

**Difficult Digestion**  
That is dyspepsia. It makes life miserable. Its causes are not because they want to, but simply because they must. They know they are irritable and fretful; but they cannot be otherwise. They complain of a bad taste in the mouth, a tenderness at the pit of the stomach, an uneasy feeling and what not. The effectual remedy, proved by permanent cures of thousands of severe cases, is **Hood's Sarsaparilla**. Hood's Pills are the best cathartic.

**Who's Your Grocer?**  
If he doesn't handle Monopole Spices, you ought to. If you want to try them, send us his name and address with two 2-cent stamps for postage and we will send you a 10 cent tin of Monopole Spices or Ginger or White Pepper or any variety. We know you'll say it's the finest you ever used. Send at once to **Wadhams & Kerr Bros., Portland, Oregon.**

**Retaining Fee.**  
Guest—Are tips expected here?  
Waiter—No, sah; we doan accept no sugar tips. We is free-born American citizens, sah, we is, and we wish to preserve our self respect, sah. I wish to glad to hear that.  
"Yes, sah, all we require is a retaining fee, same as lawyers, sah."—New York Weekly.

**Hamlin's Wizard Oil** is a good medicine; pain and suffering cannot attack it; your druggist will tell you so.

**Noah's Troubles.**  
"Confound that dinosaur!" exclaimed Noah, as the ark gave such a lurch to starboard that the waves dashed against the roof. "I wish it would learn to stay on its own side of the boat!"  
Then Noah seized a handspike and started below deck to shift the cargo.—Ohio State Journal.

**Mothers will find Mrs. Winstow's Soothing Syrup** the best remedy to use for their children during the teething period.

**Domestic Troubles.**  
Mr. Nagget—Oh, what's the matter with you? You're forever finding fault.  
Mrs. Nagget (sweetly) Well, that explains things. You're forever losing me.  
Mr. Nagget—Losing one?  
Mrs. Nagget—Yes, your temper. Surely that's a fault.

**Don't Get Footsore! Get Foot-Ease.**  
It is a certain cure for sweating, callous and itching, itching feet. Makes new or tight shoes easy. Try it today. Sold by all Druggists. Price, 25c. Don't accept a substitute. Sample sent FREE. Address: Allen S. Olmsted, LeRoy, N. Y.

**The Sure Way.**  
"How dare you send a collector to my house?"  
"To tell the truth, sir, we were a little doubtful about you."  
"Then why not have me looked up? You would then have known that I never pay my bills."—Life.

**Only Time Could Tell.**  
"Hey!" shouted the cycle policeman, as the man in the big racing car started to pass him like a railroad train. "Ain't you riding a trifle more than eight miles an hour?"  
"How do I know," howled the speed maker over his shoulder. "I haven't ridden an hour yet."—Automobile Magazine.

**CASTORIA**  
For Infants and Children.  
The Kind You Have Always Bought  
Bears the Signature of **W. D. Hoagland**  
A Windfall.  
"You say his money fell to him?"  
"No, he fell to it—tumbled through a coal hole and sued the city."—Chicago Herald.

**CANCER**  
Sufferers from this horrible malady nearly always inherit it—not necessarily from the parents, but may be from some ancestor, for Cancer often runs through several generations. This deadly poison may lay dormant in the blood for years, or until you reach middle life, then the first little sore or ulcer makes its appearance—or a swollen gland in the breast, or some other part of the body, gives the first warning.

To cure Cancer thoroughly and permanently all the poisonous virus must be eliminated from the blood—every vestige of it driven out. This S. S. S. does, and is the only medicine that can reach deep-seated, obstinate blood troubles like this. When all the poison has been forced out of the system the Cancer heals, and the disease never returns.

Cancer begins often in a small way, as the following letter from Mrs. Shirer shows:  
"A small pimple came on my jaw about an inch below my eye on the left side of my face. It grew so large and so sore that I could not see or hear. It would bleed and it would not heal. This was for some time, when my jaw began to swell, becoming very painful. I was told that it was Cancer because it was so large and so sore. I was told that it was Cancer because it was so large and so sore. I was told that it was Cancer because it was so large and so sore."

