

SUGAR.

The Grand March of the Sugar Cane.

What would the world do without its sugar? What did it do in those "good old times" when it did not have any? It would be hard, impossible, in fact, in these days, to imagine the latter contingency as applied to ourselves. Sugar, once unknown, then known only as a luxury, has become one of the staples of life, as much an every day necessity as flour or potatoes. In truth it is a question if it would not be more missed than either, since for them substitutes could be more easily found. The use of sugar is universal in civilized lands and it is classed as a necessity of civilized life the world over. Sugar, a word derived through the Arabic, from the Persian shakar, is a general term applied by chemists to certain neutral carbohydrates sweet in taste, and usually capable of being crystallized. They are produced by the vital processes found in both plants and animals. These carbohydrates are divided into two groups. The first includes such sugars as are capable of fermentation and of being changed under the action of yeast into alcohol and carbonic acid gas. The second group includes those which are not capable of being transformed into these products. The first group includes sugar or sucrose, which is the product of the sugar cane, grape sugar or glucose, milk sugar or lactose, and several others unimportant in a commercial sense.

deed they knew of it at all, although it is supposed that Theophrastus alludes to it when he says that "honey or sweet juice is procured from bees and also from canes." Strabo, in his geography and the great physician, Dioscorides, also, in his book on medicinal lore, make mention of a grass that is evidently our sugar cane. Strabo says it is a reed that produces honey. Dioscorides tells more than that. He says that the reeds of Arabia and India yield a congealed thick honey as hard as salt which crumbles between the teeth and is called sugar. Belon says that this plant is mentioned in a number of Indian and Arabic books, and that the Chinese understood its culture from the most remote ages, and also the art of extracting its products. Humboldt confirms this statement by attesting that the plant is found drawn upon the oldest Chinese porcelains. But it was not until nearly the thirteenth century that the sugar cane was introduced into Nubia and Egypt, from whence, in the fourteenth century, it was carried to Sicily, Syria and Madeira. The original home of the sugar cane, its true birthplace, is shrouded in mystery. This much only is known with certainty, that it was first cultivated in that part of the world extending from Cochinchina to Bengal and was brought from India to the south of Europe by the crusade during the fifteenth and sixteenth centuries. Various classical writers of our first era notice the sweet sap of the Indian reed and the granulated, salt-like product which was imported from India under the name of saccharum (from sanskrit, gravel, sugar) and much used in medicine.

Although the art of boiling the juice of the cane was, as we have seen, known in India and China in the earliest ages, nothing was then known of the art of sugar refining. The Chinese did not learn the use of ashes for this purpose until the Mongol period, when some savant from Egypt taught them the art. The cultivation of the "sweet reed" spread from Arabia into Persia and here "sugar" was prepared with art about the time of the Arab conquest and its manufacture on a large scale was one of the principal industries of that region. A tribute of 50,000 pounds was paid the sultan, a fact that attests the great estimation in which sugar was then held. The art of sugar refining is believed to have been developed by the famous physicians of Arabia, in whose limited pharmacopoeia sugar occupied an important place.

