

TESTING FOR KICK IN HOOTCH

Secrets of the Maker an Open Book to Chemists.

The Locating of Alcohol, Coloring Matter, etc., in Samples of Seized "Liquor"—Fake Gin Included Among the Products.

New York, Sept. 6.—(The Associated Press)—Secrets of the "hootch" maker who manufactures synthetic whiskey or gin are as open book to the government chemists who test the products of violators of the Volstead law.

Evidence seized from rum-runners and bootleggers is brought to them for examination. How the chemical tests are conducted was disclosed by R. A. Edson, chief chemist of the government laboratory in the federal building. The walls of his office are lined with shelves filled with bottles of every kind and description containing every kind of beverage forbidden by the Volstead Act.

A fringe of stills set in racks decorates the top of the shelves and there is a big pile of them in a corner. In the last year more than 8,000 samples of liquor, good, bad and indifferent, have been tested here and the results produced later in the federal courts.

The first thing to be done by the chemists when a sample of suspected liquor is brought in is to test it for alcohol. Usually the prohibition agents try to get at least half a pint of whiskey and a pint of wine for the chemists to work on. But occasionally an agent comes in with a small bottle of liquid which, he explains, is a drink of whiskey which he bought at a bar and had to hold his mouth until he could spit it out into a bottle without being observed by the bartender. And that is tested too.

When the sample is large enough the hydrometer is used to find the amount of alcohol present. The hydrometer is a thermometer-like instrument of glass with the specific gravities marked on it. It is floated in the sample and the markings read. Alcohol being lighter than water the hydrometer sinks farther in mixture of alcohol and water than in plain water. The amount of alcohol can thus be accurately determined by adding the markings.

Small samples of booze are tested by means of the pycnometer. A measured quantity of the suspected liquid is weighed and its weight compared with that of an equal quantity of water. By means of a few computations the amount of alcohol can easily be found. For rapid work on beer and wine with small percentages the ebulliometer is used. The evidence is heated up to the boiling point. Water rises at 100 degrees Centigrade and alcohol at a much lower temperature. A mixture of alcohol and water boils at a temperature between water and thus the chemists can rapidly calculate the amount of alcohol.

After the test for alcohol has been completed in the case of whiskey the color of the sample is tested. Whiskey at law has been held in bond for some time a color of its own due to the inside of the whiskey barrels being charred. Fire before the whiskey is put in. The manufacturing bootlegger making an artificial whiskey of grain alcohol and water uses caramel made of burnt sugar to color his product.

The Marsh reaction shows if the color of the whiskey sample is genuine or artificial. A quantity of amy alcohol lightly acidified with phosphoric acid is mixed with the liquid to be tested. Amy alcohol being lighter than ethyl alcohol, as ordinary grain alcohol is called by the chemists, rises to the top of the mixture. If the whiskey is genuine the color will mix with the amy alcohol and rise to the top of the mixture. If the color is due to caramel it will stay in the bottom of the mixture. Test is made for wood alcohol if there is any suspicion of its presence.

Mr. Edson said that 90 per cent. of the liquor seized by the prohibition agents and brought to the laboratory to be tested is synthetic whiskey made of alcohol and water and a little color or just plain "hootch".

"We can easily tell whether the stuff is genuine or not by just smelling of it," he explained. "The synthetic stuff has a distinct smell of raw alcohol which is not present in genuine whiskey no matter how bad it may be."

"Lately we have tested samples of synthetic gin. It is made of alcohol and water with a little oil of juniper to give the characteristic gin flavor. But the juniper flavor is ranker than genuine gin and I don't think any one gets much pleasure from drinking such stuff. The bootleggers usually put in too much of the oil of juniper."

"There is some artificial wine seized by the prohibition agents. It is usually made from alcohol and water flavored with fruit juice of some kind. The home-made wine that is submitted for test is very poor stuff. Usually there has been sufficient fermentation of grapes after they are pressed and some times putrefaction has started. Such wine will contain about 7 to 9 per cent. of alcohol."

"Most whiskeys contain 40 to 50 per cent. alcohol. Scotch whiskey has less alcohol than the other whiskeys. We have found small quantities of creosote in some of the artificial Scotch whiskeys that have been seized. The creosote is put in to imitate the peat-smoke flavor of the genuine article."

The making of home-made grape juice is dangerous from the standpoint of the Volstead Act unless precautions are taken to prevent fermentation and the consequent production of alcohol. The best way is to sterilize the grapes by pouring hot water over them or by boiling the juice. There is a wild yeast present on the grapes and floating in the air at grape-picking time and it is the wild yeast that starts the fermentation. The government chemists have even tested Chinese wine or napa to determine for the government if it was suitable for human consumption. A large quantity of wine consigned to Chinese merchants here was held up by the customs officials on the ground that it smelled so bad it was not fit for human consumption. The government's chemists found the wine was made from rice spirits and a decoction of herbs. They said it was all right for Chinese medicinal purposes so it was allowed to be brought in.