**SSS** blood purifier, and the only one guaranteed pure vegetable. Send for our free book on Cancer, containing valuable and interesting information about this disease, and write our physicians about your case. We make no charge for medical advice.  
**THE SWIFT SPECIFIC CO., ATLANTA, GA.**

# STORY OF SUGAR.

## Graphic Description of the Methods of Reducing Sugar Cane and Beet Root to the Sugar of Commerce—A Bit of History and a Mass of Uncommon and Interesting News Given.

**SUGAR** is a generic term, having one meaning in chemistry, another in commerce and still another in politics. In the slang phraseology of the day, sugar has supplanted "soap" as the agent which keeps political machines greased and accomplishes many things which the uninitiated public fails to understand.

The sugar of commerce, however, while it has been suspected of mixing in politics, has a more important office than that of a lubricant of the wheels of government. If it sweetens the cup for some of our statesmen it also fills the cup for thousands of toilers, gives scores of thousands of little folks the stomach ache and, in one form or another, makes America the paradise of dentists. America does not make a very large proportion of the world's supply of raw saccharine matter, but it refines a great deal of it, importing for the purpose something like 2,700,000,000 pounds annually. While the United States produces only about 600,000,000 pounds of cane sugar annually, it refines many times that amount, an indication that this country not only has a very big sweet tooth but has a refining industry upon one of the world's great products.

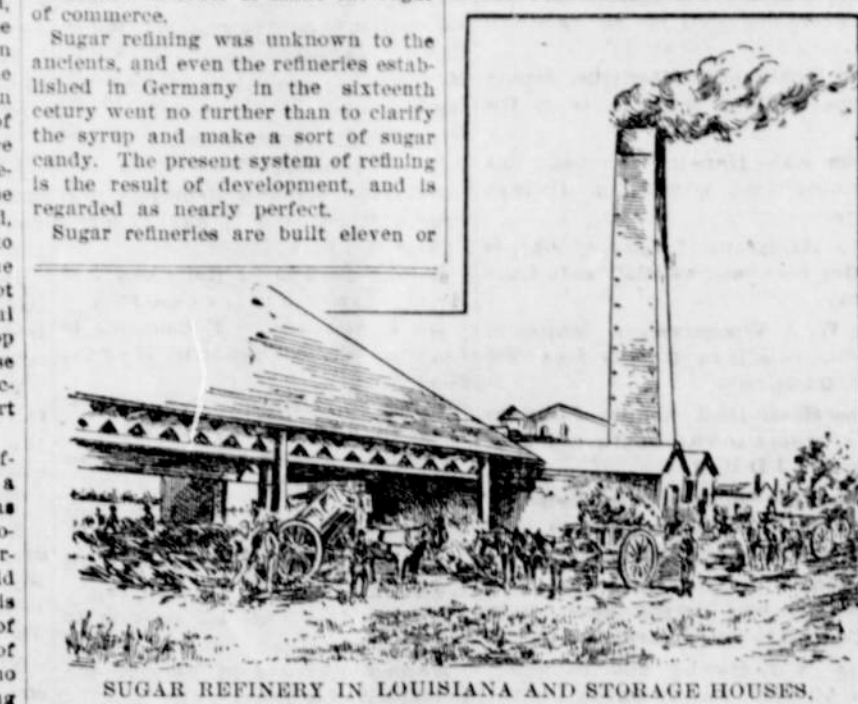
The sugar of commerce is obtained from the juice of the sugar cane, a genus of the grasses, which is found chiefly in tropical and sub-tropical regions, and is also obtained from a species of the beet root which is cultivated for the purpose extensively abroad, and of late years to a considerable and constantly increasing extent in some portions of the United States.

