

UNITED STATES

vs.

448 HOGSHEADS 33 TIERCES

CONTAINING

“SYRUP OF SUGAR,” ETC.,

IMPORTED PER BRIG LILLA,

From Manzanillo, Cuba.

PHILADELPHIA:

E. C. MARKLEY & SON, PRINTERS, 422 LIBRARY STREET, OPPOSITE POST OFFICE.

1869.

PREFACE.

The following pages embrace a report of the case of the “United States vs. 448 Hogsheads, 33 Tierces, containing Syrups of Sugar, &c.,” imported per brig “Lilla,” from Manzanillo, Cuba; accompanied with a narrative of such facts and copies of such letters and documents as are necessary to a complete history and proper understanding of the whole matter. The cause was brought to trial in the District Court of the United States for the Eastern District of Pennsylvania, before Hon. Judge Cadwalader, on the 14th of December, 1868, and was finally, without argument, submitted on the evidence to the jury, who, under the instruction of the Court, returned a verdict for the defendants.

On account of the deep interest felt in the suit during its progress, especially by that part of the mercantile community engaged in foreign trade, the novelty and commercial importance of the particular question it involved and decided, and the very remarkable exposure it made of the ignorant arbitrariness, if not corrupt or malicious perverseness, with which certain officers of the customs exercise their highly responsible functions, we have thought it worth while to prepare the case for publication in the form in which it is now presented.

If it shall serve no better purpose, it will at least be valuable as showing the serious injustice and injury which unintelligent officials of the Government may do to individual merchants, as well as to the general interests of any particular port, and also the necessity of appointing entirely competent and trustworthy persons to fill every position which largely affects both private and public concerns, and the authority of which may be so grievously abused.

UNITED STATES DISTRICT COURT.

UNITED STATES

vs.

448 Hogsheads, 33 Tierces, containing Syrups of Sugar, &c.,
imported per Brig Lilla, from Manzanillo.

Early in May, 1868, a statement was published in the papers of this city, that the cargo of the brig Lilla, from Manzanillo, Cuba, had been seized by the revenue officers for an attempted fraud upon the Government, in entering this cargo as molasses, the duty on which was eight (8) cents gold per gallon, whereas the article was "concentrated cane-juice," the duty on the same being two and one-half (2½) cents gold per pound.*

Since 1859, we have been receiving consignments of sugar, molasses, cedar, &c., from Messrs. Venecia, Rodriguez & Co., of Manzanillo, Cuba, and during the past two years, from Messrs. Ramirez & Oro; both respectable mercantile firms residing at that port. The molasses has been openly sold in this market by Messrs. Field & Keehmlé, merchandise brokers, and has been purchased by both boilers and grocers. No suspicion existed in our minds that the article we were selling was anything else than the article represented. Over 3,000 hogsheads of molasses have been received at this port, from Manzanillo, during the past two years (1867 and 1868).

In February, 1868, we received a cargo of molasses and sugar from Manzanillo. The molasses was sold to a refiner at 62c. per gallon, excepting about seventy-five hogsheads sold to a grocer at 70c.

On the 31st of March, 1868, Messrs. Venecia, Rodriguez & Co., shipped to our consignment by the brig "Lilla," Day, master, a cargo consisting of 448 hogsheads, 33 tierces molasses, as follows:

* Molasses weighs about 11 to 11½ pounds to the gallon.

Invoice of Molasses shipped by the undersigned, for their account and risk, on board the Am. brig "Lilla," Day, master, bound to Philadelphia, and consigned to Messrs. Madeira & Cabada:

V. R. & Co.	448 Hhds.		
M. D.	33 Tcs.	Molasses, containing	
		66,515 galls. @ 25c	
		per gallon,	\$16,628 75
Charges:			
448 Hhds.	@ \$7.		\$3,136 00
33 Tcs.	" 4½,		148 50
Cooperage,			233 90
Labor,			116 95
			<u>3,635 35</u>
			\$20,264 10
		Commission, 2½ pr. ct.,	506 60
		Disbursements, as per receipt at	
		back of B. L.,	555 60
			<u>\$21,326 30</u>

E. & O. E.

MANZANILLO, 31st March, 1868.