THIRTY-FOUR HURT IN A BURNING CAR

Swampscott, Mass., Sept. 5.—Thirty-four persons were injured, five seriously, when they were trapped in a burning one-man trolley car on Humphrey street here last night. None of the injured will die.

A short circuit in the wires under the body of the car set the floor on fire. The passengers, panic-stricken, crowded to the front so lightly that Motorman Thomas A. McCarthy was unable to open the door. Windows were broken, but before the passengers had succeeded in climbing out all were suffering from cuts and burns. Fifteen were taken to a hospital but ten of these were later taken home.

A ST. LAWRENCE VILLAGE BURNED

Malone, N. Y., Sept. 5.—Fire destroyed the central section of the village of Bombay, twenty-five miles west of here on the St. Lawrence river, today, causing a loss estimated at \$150,000. The blaze is believed to have been incendiary. Ten buildings were burned, including the property of Shields Bros. manufacturers of moccasins and Indian specialties. Several men were injured fighting the flames.

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Malted Milk for the Home A nourishing food-drink for All Ages. Anywhere at anytime. Delicious, sustaining, No cooking.

MARINE JOURNAL

ALMANAC FOR ST. JOHN, SEPT. 6.
A.M. P.M.
High Tide... 2.25 Low Tide... 11.11
Sun Rises... 5.55 Sun Sets... 6.47

PORT OF ST. JOHN.

Arrived.
Saturday, Sept. 3.
Str. Governor Dingley, 2550, Ingalis, from Boston.

Sunday, Sept. 4.
Sch. Frederick H., 429, Hawx, from New York.
Sch. Kennebunk, 629, Moody, from New York.

Sailed.
Saturday, Sept. 3.
Str. Governor Dingley, 2550, Ingalis, for Boston.

Sunday, Sept. 4.
Sch. Moonlight, 160, Martin, for Boston.

MARINE NOTES.

The four-mastered schooner Kennebunk arrived here on Sunday from New York with hard coal for the Consumers Coal Co. Nagle & Wigmore are the local agents.

The steamer Muskegon is due to arrive here early this morning from Hampton Roads with a full cargo of coal for the Atlantic Sugar Refinery. Nagle & Wigmore are the local agents.

The schooner Charles C. Lister proceeded up the river on Sunday in tow of the tug Wasson to Gagetown to load lumber for New York. Nagle & Wigmore are the local agents.

Notice has been posted by the famous shipbuilding firm of Yarrow & Co. Ltd., Scotstoun, Glasgow, that the yards will be closed November 30. No continuation has been given as to the date for reopening. The company is operating two plants says that "constant strikes, excessive costs of material and labor and the lack of demand for vessels have made further operations impossible. In order that the employees may have ample time in which to obtain employment elsewhere advance notice has been given. The company has built some of the fastest vessels afloat and while the works are closed will continue work in its experimental and research plant."

It is reported that the shipping board has fixed an insurance value on freight vessels sold to pioneer purchasers of \$20 a dead-weight ton. While a circular has informed such purchasers of the new valuation, they have been complaining that this action does not establish a new sales price. In the event of the loss of a ship insured at \$20 a ton, there is speculation as to what would be the position respectively of the purchaser and the shipping board. Some of the steamers were sold to the "pioneers" at \$225 a dead-weight ton and it is understood that in some cases, as much as \$30 has been paid in on the ships on the deferred payment plan. This gives the shipping board an equity of \$175 a ton in the ship, the notes of the company being held for this amount. Under the circumstances, it is not entirely clear to the steamship lines as to what would happen in the event of a total loss. Insured at \$20 a ton, the shipping board would doubtless claim this full amount, which would leave nothing to the purchaser for his equity in the ship and \$92 per ton still due to the government.

Bids of \$2,100 each for 208 wooden vessels submitted by the Ship Construction & Trading Corporation of New York have been accepted by shipping board. It was announced officially at Washington (D. C.), recently. A contract for sale between the corporation and the shipping board would be under the supervision of Commissioner Edward C. Plummer and will be approved by the board, providing the purchaser completes the required bond.

European grain orders and some sugar business continue to feature the activity of the steamer market. The following fixtures were made recently: Italian steamer Olipino, Atlantic range to west Italy, coal, \$150, prompt loading; British steamer Capella, Atlantic range to Los Palmas, coal, \$350, prompt loading; British steamer Zamora, Gulf to River Plate, lumber, private, September loading.

It is announced that Messrs. Cory & Blundell, Cardiff, have purchased for \$1,000 the Swedish-built steamer Merica, 1,100 tons deadweight, engine in the Tyne and launched four weeks ago at a cost of \$20,000.