As a matter of fact, the world's annual production of beet sugar is much larger than the production of cane sugar. Cane sugar is the kind in common

the upper dome there is a large pipe communicating with a condenser into which a rush of cold water is continually passing, so as to condense all the steam or vapor that arises from the boiling liquor. The water which is continually rushing into the condenser is as steadily withdrawn again by a pump. There is thus a constant vacuum in the pan, and consequently the liquid will boil at a much lower temperature than it would in the open air or pan. By the time the vacuum pan is full the contents have thickened by the formation of crystals of sugar into a mass the consistency of thick gruel. This is drawn off into a heater and kept merely warm until it can be run into pots to cool and complete crystallization. The residuum is boiled and reboiled, making the different lower grades of sugar. The result of this process is raw sugar, which must be refined in order to make the sugar of commerce.

Sugar refining was unknown to the ancients, and even the refineries established in Germany in the sixteenth century went no further than to clarify the syrup and make a sort of sugar candy. The present system of refining is the result of development, and is regarded as nearly perfect.

Sugar refineries are built eleven or



SUGAR REFINERY IN LOUISIANA AND STORAGE HOUSES.

twelve stories high, and the raw sugar is first hoisted to the upper story, where it is dissolved in large tanks of hot water, care being taken to use as little water for the purpose as possible. Formerly a quantity of bullock's blood was stirred into the solution of sugar, and the heat being gradually raised, the albumen of the blood coagulated and rose to the surface in the form of a thick scum, bringing with it nearly all the mechanical impurities floating in the fluid. Now the same result is obtained by an air blast which

flows of the treacle or syrup to the aperture at the bottom of the form. To get rid of the coating of colored syrup which still hangs about the crystals of sugar, a small quantity of a saturated solution of pure white sugar is poured on the top of the form. This strong liquid is unable to dissolve any more sugar, but being more fluid than the sticky coating of syrup adhering to the crystals, it mixes with the coatings and makes them fluid enough to flow down to the bottom of the form, leaving the crystals clear of syrup and coloring.

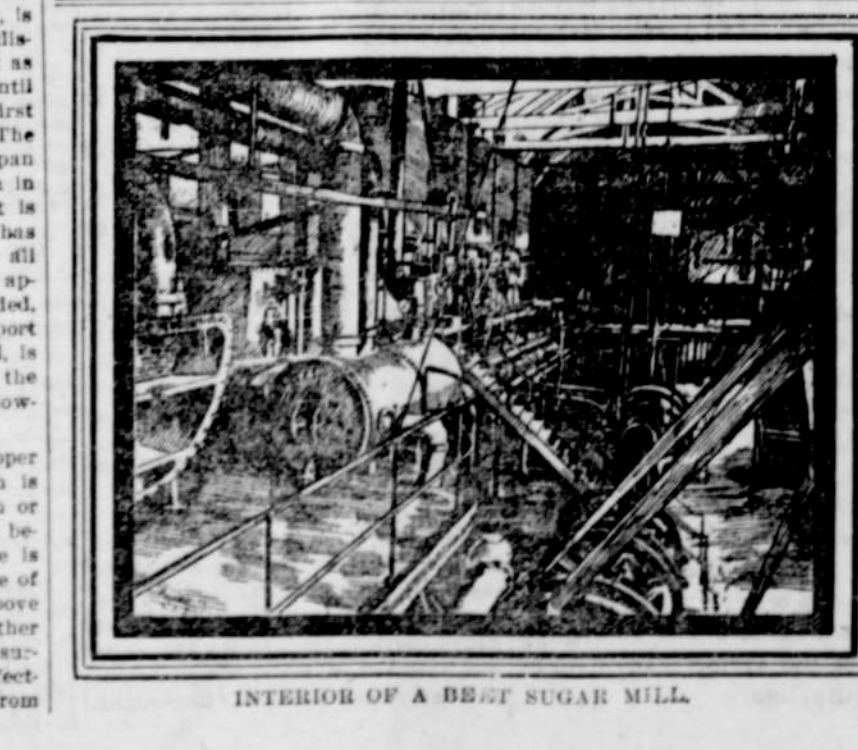
The liquor draining from the forms is reboiled and forms leaves of inferior grade, and the liquor drained from the inferior leaves is again boiled into yellow sugar.

