to its antiseptic properties. Produced upon a large scale, saccharine has the appearance of a white amorphous powder. It should not be tasted in this state to judge of its fitness for various purposes, but should be in a form of solution. It must be regarded in the light of an essence, which requires diluting or mixing with other materials before its true value as a flavouring material can be established. It resembles in this respect another derivative of coal-tar recently discovered, vanillin, which bids fair to rapidly supersede the natural vanilla as a flavouring material.

Saccharine is slightly soluble in cold water, in warm water somewhat more, and in boiling water sufficiently soluble for many practical purposes. It is readily soluble in alcohol, and will probably be largely used in this manner as an antiseptic sweet for liqueurs, wines, cordials, and so forth. The antiseptic properties of saccharine are very marked and are likely to be of great service to medical men. The physiological researches relating to this wonderful chemical compound have been of a searching and complete description, various species having been experimented upon. During these researches it was proved to be without action upon diastase, ptyalin, or the digestive functions of the system. *From this* it will be seen that saccharine will not usurp the functions of a food, but will be regarded rather as a condiment or flavouring. In Germany it has already been largely used in the hospitals and in the army, and with good results. Lozenges containing saccharine are prepared about the size of an ordinary acid drop, and one of these is ample to sweeten a cup of tea or coffee, so that a soldier can carry sufficient to supply him for a week or more in a bottle, the weight of which is scarcely noticeable.

A wide scope is afforded ingenious persons in the preparation of dietetic articles containing saccharine, particularly in its incorporation in harmless media, and in preparations of infants' foods, diabetic biscuits, condensed milk, rusks, etc. What will sugar merchants say to this new product? for no doubt in time it will affect their trade, if it is to be so extensively employed for domestic as well as medicinal purposes.

At first sight the nature of this substance appears paradoxical, but this will not in any way impair its value. It is easier to plant truths than to root out old errors. One of our most prominent scientists of the day has aptly applied Samson's riddle to this new discovery: "Out of the burning came forth coolness, and out of the strong came forth sweetness." "By no one could the answer be given," says the scientist, "who has not ploughed with the heifer of science." "What smells stronger than tar? and what tastes sweeter than saccharine?" This seems, if anything, more paradoxical than Samson's riddle, but not more so than human beings who run after that which is new, but are prejudiced in favour of that which is old.

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# RESTITUTION;

OR,

## MISER AND SPENDTHRIFT.

By ANNE BEALE.

### CHAPTER L.

#### FAN'S WEDDING.

THERE was what is called a "mixed company" at Fan's wedding: very mixed, indeed. There was scarcely standing room in Roselands Church; for long before the bridal party appeared it was filled from porch to chancel. The ladies from the Cottages occupied distinguished positions as near the altar as possible, for they came very early to secure them; the inhabitants of the village crowded the pews, and those of the gipsy camp all other available space. As to the gipsies, they had adorned themselves in various quaint and conspicuous attire. Red cloaks, particoloured shawls, many-hued ribbons, floral hats, represented them in every corner. They had come from far and near to see the daughter of Wandering Will and the granddaughter of the Tigress wed to the son of her benefactor. Other people of different classes had also come from far and near to see the brother and niece of Mr. Aspenel, who had been so proud and reserved, appear in public after their years of mysterious seclusion. Their story had got wind, and had created much sensation, particularly when mixed up with the history of the fire, and the consequent incapacity of the millionaire.

This publicity was just what Fan's friends had sought to avoid. The arrangements for the wedding had been as simple as possible, and confined, it was believed, to the precincts of Hoplands. Even Janet's desire for wreaths and a flower-lined church had been decisively checked by Mr. Harton, and Fan herself had declared that she would wear neither veil nor typical orange blossoms.

"What should I do with them in a wigwam in the backwoods?" she had asked, with her frank audacity.

Outside the church, scouts, in the shape of bare-footed gipsy children, were stationed on the watch, and they excited the expectant congregation from time to time by running in and out to their friends with the announcement, "They're a comin' now." Not that the wedding-party was behind time, but when people are gathered together half an hour beforehand the moments lag. At Mr. Aspenel's particular request they had adopted the new and convenient fashion of an afternoon marriage, and two o'clock was the hour appointed. Before the auspicious moment Jack, the bridegroom elect, and Gerard, his best man, stood at the altar-rails, and Mr. Austen within them. Ritualism had not yet made inroad into quiet, simple Roselands Church, and Mr. Austen withstood it valiantly; so that the marriage ceremonial was not complicated by change of place or