#### SUGAR.

The Grand March of the Sugar Cane.

What did it do in those times" when it did not It would be hard, imposfact, 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 miss-ed 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 carbo-hydrates sweet in taste, and usually capable of being crystalized. They are produced by the vital processes found in both plants and animals. These carbobydrates 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, commercial sense.

Cane sugar or sucrose, the familiar sugar of commerce, is by far the most important of them all. It is sweeter than grape sugar or glucose by five to two and in a still higher ratio sweeter than milk sugar.

Sugar in various forms and proportions is found in a wonderful variety of substances. In the several species of sugar cane, in trees such as maple in pumpkins and in the chestnut, in the young shoots of maize, in the n many fruits. Sugar exists in peas,

he sugar called treebalose, from tre- portant place. ala, or Turkish manna, which is the oduct of an insect of the same odd amily as those remarkable ones so alizes in brilliant rectangular octabera, contains water of crystalization, uses at 212 degrees, and then loses be latter. It is very soluble in hot

mes an great a rotary power on polar-

red light as sucrose or cane sugar.

ven whom heated to 856 degrees it

oes not undergo any further changes, khough sucrose sugar fuses at 320. Sugar, the common every day sugar ith which all are familiar, is a very aluable article of food, as it is rapiddigested and gives heat forming od to the system. Prone to fermention when in a diluted state sugar, her in a contracted form, has great tiseptic power and is largely used preserving both animal and vegetasubstances from decay. Some aits contain enough sugar in their mposition to preserve them when led, as we see every day in the case figs and evaporated fruits. In other

ses, as in jellies and preserves, it ast be added in certain set proporplied to meats and fish preserves es of the natural flavor than when It alone is used, as witness the favte "sugar-cured" hams.

oaf sugar and sugar candy are two ailiar forms of orystalized sugar. former is a mass of tiny transpait crystals and owes its dazzling iteness to the refractions which the s of light undergo. The brown or of the candy is due to the fact t column matter was not removed m the rivin before the additional at crystalized it. The crystals of , try it, and note the pale, phos-

rescent light that results. groing now from the sugar of merce to its source, we propose to the path of the sugar cane from earliest days to the present, ther the Greeks nor Romans knew value of sugar cane as food, if in-

it is supposed that Theophractus al- put into conicel pots which at the botludes to it when he says that "honey tom have a little hole stopped only or sweet juice is produced from bees and also from canes." Strabo, in his geography and the great physician, Dioscorides, also, in his book on medical 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 Arabie books. and that the Chinese understood its culture from the most remote ages, and also the art of extracting its products. Humbolt confirms this statement by attesting that the plant is found drawn upon the oldest Chinese porcelsin. But it was not until nearly the thirteenth century that the sugar care 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 Coohin China to Bengal and was brought from India to the south of and several others unimportant in a Europe by the crusade during the fifteenth and sixteenth centuries. Various classical writers of our first era notice the sweet sap of the Indian far, as we have traced the course of reed and the granulated, salt-like product which was imported from India under the name of sacoharum (from sanskr, gravel, sugar) and much used

Although the art of boiling the juice of the cane was, as we have seen. known in India and China in the earland cow trees, in augar grasses such as lest ages, nothing was then known of sorghum, whose juice yields. 13 per the art of sugar refining. The Chicent of sugar; in carrots and turnips, nese did not learn the use of ashes for this purpose until the Mongol period, incorrect. While early records on "hanged by the neck until he was when some savant from Egypt taught flowering buds of the cocos palm and them the art. The cultivation of the "sweet reed" spread from Arabia into 2 per cent; in rye meal and in wheat Persia and here "sugar ; was prepared bread, 3 1-2 per cent; in cow's milk, with art" about the time of the Arab 43-4 per cent; in goat's milk, 51-4 conquest and its manufacture on a per cent; in human milk, in asses' large scale was one of the principal milk and in ripe pears, about 6 per industries of that region. A tribute cent. There it in oatmeal about 8 of 50,000 pounds was paid the sultan, per cent of sugar; in wheat flour from a fact that attests the great estimation 4 to 8 per cent; in best roots, 5 to 10; in which sugar was then held. The in ripe peaches 16 1-2 per cent; in art of sugar refining is believed to ripe cherries, 18 and in figs, 60 per have been developed by the famous physicians of Arabia, in whose limited But rarept and strangest of all is pharmacopela sugar occupied an im-

During what might be called the "age of discovery" the Spaniards side by side with the cane of European played an important part in scatterately interviewed in these columns, ing far and wide the cause that has he praying and leaf insects. The now become one of the world's greatngar extracted from this insect is it. est staples. It was they who carried elf as curious as its origin. It crys- it to Madeira in 1420 and to San Domingo in 1494. From thence early in the sixteenth century it was spread all | ed more sugar, but of a better quali- | stood, of course, if Barth were a white oversihe conquered portions of the West Indies and South America. cohol and possesses about three 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 ...