Crushed sugar is simply inferior leaves crushed while soft and moist. The syrup which drains from refined sugar is reboiled and constitutes the "golden drip" syrup sold in the stores.

**Beet Sugar Process.**  
The process with beet sugar, which is inferior sweetening quality, is quite similar to that pursued with cane sugar, except that the juice is treated with lime or sulphuric acid to clarify it, is strained through flannel, and the filtered juice is mixed with lime-water beat up with the white of egg. Beet root gives about 10 per cent of saccharine matter as compared with the 18 per cent of cane sugar. The mangel-wurzel beet is best for sugar making. These dry details give an idea of sugar refining. The production of sugar, the various stages of its development from cane to marketable product, and the commerce in sugar constitute a prodigious industry. The beet sugar production of the world amounts to 3,900,000 tons annually, while the production of cane sugar reaches an annual total of 2,900,000 tons. A fair proportion of the world's output of raw cane sugar comes from America, not to exceed 265,000 tons, the cane sugar growing being confined to the States of Louisiana, Texas, Florida and Mississippi, the first named State producing all but 6,000 tons of it. The greatest cane sugar country in the world is Cuba, with 850,000 tons annually. Then comes Java, 480,000; the United States, 265,000; Philippines Islands, 265,000; Brazil, 260,000; Hawaiian Islands, 135,000; Mauritius, 125,000; Demarara, 110,000; Egypt, 70,000; Barbadoes, 65,000; Porto Rico, 60,000; Trinidad, 50,000; Guadeloupe, 40,000; Reunion, 37,000; Martinique, 32,000; Jamaica, 25,000; Lesser Antilles, 25,000.

**Mental Variations.**  
If there is anything certain, it is that no intelligent person will retain all the same views at 20 that he held at 30, or retain those at 50 that he held at 60. Nor are there mental variations to be deplored. Emerson says, "Why should you keep your head over your shoulder, lest you contradict somewhat you have stated in this or that public place? Suppose you should contradict yourself—what then? It seems to be a rule of wisdom never to rely on your memory alone, but ring the past for judgment into the thousand-eyed present, and live ever in a new day."

No man admires a doctor's generosity in prescribing large doses.



INTERIOR OF A BEET SUGAR MILL.

**BUYING BINDING TWINE.**  
The Following Points Should be Kept in Mind.  
Beware of unscrupulous dealers who misrepresent the quality of this important article.  
The best material for Binding Twine is pure Manila fibre. The poorest material for Binding Twine is Sisal fibre. The best Binding Twine is Pure Manila, selected fibre, 650 feet to the pound. The next grade is made partly of Pure Manila fibre and runs 600 feet to the pound.  
Twine made of Sisal fibre cannot be spun longer than 500 feet to the pound with proper strength and evenness.  
The great question is how many bundles can you bind with one dollar's worth of Twine? Notice the length, per pound and figure how many feet of Twine you get for a dollar. The mixed fibre twine is 20 per cent longer than the Sisal grades. The Pure Manila Twine is 30 per cent longer. It is a simple problem in arithmetic. Use a little "horse sense" and you cannot fail to decide right.  
Standard Twine is Sisal Twine, colored or dyed to imitate Manila, and is the same length and same price as Sisal, in the same strength and same price at all factories where it is made. Some dealers are selling it for a better grade than Sisal, which it is not. When they misrepresent the twine and use deception to enlarge their profit do they deserve patronage?  
If Twine is made of Pure Manila fibre the tag attached to each ball will always bear the words "Pure Manila."  
If Twine contains any Manila fibre the word "Manila" will always appear on the tag, for no dealer or maker will fail to put on the labels any fact which will recommend his goods.  
The "Red Clover Leaf" is the best grade of Twine made and is the favorite with the farmers all over the Pacific coast, and is of guaranteed length and strength.  
The Manila grades are the smoothest, evenest and most satisfactory in every respect.