VENECIA, RODRIGUEZ & CO.

The "Lilla" arrived at this port on the 21st April, and after some delay in obtaining wharf room, discharged her cargo. On the 2d May the molasses was sold, through Messrs. Field & Keehmlé, Brokers, to Messrs. Rogers & Mitchell, at 64c. per gallon, on four months' credit, as shown by the following certificate:

No. 14,274. PHILADELPHIA, May 2d, 1868.

"Lilla." } Sold by your order to Messrs. Rogers & Mitchell,
448 Hhds. 33 Tcs. Manzanillo Molasses, at 64c. per
gall., four mos. cr.

FIELD & KEEHMLÉ,
per W. D. STEELE,

Brokers, No. 142 South Front street.

To Messrs. MADEIRA & CABADA.

No intimation up to this time had been given, by the officers of the customs, that this cargo was different from what it was represented to be by the invoice.

On the 4th of May, we were informally advised that a question might be raised, and on the 6th we received a communication from the Collector of Customs, as follows:

CUSTOM HOUSE, PHILADELPHIA,
Collector's Office, May 6th, 1868.

GENTLEMEN:—A lot of 448 Hhds. and 33 Tierces Manzanillo molasses entered by you per the brig "Lilla," from Manzanillo, has been appraised by the Public Appraisers of this District, in accordance with law. It is declared by them to be "concentrated cane-juice," the duty on which is two and one-half ($2\frac{1}{2}$) cents per pound.

If you appeal from the action of the Appraiser, it will be necessary to do so within twenty-four hours.

I am, very respectfully,

J. W. CAKE, *Collector.*

MESSRS. MADEIRA & CABADA,
Merchants, Philad'a.

We called upon Collector Cake, and at our interview with him, he stated that he was sorry there was any difficulty, and that what we might then say to him should not, in any way, affect or prejudice our interests; that he was kindly disposed towards us, and that our conference was to be only a friendly and confidential talk. He also stated that the Treasury Department had complained that this Custom House had made no seizures; that he was interested in the forfeiture, but that the amount to him was a matter of "no consequence." Mr. Johns, the Deputy Collector, was present during part of the interview. After some consultation, he said we had the right to appeal, but upon further investigation he found that this was a case in which there could be no appeal. We were subsequently informed by the Collector, that he would have to hand the case over to the U. S. District Attorney.

On the 7th of May we made out a withdrawal, the cargo having been entered at Custom House for warehousing, as a cargo of molasses, according to the invoice—but were not allowed to pass the entry. We then offered to pay a duty of $2\frac{1}{2}$ cents per lb., under protest, but this was refused by the Collector.

The U. S. District Attorney libelled the cargo, but did not call it "concentrated cane-juice"—which is a non-enumerated

article, and not liable to seizure or forfeiture—but named it in the libel as "syrops of sugar, and of sugar cane, and cane-juice." He afterwards stated to the Judge in Court, that "these importations had been watched for some time, and that they were done by design."

On the 9th of May we received a notice from the U. S. Marshal, that the cargo was in his charge.

In the District Court of the United States in and for the Eastern District of Pennsylvania.

The United States

vs.

448 hogsheads and 33 tierces, containing
Syrups of Sugars, imported in the brig
"Lilla."

} Attachment sur
Information for
forfeiture.

And now, May 19th, 1868, Louis C. Madeira and E. F. Cabada, co-partners doing business under the firm of Madeira & Cabada, intervening for the interest of José R. Venecia and José A. Rodriguez, and others, co-partners doing business under the firm of Venecia, Rodriguez & Company, residents of Manzanillo de Cuba, in the Island of Cuba, appear before this Honorable Court, and, protesting that the said hogsheads and tierces do not contain syrups of sugar and of sugar cane and cane-juice, but do contain molasses, from Manzanillo de Cuba, make claim to the said four hundred and forty-eight hogsheads and thirty-three tierces above mentioned, and the contents thereof, as the same are attached by the Marshal, under process of this Court, at the instance of the United States.