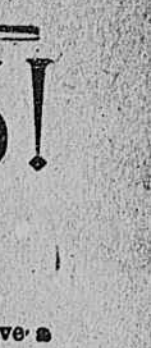
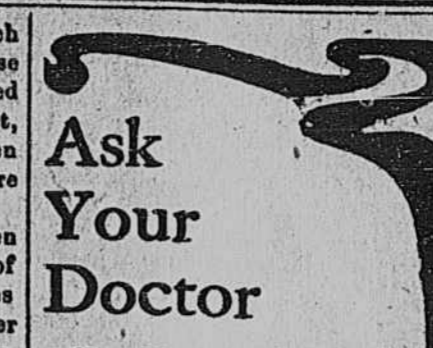
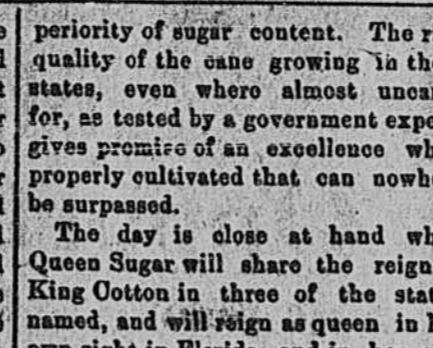
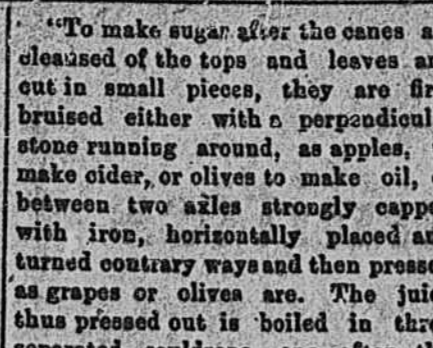
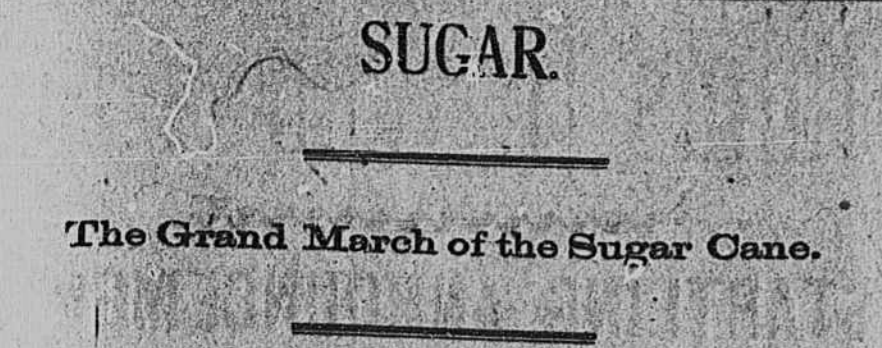
During what might be called the "age of discovery" the Spaniards played an important part in scattering far and wide the cane that has now become one of the world's greatest staples. It was they who carried it to Madeira in 1420 and to San Domingo in 1494. From thence early in the sixteenth century it was spread all over the conquered portions of the West Indies and South America. During the first twenty years of this century the sugar trade of San Domingo grew with wondrous rapidity. From the import tax levied on the San Domingo sugar by Charles V of Spain he obtained funds sufficient for the erection of two splendid palaces, a fact that gives some idea of the magnitude of this trade even in those early days.

Venice became the great center of the sugar trade during the middle ages, and it was here that the art of making loaf sugar was discovered by a Venetian merchant who received a reward of 100,000 crowns for his invention. The earliest reference to commercial sugar in Great Britain is the mention of the importation of 100,000 pounds sent to London by a Venetian merchant in 1319, this amount being exchanged for a like value in wool. During this same year the accounts of the court chamberlain of Scotland show a payment of 1 shilling, 9 1/2 pence per pound for sugar. Nor did sugar cease to be other than a very costly luxury and an article in common use in medicine only until the increasing use of tea and coffee in the eighteenth century forced it, as it were, into the list of food staples. The wonderful impulse given to the consumption of sugar by these beverages is shown by the fact that in Great Britain alone the amount used in the year 1700 was 10,000 tons, in 1800 150,000 tons and in 1900 over 1,000,000 tons of the "sweet stuff" were used, while year by year a still more rapid increase is noted.

The sugar cane was brought to Spain at the time of its conquest by the Moors. It was first planted in Valencia and the crude process of manufacture there in vogue in the year 1664 as told by an English traveler, is full of amusing interest for our modern manufacturers.