The Sisal grades are rough, coarse and harsh; they wear out the knotters, twine guides and twine holders on the binders very fast and are so stiff and unyielding that the knots are more likely to slip and become untied when the bundle drops from the binder or in shocking and hauling.  
Some twines are sold merely by the name of the manufacturer and the salesman is careful not to mention the grade or quality. In buying always require specific information as to the quality of the Twine, and, moreover, be very careful to inspect the tag attached to the balls. The buyer, if well informed, cannot be deceived.  
Manila fibre is all brought from the Philippine islands. The Pacific coast should especially encourage trade with these islands, for they now belong to our country, and in Asiatic trade lies our best hope for the future, for the reason that when this trade is developed the Pacific coast will control it and our commerce will increase a thousand fold.  
The only check that can be put upon the capacity of the producers of Sisal fibre in Yucatan (which is the cause of the present high price of twine) is the largest possible use of Manila fibre.  
Reduce the demand for Sisal Twine 25 per cent and you will see twine prices decline at once.  
Owing to possible market changes we do not quote prices in this article, but we will at all times sell at reasonable prices based on the cost of the goods, and we will tell the truth about the twine and will not resort to any misrepresentation.  
Our grades and brands are: Pure Manila, "Red Clover Leaf" brand, 650 feet to the pound. Mixed Fibre "Manila," 600 feet to pound. Colored Sisal, "Standard," 500 feet to pound. Sisal, "Pure Sisal," 500 feet to pound.  
**THE PORTLAND CORDAGE CO.**  
Patronize home manufactures. All our twine is made in Oregon. None of the money goes out of the state except the bare cost of the raw material.

**Proves His Heroism.**  
"Did you say," asked the author's friend, "that your hero, who is poor, is to marry the rich heiress?"  
"Yes, that is the way he proves his heroism."—Indianapolis News.

**Reasonable Inference.**  
"Did the evidence in that divorce suit indicate that Mrs. Flash was giddy?"  
"I guess so. The judge and five of the jurors wanted to marry her."—Brooklyn Life.

**ABSOLUTE SECURITY.**  
Genuine  
**Carter's Little Liver Pills.**  
Must Bear Signature of **Brewster**  
See Fac-Simile Wrapper Below.

FOR HEADACHE.  
FOR DIZZINESS.  
FOR BILIOUSNESS.  
FOR TORPID LIVER.  
FOR CONSTIPATION.  
FOR SALLOW SKIN.  
FOR THE COMPLEXION.  
CURE SICK HEADACHE.

**Cure Your Horses**  
OF HEAVES, COUGH OR DISTEMPERS WITH  
**PRUSSIAN HEAVE POWDERS.**  
CURED THIRTY-FIVE HORSES.  
PRUSSIAN REMEDY CO., St. Paul, Minn.  
GENTLEMEN—I have been using the PRUSSIAN HEAVE POWDERS for the past eight months, and in that time have cured 35 horses of heaves, 14 of distemper and 9 of chronic cough. Your Prussian Remedies have gained a great reputation in this section of the country. I am, Sir, your obedient servant,  
BOWEN SEED STORE, Coast Agents Portland, Ore., and Seattle, Wash.

**Your Hair**  
"Two years ago my hair was falling out badly. I purchased a bottle of Ayer's Hair Vigor, and soon my hair stopped coming out."  
Miss Minnie Hoover, Paris, Ill.  
Perhaps your mother had thin hair, but that is no reason why you must go through life with half-starved hair. If you want long, thick hair, feed it with Ayer's Hair Vigor, and make it rich, dark, and healthy.  
\$1.00 a bottle. All druggists.  
If your druggist cannot supply you, send us one dollar and we will express you a bottle. Be sure and give the name of your nearest express office. Address: J. C. AYER CO., Lowell, Mass.