That the said firm of Madeira & Cabada were in possession of said property at the time of the attachment thereof. That they are the agents of the said firm of Venecia, Rodriguez & Company, who are residents of Manzanillo de Cuba, in the Island of Cuba, and that the said last named firm are the true and *bona fide* owners of the said property, to wit, the four hundred and forty-eight hogsheads and thirty-three tierces attached in this case, and that no other person is the owner thereof; and that the said firm of Madeira & Cabada are the true and lawful consignees and bailees thereof for the said owners; wherefore they pray to be admitted to defend accordingly. And they pray your Honor to order the said property to be appraised and delivered to them, upon their executing

to the United States a bond, with sureties, according to the statute in such case made and provided.

Louis C. Madeira, being duly sworn, doth depose and say, that he is one of the firm of Madeira & Cabada above mentioned, and that the statements set forth in the foregoing claim and petition are true.

L. C. MADEIRA.

In the District Court of the United States for the Eastern District of Pennsylvania.

To the Honorable John Cadwalader, Judge of the said Court :

The answer of Louis C. Madeira and E. F. Cabada, co-partners under the firm of Madeira & Cabada, consignees of the four hundred and forty-eight hogsheads and thirty-three tierces imported by the brig "Lilla," from Manzanillo de Cuba, on their own behalf and that of their principals, José R. Venecia and José A. Rodriguez, trading under the firm of Venecia, Rodriguez & Company, of Manzanillo de Cuba, owners of said cargo, and claimants to the information filed by the Attorney of the United States, make answer as follows :

That the said four hundred and forty-eight hogsheads and thirty-three tierces do not contain syrups of sugar, or of sugar cane and cane-juice, but contain what is known to commerce, and designated in the law, as molasses from the sugar cane, which was correctly entered by them at said Custom House under the name of molasses.

Louis C. Madeira, being duly sworn, according to law, deposes and says, that the facts in the above answer are true, to the best of deponent's knowledge and belief.

L. C. MADEIRA.

After some days of delay, the Court appointed six appraisers, viz: Messrs. John Mason, Wm. Morris Davis, Edward C. Knight, Alfred Kusenburger, Henry Jacoby, and John H. Young, to value the cargo, but instructed them not to "designate the article by name." These gentlemen made a return to the Court, stating that they had valued the cargo at 64 cents per gallon, excepting 18 hhds., which the Collector informed them was not to be included.

To the Honorable John Cadwalader, Judge of the District Court of the United States for the Eastern District of Pennsylvania :

JOHN MASON, W. MORRIS DAVIS, E. C. KNIGHT, HENRY JACOBY, ALFRED KUSENBURG, and JOHN H. YOUNG, the subscribers appointed by the Court to appraise the property in the annexed writ described, having been first duly qualified, have, in obedience to the said writ, appraised the items of property therein mentioned, as the same are now in the custody of the Marshal, at the sums placed opposite the same respectively in the following schedule and inventory, amounting in the aggregate to \$36,516 48.

JOHN MASON,
WM. MORRIS DAVIS,
E. C. KNIGHT,
ALFRED KUSENBURG,
HENRY JACOBY,
JOHN H. YOUNG,
Appraisers.

PHILADELPHIA, 15th day of May, A. D. 1868.

Inventory and Appraisalment

of certain property described in information filed as 448 Hhds. and 33 Tces., containing syrups of sugar, &c., lately in possession of

No. 189, 1868.

May 18—426 Hhds. cont'g 54,761 galls.,	
at 64c. per gallon,	\$35,047 04
32 Tces. cont'g 2,296 galls., at	
64c. per gallon,	1,469 44
	\$36,516 48

18 hhds. are not enumerated in the above—the Collector of the Port giving the Appraisers to understand that they were not to be included in the above estimate.

4 Hhds. empty.
1 Tce. do

481 Pkges. as pr information.

Subsequently we procured the following certificate from four of the appraisers, that they considered the cargo to be molasses. The other two appraisers testified in Court, upon the trial, that they also believed the cargo to be molasses.