The conversion of the Mauretania to oil-burning will make a total of six



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FLAME-MENAGED TOWNS ABANDONED

Forest Fire Situation in Minnesota Becoming More Serious, People Fleeing From Homes.

St. Paul, Minn., Sept. 4.—Two towns—White Pine and Salome—have been abandoned because of forest fires as a precaution against loss of life and it may become necessary to abandon McGrath, Adjutant-General W. F. Rhinow reported to his office in the capital here today. He declared his reports indicated the situation was growing more serious.

THE REST OF INDIA NOT LIKE MALABAR

(Canadian Press Despatch.)

Simla, India, Sept. 5.—Lord Reading, viceroy of India, during the course of a speech at a joint sitting of the council of state and the legislative assembly on Saturday last said it would be wrong to assume that the rising of the Moplas in the Malabar district was symptomatic of the whole of India, as that district had already been a storm centre. Referring to the proclamation of martial law in the Malabar area, the viceroy declared the British authorities would have failed in their duty if they had not taken that step and supported the local government to the utmost in quelling the rising.

ACTOR WOULD WASH DISHES BUT BALKED AT INDIAN SPIRITS

(New York Times.)

Eugene Lawe, an actor, who was directed yesterday by Supreme Court Justice Wasservogel to pay \$38 a week alimony pending a suit for separation brought by Mrs. Margaret Lowe, told the court that he didn't mind washing the dishes, sweeping floors and mending clothes to spare his wife some of the household labor, but he objected to the "spirit controls" which influenced her. Lowe said that his wife was in communication with "Red Feather," an Indian chief whose picture adorned their wall, and also had spirit chats with an infant girl guide, "Little Flower." Lowe said his wife's spiritualism didn't bother him when he was busy in the winters, but during the summers he was compelled to listen to her communications and they caused him to lose his temper, and once he did threaten to kill her and send her to join her "guides." He said he was willing to live with her again because he loves her, but she told him her "guides" advised against it.

Our Autumn Blouse Models Are Here!

Arriving daily: Beives of advance Autumn Models. An entirely new note has been struck, quite different from anything that has yet dawned upon the horizon.

Sashes tying behind are jauntily buttoned on in front—giving the effect of a short overblouse.

Some of the new color alliances are strikingly pretty.

Quaint knife-pleatings trim many of these blouses in most ingenious ways.

Effective new tailored styles, tucked and smartly trimmed with buttons.

So delightfully unusual are many of these Advance Autumn models, description is almost impossible.

Watch our windows all this month for new styles arriving daily.

21 STORES IN CANADA 81 KING STREET

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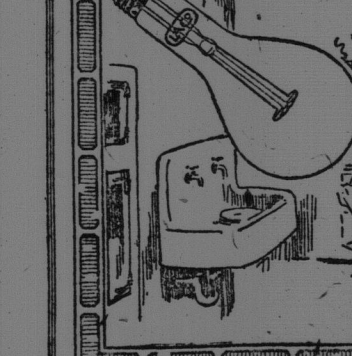
There's nothing too good for Baby



That's why careful mothers for the past 40 years have insisted on MENNEN'S TALCUM POWDER. They don't wait to experiment on Baby's sensitive skin.

The soft silky powder which has soothed and comforted generations of Babies has a gentle medicating action which makes Babies love it.

MENNEN TALCUM POWDERS



The Light for the Kitchen

—is just naturally the LACO NITRO Lamp.

A clean, well-equipped kitchen is the pride of every housewife, and it is important that this light, cheery appearance be maintained at night time as well as during the day. To this end, it is desirable to use LACO NITRO Lamps for your kitchen lighting.

And good lighting will not only aid in appearances, but your work in the kitchen will be less fatiguing than under conditions arising from poor lamps.

Don't tolerate a poor light in the kitchen. Choose a good lamp, not a cheap makeshift.

Choose LACO NITRO Lamps for their high-powered daylight effect. LACO NITRO Lamps will not blacken—they are carefully constructed with specially prepared filament. Their brilliancy is intensified by enclosure in a bulb filled with an expensive argon gas, instead of burning in a vacuum as in ordinary lamps.

Laco Nitro Lamps are made in Canada. Factory and Head Office—Montreal. They are sold by best Electrical and Hardware Dealers throughout the Dominion.

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ONCE the crispness and charm of Grape-Nuts have been tested by the family, there's one item that stands prominently out in the marketing list thereafter.

That's Grape-Nuts.

The twenty hours of continuous baking have produced, from the natural richness of wheat and malted barley, a food that is uniquely sweet with sugar developed from the grains themselves, and whose crispness and flavor make a delightful appeal to every member of the family.

And Grape-Nuts is soundly nourishing—a great builder of health and strength.

Served with cream or milk, as a cereal for breakfast or lunch, or made into a pudding for dinner.

See that your marketing list includes this delicious, economical food, today. All grocers.

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