Vinice 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 | as growing spontaneously along the pounds sent to London by a Venetian | banks of the Rio de la Plata, and anmerchant in 1319, this amount being exchanged for a like value in wool. os. A mixture of salt and sugar During this same year the accounts of the court chamberlain of Scotland 1660 that the first sugar cane for comshow a payment of 1 shilling, 91-2 pence per pound for sugar. Nor did maica by the English. This cane 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 European from India. 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 tho amount used in the year 1700 was 10,000 tons, in especially, it is needless to speak, candy are larger than those of loaf 1800 150,000 tons and in 1900 over ar because the evaporation in the 1,000,000 tons of the "sweet stuff"

> at the time of its conquest by the proven her claim as a great sugar Moors. It was first planted in Valencis and the crude process of manufactore there in vogre in the year 1664 as told by an English traveler, is Florida are especially adapted to the full of amusing interest for our mod- culture of sugar cane in its highest

cleaused of the tops and leaves and make cider, or olives to make oil, or between two axles strongly capped with iron, horizontally placed and turned contrary ways and then pressed as grapes or olives are. The juice thus pressed out is boiled in three separated cauldrens, one after the other. In the third cauldron it be-What would the world do without | deed they knew of it at all, although comes thick and black, and is then with coarse and foul sugar. These pots are covered whom 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 vertix 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 foulred sugar that will never be any better. The conical loaves 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, bucabout 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 thesoothat 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 the sygar 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 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

It is more than a belief, it is a certainty, that the plant was found flourishing in the South sea islands by the earliest navigators and that the napress the juice from the cane. They did not, however, know its capacities for sugar making.

Some of the Otaheite sugar cane was brought to Jamaica and planted origin. At once it became apparent that the Otaheite cane was of a differant species from that of the old Indian cane. The stranger cane yielded an astonishing increase of sugar over that of the Indian. It not only yield-

Sir John Laforey, who introduced the Otaheite cane into the island of Antigua says: "The canes are much larger than those of our islands, their color and that of their leaves differs from ours. They are ripe enough to grind at the age of ten months, and they stand dry weather better than is that they had never before tried to ours, and are not liable to be attacked by that destructive insect called the

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 Maros down to the sea the banks of the Mississippi are full of canes."

Hippenes mentions the sugar cane other reliable traveler saw it growing as an indigenous plant in the island of St. Vincent. It was in the year mercial purposes was planted in Jacame from the Barbadoes islands, where it had been imported from Brazil, just as the Brazilian cane had been brought from Europe and the

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 since facts are more eloquent than words. Louisiana, Mississippi, southmer case has been slower. Did were used, while year by year a still orn Georgia and Florida are destined to become the sugar producing centers of the dark? If The sugar cane was brought to Spain of the world. Louisiana has already The sugar cane was brought to Spain of the world. Louisiana has already country, and it has of late years been proven beyond a doubt that the soil and climate of southern Georgia and perfection both as to growth and su-

"To make sugar after the canes are periority of sugar content. The rich quality of the cane growing in these cut in small pieces, they are first states, even where almost uncared bruised either with a perpendicular for, as tested by a government expert, stone running around, as apples, to 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 Hercourt 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 dea' by the official physician, and was ou '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 rearrested, 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 negessarily scant." We do not know what the law in

Alabama is, but most of the State constitutions, we believe, provide, in offeet, 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 fense, 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 beat authorities, however, give good can be set aside. In the eye of the reasons for the belief that this idea is law Tom Barth in dead; has been dead;" and the law knows no such live person any more. How can he be rearrested, and retried and resentenced. and rehanged? There is such a thing found already established when the as res adjudicata, and Barth appears first European stepped upon their 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 vary curious case and we shall be interested to learn what is done with it. And not the least ourious 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 pervous and bungled their work." This could readily be underman. 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 hang anybody.-News and Courier.



The Thief... ... of Beauty

Thousands of young women are awaking to the fact that inherited conliness hits been stolen sway and instead of glowing cheeks, bright eyes and amooth brows, the tell-tale wrinkles of pain have taken the place of these former clearus.

These are the warning feelings! Weak, tired and axhausted in 'he morning, no life, no ambition to enter upon their former plensures, firitable, cross, discouraged, dull headsches, general dispirited feeling, sleepiess nights, cold feet, poor circulation, "bearing down" pains. All these symptoms indicate deranged and weakened or symptoms indicate deranged and weakened or syns, Shattered nerves and exhausted energies follow the weakened condition of the female organs as surely as night follows day. Save rourself from more terrible results, redeem your routh by taking

#### Bradfield's Female Regulator

The most strengthening, invigorating, menstrual regulator in the world.