The undersigned, being duly affirmed according to law, deposes and says, that he is one of the appraisers appointed by the United States District Court, to value 448 Hhds. and 33 Tces. described in the information filed as containing syrups of sugar, &c., imported from Manzanillo de Cuba, in the brig "Lilla," under which appointment deponent and his colleagues made a return to the Court, of which the annexed is a copy.

That deponent is well acquainted with the article known as molasses, and with other forms of products of the sugar cane, having dealt in them for thirty-two years past. That the contents of the 426 Hhds. and 32 Tierces, which they appraised at 64 cents per gallon, was, to the best of the knowledge and belief of deponent and his colleagues, molasses, of a good but not the best quality; the best quality of Porto Rico molasses is now worth in the market, 75 cents per gallon; the molasses in question, they believed fairly worth 64 cents per gallon, sold in the usual way and upon the usual credit of four months.

The reason that in making their return to the Court, they did not call it molasses, was, that the Judge directed them not to designate it by any name, but only to return its value.

E. C. KNIGHT.

Affirmed to and subscribed before
me, this 26th day of May, 1868.

AUBREY H. SMITH,

U. S. Commissioner.

We concur in the foregoing—

JOHN MASON,
ALFRED KUSENBURG,
HENRY JACOBY,

Appraisers.

PHILADELPHIA, May 26, 1868.

The undersigned are sugar and molasses brokers. A large proportion of all the sugar and molasses imported and sold in Philadelphia within the last ten years, has been sold by them. During said period they have been familiar with all grades and qualities of molasses and other products of the sugar cane, imported or sold in this market, and are competent to judge of the quality of molasses, as well as to know what is or is not molasses.

On the arrival of the brig "Lilla," we had fair samples of her cargo taken, for the purpose of selling. It consisted of molasses of two qualities; 426 Hhds. and 32 Tierces being a light colored molasses, of good quality, and 18 Hhds. of a different kind, and not equally good. It is, however, all equally and unquestionably molasses. We sold the 448 Hhds. 33 Tierces, to Messrs. Rogers & Mitchell, on the usual credit, for 64 cents per gallon, which was its full value. The value of the best Porto Rico molasses in the market, at the same time, was about 75 cents per gallon.

FIELD & KEEHMLÉ.

We know Messrs. Field & Keehmlé to be gentlemen of the highest respectability and great experience in regard to the matters stated in the annexed certificate. We have examined the samples taken by them of the molasses per brig "Lilla," and agree with them that said cargo consists unmistakably of molasses.

SAML. & WM. WELSH,
GEO. C. CARSON & CO.,
G. W. BERNADOU & BRO.,
REIFF, HOWELL & HARVEY,
JOHN MASON & CO.,
S. MORRIS WALN & CO.

PHILADELPHIA, May 26, 1868.

I am personally acquainted with the above-named business firms of the City of Philadelphia, and beg to say that they are the principal importers of sugar and molasses from the West Indies to that city, and that they are widely known as merchants of the highest respectability. I should have implicit confidence in any statements made by them.

ALEX. G. CATTELL.

WASHINGTON, May 29, 1868.

STATE OF PENNSYLVANIA, }
City of Philadelphia, } ss.

Oscar B. Stillman, being duly sworn according to law, deposes and says, that he has been engaged in the sugar refining business for over ten years past, during which time he has had very large experience in relation to the various kinds of molasses and syrups derived from sugar cane; that he is now in the employ of the Franklin Sugar Refining establishment, owned by Messrs. Harrison, Havemeyer & Co., Philadelphia; that it has been his business for many years past to examine and analyze molasses; that he has thus examined and analyzed, as he believes, all or nearly all the cargoes of molasses that arrived in New York City the last year—possibly one thousand lots in number—also, cargoes arriving at other ports.

That he examined the cargo of 444 hhds. and 32 tierces, exclusive of some empty hhds. imported by Messrs. Madeira & Cabada, from Manzanillo de Cuba, in the brig "Lilla," of which 426 hhds. and 32 tierces are seized by the Marshal, at the suit of the United States, as deponent is informed, and 18 hhds. originally seized, have been released. Deponent took fair samples, as well from the contents of the 426 hhds., as also of the 18 hhds., and has carefully analyzed each sample.