To make sugar after the canes are cleared of the tops and leaves and cut in small pieces, they are first bruised either with a perpendicular stone running around, as apples, to make cider, or olives to make oil, or between two axes strongly capped with iron, horizontally placed and turned contrary ways and then pressed as grapes or olives are. The juices thus pressed out is boiled in three separated cauldrons, one after the other. In the third cauldron it becomes thick and black, and is then put into conical pots which at the bottom have a little hole stopped only with coarse and foul sugar. These pots are covered when full with cakes of paste made of a kind of earth called the "Spanish gritty," which is good to take spots out of clothes and which cake sinks as the sugar sinks. These pots are put into others of another shape by the hole at the vertex and the juice drains down through the coarse sugar at the bottom. It drains for five or six months, in which time the sugar in the conical pots grows hard and all the juice has run out into the other pots. This juice is boiled again so long as it is good for anything, but at last it makes only a foul red sugar that will never be any better. The conical leaves of sugar after they are taken out are set to drain over the same pots for fifteen days. To make the sugar more white they must boil it again, but about one-sixth is lost every time. They never refine the sugar more than three or four times, and they use for the refining of it the whites of eggs, putting two or three dozen into a cauldron. When the process is finished it forms hard and white in nine or ten days.

It was from such crude beginnings as these that our present perfected method of sugar making have grown. While the Spaniards were carrying the sugar cane to the West Indies the Portuguese were likewise employed in their own colonies of Brazil. Thus far, as we have traced the course of the sugar cane from its earliest days to the present, one would naturally gain the idea that the West Indies and South America owe their great staple to the work of the European nations above mentioned. It has not been shown so far that the sugar cane was indigenous to these countries and the western hemisphere. The best authorities, however, give good reasons for the belief that this idea is incorrect. While early records on this as on most subjects are vague and incomplete, yet there is every reason to believe that in some of the West India Islands sugar cane was found already established when the first European stepped upon their shores.



periority of sugar content. The rich quality of the cane growing in these states, even where almost uncared for, as tested by a government expert, gives promise of an excellence when properly cultivated that can nowhere be surpassed.

The day is close at hand when Queen Sugar will share the reign of King Cotton in three of the states named, and will reign as queen in her own right in Florida, and in her service palace factories will spring up all over her domains.—Helen Harcourt in Sunny South.

A Curious Case. A dispatch from Mobile reports that a negro named Tom Barth was legally hanged two weeks ago in Randolph County, Alabama, until he was apparently and officially dead. He was pronounced dead by the official physician, and was cut down and delivered to his friends, who took him home to have a wake over him.

After reaching his home, however, they noticed some sign of life in him and sent hastily for a doctor who resuscitated him. "He is now sitting up and will recover." The question in Randolph County is, can the man be re-arrested, after having been legally killed, in the execution of the Court's sentence, and officially declared to be dead? It is, of course, a very interesting question, especially to Tom Barth; and it will have to be decided one way or another. "The law on the subject," it is stated, "is plain," whatever it may be, "but the authorities are necessarily scant."

We do not know what the law in Alabama is, but most of the State constitutions, we believe, provide, in effect, that a man's life "shall not be twice put in peril for the same offence," and if there is such a provision in the Alabama Constitution, we assume that it applies very closely to Barth's case. His life was very seriously imperilled for his offense, whatever it was. The official executioner and doctor did their best, and he had a very narrow squeak of it. The official representatives of the law having officially expressed the judgment that the demand of the law was satisfied, and having surrendered the body of the culprit accordingly, it is not clear how their finding and action can be set aside. In the eye of the law Tom Barth is dead; he has been "hanged by the neck until he was dead," and the law knows no such live person any more. How can he be re-arrested, and retried and resentence, and re-hanged? There is such a thing as res adjudicata, and Barth appears to be just such a res. We do not see, really, how he can be, legally, put in peril of his life again, and we take it that the Governor will have to compromise the matter, in a way, by commuting the man's sentence to life imprisonment in the penitentiary and dating the order of commutation back to the day preceding the imperfect execution of the Court's sentence.