**Patent Had Expired.**  
Lon Field met Gus Rodgers on the Riata a few days ago. After talking a few minutes Field said:  
"Gus, what's become of those patent leather shoes you wore last winter?"  
"They have gone to the wall, Lonnie."  
"Why, wasn't the leather good?"  
"Yes," said Gus with a sigh, "but the patent expired."—New York Times.  
**Something Wrong.**  
Windig—I make it a rule never to talk on any subject of which I know nothing.  
Jabber—If that's true, it's mighty queer.  
Windig—What's a mighty queer?  
Jabber—The fact that you are constantly talking.  
**Stilt Racing in Gascony.**  
Until very recently hardly any festivals took place in the villages of Gascony without stilt races. The prizes usually consisted of a gun, a sheep, a rooster, or something of the kind, and young women took part in the exercises.  
**And It's Incurable.**  
Judge—What is your profession?  
Witness—I'm a poet, your honor.  
"Huh! That's not a profession; it's a disease!"—Chicago Daily News.

**BISHOP SCOTT ACADEMY**  
PORTLAND, ORE.  
Founded 1870  
A Home School for Boys  
Military and Manual Training  
Write for Illustrated Catalogue  
**ARTHUR C. NEWELL**  
PRINCIPAL

**St. Helen's School for Girls.**  
Thirty-third year. Commodious buildings. Modern equipment. Academic and college preparatory courses. Special courses in music and art. Physical training. All departments will reopen September 16.  
MISS ELEANOR TEBBETTS, Principal.

**HOITT'S SCHOOL.**  
Parents desiring home influences, beautiful surroundings, perfect climate, careful supervision, and thorough mental, moral and physical training for their boys, will find all these requirements fully met at Hoitt's School, Menlo Park, San Mateo County, Cal.  
Send for Catalogue.  
Twelfth year begins August 12th.  
IRA G. HOITT, Ph. D., Principal.

**MONOPOLE**  
stands for all that is best in Coffee, Spices, Flaming Powders, Canned Goods, Syrups, Starches, Etc. They are consistently the finest goods packed at any price. Ask your grocer for them.  
**WADHAMS & KERR BROS., Packers, Portland.**

**JOHN POOLE, PORTLAND, ORE.**  
Foot of Morrison Street.  
Can give you the best bargains in Buller's Engines, Windmills, Pumps and General Machinery. Wood sawing Machines a specialty. See us before buying.



**HOW ABOUT IT?**  
When you strike a stump with the ordinary push out mower, something happens about as shown in the above illustration, and they are not push cuts, and all will do this except the Champion Draw Cut Mower.  
This serves to show that pressure against the bar will raise the wheels from ground, decrease traction and cutting power. With the Champion Draw Cut the contrary is the result—pressure against the bar in heavy cutting gives downward pull, holding the wheels tight to the ground. Increased traction, more power, less wear, and the most powerful cutting edge making the most powerful cutter. And if you want the best mower made, buy the Champion Draw Cut.  
Send for book of testimonials from hundreds of delighted customers, all over Oregon, Washington and Idaho. MITCHELL, LEWIS & AYER CO., General Agents, Portland, Ore.

**SPRINGSTEEN MEDICINE CO.**  
214 Alky bldg., Third and Morrison Sts.  
The merits of the Springsteen Medicine Company are well known. Both Male and Female complaints, many which have baffled medical skill, are cured by our medicines. In those who cannot call, address as above, and all information will be provided.

**Summer Resolutions**  
TAKE THE **Keeley Cure**  
Sue relief from liquor, opium and tobacco habits. Send for particulars to  
**Keeley Institute**  
Ave. of Portland, Oregon  
P. O. N. U. No. 25-1502.

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**PRUSSIAN HEAVE POWDERS**  
OF HEAVES, COUGH OR DISTEMPERS WITH  
**PRUSSIAN HEAVE POWDERS.**  
CURED THIRTY-FIVE HORSES.  
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