It relieves pellet a menstrustion, profuse menstruation, obstructed acceptance, inflammation of the vagina, displacement, membranol catarrh, nervousness, headschee, et cettera, beauty of face and symmetry of form are the Of druggists \$1.00. Our book, Perfect Health for Women, mailed free. THE BRADFIELD REGULATOR CO.

## 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 31/2 per centis 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 recog-nized standard all the world over, because of its purity. Askfor the Brewery Bottling.

For sale at all dispensaries in the State, in quart and pint bottles.



## CURSE DRINK

WHITE RIBBON REMED!

No taste. No odor. Can be given in glass of water, tea or coffee without patient's knowledge.

White Ribbon Remedy will cure or destroy the diseased appetite for alcoholic stimulants, whether the patient is a confirmed inabriate, a "tipler," soois frinker or drunkard. Impossible for any one to have an appetite for alcoholic liquors after using White Ribbon Remedy.

Indorsed by Members of W. C. T. U.

Mrs. Moore, press superintendent of Woman's Christian Temperance Union, Ventura, California, writes: "I have tested White Ribbou Remedy on very obstinate drunkards, and the cures have been many. In many cases the Remedy was given secretly. I cheerfully recommend and indorse White Ribbon Remedy. Members of our Union are delighted to find an economical treatment to aid us in our temperance work."

Druggists or by mail, \$1. Trial package free by writing Mrs. A. M. Townsend; (for years Secretary of a Woman's Christian Temperance Union.)

218 Tremont 81. Boston, Mass. Bold in Abderson

### Foley's Kidney Cure makes kidneys and bledder right.

Notice to Teachers.

AT a recent meeting of the State Board of Education two re-olutions were passed which are of special importance to all 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."

The second forbids the teaching of Latin in the public schools except by teachers who hold a special certificate showing their qualification to teach this subject. College diplomas do not exempt teachers from the examination in Latin. Pursuant to these resolutions an exami-

teachers from the examination in Latin. Pursuant to these resolutions an examination will be held at Ander-on on Friday, May 22nd. The examination will begin at 9 a. m. and all applicants are urged to be here on time, provided with the necessary stationery, etc.

R. E. NICHOLSON.

Co. Supt. Ed.

May 5, 1903 3t

#### 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

ministration on the Estate and effects of P. F. Farmer, deceased.

These are therefore to cite and admonish all kindred and creditors of the said P. F. Farmer, deceased, to be and appear before me in Court of Probate, to be held at Anderson C. H. on the 15th day of May, 1903, after publication hereof, to show cause, if any they have, why the said Administration should not be granted. Given under my hand, this 29th day of April, 1903

R. Y. H. NANCE, Probate Judge.

April 29, 1903 46

## Notice of Final Settlement.

THE undersigned, Executor of the Estate of Jno. M. Warren, dec'ed, hereby gives notice that he will on Saturday, 6th day of June, 1903, apply to the Judge of Proc to for Anderson County, S. C., for Final Settlement of and Estate, and a discharge from his office as Executor.

J C JACKEON,

Executor.

May 6, 1903

46 46

May 6, 1903

#### 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 proven, to the undersigned within the time prescribed by law, and those indebted are notified to make payment.

RUFUS FANT, Executor.

April 22, 1903. 42. 3

#### Notice of Final Settlement.

THE undersigned, Executor of the Estate of Mrs T. C. Reed, dee'd, 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 Execu-

B. F. MAULDIN, Executor.

# 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 whenhe does his trading with us. We can sell you-

PLOW STOCKS, SINGLE TREES, HEEL BOLTS. CLEVICES. 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



#### 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 troshould cease. Once I know the kind your palate approves I can give you just?

Wit. White Star Coffee, and right Coffee making, you are bound to have Coffee sa sfaction. The Coffees are unbeatable, pure, genuine, and sold under their righ names. No substitutes allowed here. White Star Coffees are put in Caus for grades from 25c to 40c a pound. I am exclusive agent for these A. A. Grade, 40g a pound, an extra fine blend of rare, rich and costly Cof-

fees 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.

Coffee critic. The Coffees in it are never sold by some dealers because of their cost. Those who want a No. 1 Coffee recognize its betterness at once.

No. 1 Grade, Mocha and Java, 35c a pound. Another palate pleaser. Smooth, rich, fragrant, with drinking qualities hard to surpass. "Can't be surpassed," many folks claim. Genuine Mocha and Java, and not Rio or other sorts masquerading under assumed names for profits sake.

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

C. FRANK BOLT, The Cash Grocer.

NHOL HUBBARD.

# Nheat 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

You can put it on yourself-it is already mixed—and to paint your house would not cost you more

Five or Six Dollars! Orr-Gray & Co.