Altogether it is a very curious case and we shall be interested to learn what is done with it. And not the least curious thing about it, it may be remarked finally, is the explanation of how the mishap, so to call it, occurred. The explanation is that the officials "were nervous and bungled their work." This could readily be understood, of course, if Barth were a white man. Very few sheriffs in this section of the country have ever had any experience in hanging white men. As Barth was black, however, the Randolph County officials appear to be without that excuse for their awkwardness, and the only presumption that can be suggested in their favor is that they had never before tried to hang anybody.—News and Courier.

The first explorers of the interior of America found sugar cane growing in the lower lands of the Mississippi river. Says Father Hennepin, "From thirty leagues below Haros down to the sea the banks of the Mississippi are full of canes."

Hippocrates mentions the sugar cane as growing spontaneously along the banks of the Rio de la Plata, and another reliable traveler saw it growing as an indigenous plant in the island of St. Vincent. It was in the year 1660 that the first sugar cane for commercial purposes was planted in Jamaica by the English. This cane came from the Barbadoes islands, where it had been imported from Brazil, just as the Brazilian cane had been brought from Europe and the European from India.

England, France and Spain all had a hand in establishing the sugar cane in the then colonies of the mainland, and of the success met with in its march over four of the Southern States especially, it is needless to speak, since facts are more eloquent than words. Louisiana, Mississippi, southern Georgia and Florida are destined to become the sugar producing centers of the world. Louisiana has already proven her claim as a great sugar country, and it has of late years been proven beyond a doubt that the soil and climate of southern Georgia and Florida are especially adapted to the culture of sugar cane in its highest perfection both as to growth and an-

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FARMING TOOLS!

NOTHING is more gratifying to an up-to-date Farmer than to have a well-equipped outfit to begin his Spring work, and this he is sure to get when he does his trading with us. We can sell you—

- PLOWS, PLOW STOCKS, SINGLE TREES, HEEL BOLTS, CLEAVICES, HAMES, TRACES, COLLARS, COLLAR PADS, BACK BANDS, PLOW LINES, BRIDLES.

And everything necessary to begin plowing, except the Mule, and we can "sight" you to a Mule trade.

We still have a few Syracuse Turn Plows that we are closing out at a very low price, and can furnish you with the Terracing Wing.

Come in and let us show you our 7-foot Perfection Trace Chain at 50c pair. Nothing in the Trace line compares with this Chain.

Don't you need a hog pasture? We have the Wire Fence for you.

BROCK HARDWARE COMPANY.

Advertisement for Dr. J. C. Hoffelt's Teething Tablets, including a small illustration of a baby and text describing the product's benefits for infants.

TRUTHS ABOUT COFFEES.

HAVING trouble with your Coffee, are you? Can't find the sort to taste? Can't get it uniformly good? Try BOLT and your Coffee trouble should cease.

White Star Coffee, and right Coffee-making, you are bound to have Coffee satisfaction. The Coffees are unbeatable, pure, genuine, and sold under their right names.

A. A. Grade, 40c a pound, an extra fine blend of rare, rich and costly Coffees of the very highest grade, fine flavor, delicious in the cup and suits the Coffee critic. The Coffees in it are never sold by some dealers because of their cost.

No. 1 Grade, Mocha and Java, 35c a pound. Another palate pleaser. Smooth, rich, fragrant, with drinking qualities hard to surpass.

No. 2 Grade 30c—No. 3, 25c. Both good and popular where medium priced Coffees are desired. Honest Coffees at honest prices. Blends of high-grade sorts and please most palates. Money saved if you like them.

C. FRANK BOLT, The Cash Grocer.

Advertisement for China Tea, listing various types of tea such as Oolong, Green, and Black tea, along with prices and contact information for John M. Hubbard.

Wheat Growers! TAKE NOTICE.

Do not Fail to try our Specially Prepared 8 1-2 2-2 Petrified--

Bone Fertilizers for Grain. We have all grades of Ammoniated Fertilizers and Acid Phosphates, also Kainit, Nitrate of Soda and Muriate of Potash; all put up in new bags; thoroughly pulverized, and no better can be found in the market.

We shall be pleased to have your order. ANDERSON PHOSPHATE AND OIL CO.

Why Not Give Your House a Coat of MASTIC PAINT? You can put it on yourself—it is already mixed—and to paint your house would not cost you more than...

Five or Six Dollars! SOLD BY Orr-Gray & Co.

Advertisement for Mastic Paint, detailing its benefits and providing contact information for Orr-Gray & Co.

Ask Your Doctor

He will tell you—that barley-malt is a half-digested food, as good as food can be.

That hops are an excellent tonic.

That the little alcohol in beer—only 3 1/2 per cent—is an aid to digestion.

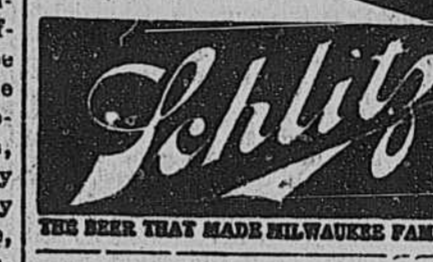
But Purity is Essential

But he will tell you that beer must be protected from germs, and brewed in absolute cleanliness.

He'll say, too, that age is important, for age brings perfect fermentation. Without it, beer ferments on the stomach, causing biliousness.

Schlitz beer is brewed with all precautions. It is the recognized standard all the world over, because of its purity.

Ask for the Brewery Bottling. For sale at all dispensaries in the State, in quart and pint bottles.



CURSE OF DRINK CURED BY WHITE RIBBON REMEDY.

No taste. No odor. Can be given in glass of water, tea or coffee without notice. White Ribbon Remedy will cure or destroy the diseased appetite for alcoholic stimulants, whether the patient is a confirmed alcoholic, a "tippler," social drinker or drunkard. Impossible for anyone to have an appetite for alcoholic liquors after using White Ribbon Remedy.

Foley's Kidney Cure makes kidneys and bladder right.

Notice to Teachers.

At a recent meeting of the State Board of Education two resolutions were passed which are of special importance to all teachers and prospective teachers. The first provides for two examinations each year, to be held in May and September, and that "no teacher shall be employed in the public schools of this State who has not registered the certificate in the office of the County Superintendent of Education and submitted proof thereof to the board of trustees."

CITATION.

State of South Carolina, County of Anderson. By R. Y. H. Nance, Judge of Probate. Whereas, E. B. Farmer has applied to me to grant him Letters of Administration on the Estate and effects of P. F. Farmer, deceased.

Notice of Final Settlement.

THE undersigned, Executor of the Estate of Mrs. M. V. Varr, deceased, hereby gives notice that he will, on Saturday, 6th day of June, 1903, apply to the Judge of Probate for Anderson County, S. C., for Final Settlement of said Estate, and a discharge from his office as Executor.

Notice to Creditors.

ALL persons having demands or claims against the Estate of Mr. G. W. Fant, deceased, are hereby notified to present them, properly proved, to the undersigned, within the time prescribed by law, and those indebted are notified to make payment.

Notice of Final Settlement.

THE undersigned, Executor of the Estate of Mrs. T. G. Reed, deceased, hereby gives notice that he will, on Friday, May, 29th, 1903, apply to the Judge of Probate of Anderson County, S. C., for a Final Settlement of said Estate, and a discharge from his office as Executor.



The Thief... ..of Beauty

Thousands of young women are awaking to the fact that inherited comeliness has been stolen away and instead of glowing cheeks, bright eyes, and rosy lips, they have faded, listless, and exhausted in "the morning, no life, no sentiment to enter upon their former pleasures, irritable, cross, discouraged, dull headaches, general dispirited feeling, sleepless nights, cold feet, poor circulation, "beating down" pains. All these symptoms indicate deranged and weakened organs. Shattered nerves and exhausted energies follow the weakened condition of the female organs as surely as night follows day. Have yourself freed from these terrible results, redeem your youth by taking Bradfield's Female Regulator.