The whole of said cargo is unquestionably molasses; there can be no doubt of this, and it could not be mistaken by any one having a knowledge of the subject for any other form of product from the sugar cane. It is not concentrated cane-juice, nor melado, nor syrup of sugar cane, nor cane juice, and has no greater resemblance to those articles than any other light colored good molasses.

The difference between the several articles above named and molasses is well-known, and of such character as to be easily and unmistakably distinguished by any one having a knowledge of the business.

The 426 hhds. 32 tierces, consist of molasses of light color and good quality, though not equal to the lightest or best that sometimes comes from Manzanillo or Porto Rico. It is evidently the residuum from the manufacture of sugar by the centrifugal process, treated with sulphurous gas in order to improve the color. Its analysis by the polaroscope shows it to contain 57 per cent. of cane sugar; and by the process known as Fehling's Solution, I have found it to contain 7 per cent. of grape sugar.

The best Manzanillo and Porto Rico molasses not unfrequently contains as high as 60 per cent. of cane sugar.

The amount of sugar deposited in a crystallized form in the hogsheads of the "Lilla" cargo is not unusual. Molasses of light body, like this, will deposit sugar of larger crystals than a heavier article of molasses. The whole amount which it deposits will be deposited in less time; hence, on the arrival of the cargo, hogsheads containing light molasses will generally contain a larger amount of deposit than would be the case if the molasses were of greater body, but the latter quality continues to afterwards deposit sugar, and in the end yields an equal or greater quantity, depending on the relative richness of the molasses.

The 18 hogsheads are an inferior molasses, and analyze 48 per cent. cane sugar and 8 per cent. grape sugar.

The market value of the molasses per "Lilla" did not exceed 64 cents per gallon, sold on the usual credit.

The color and appearance of molasses has changed and considerably improved within the last four or five years. The change and improvements are due to greater skill in its manufacture.

In richness it has not improved; it is generally supposed that the contrary is the case; that is, that molasses is now less rich, though of better appearance. Certain it is, that the molasses now imported and above spoken of, such as the 426 hogsheads per "Lilla," is not more rich in cane sugar than very good molasses always was, as far as deponent's knowledge extends.

OSCAR B. STILLMAN.

PHILADELPHIA, May 27th, 1868.

Sworn and subscribed as above, before me, at Philadelphia, this 27th day of May, A. D. 1868.

THOS. F. MANDERFIELD,
Notary Public.

PHILADELPHIA, May 27th, 1868.

Messrs. MADEIRA & CABADA.

GENT'N:—The molasses per "Lilla," under dispute, has a specific gravity of 1.33, the eighteen hhd. lot, of 1.34; or by Beaumé's hydrometer, the first lot stands at 36°, the eighteen hogsheads at 37°.

Muscovado molasses usually stands at 37° to 38° Beaumé.

Concentrated cane-juice may have a specific gravity more or less than the above molasses, that being due entirely to the amount of boiling it has been subjected to on the estate; but this molasses is actually no lighter in body than many lots of Porto Rico or Manzanillo imported. I ought to state that the molasses having been standing in a room at a temperature of 90°, it is even lighter than it would be in a cooler place—one

or two degrees at least. Refined syrups are usually heavier bodied than molasses, ranging from 40° to 44°.

Yours, &c.,

OSCAR B. STILLMAN.

PHILADELPHIA, May 28th, 1868.

Messrs. MADEIRA & CABADA.

GENTS:—In regard to the 18 hogsheads molasses. The specific gravity is *correct*. At a temperature of 90°, the molasses stood 37° Beaumé, or 1.34. At the same temperature, the molasses in dispute stood 36° Beaumé, or 1.33 sp. gr. The hogsheads that I took the sample of the 18 lot from, were marked with a red mark, as I was told they were the hogsheads not seized.

If necessary, I am ready to sign an affidavit to the above figures.

Yours, &c.,

O. B. STILLMAN.

It was not until the 30th of May, that we could make any arrangement about the cargo, which all this time was exposed on the wharf. On that day we gave bonds in the United States Court, amounting to near \$40,000, paying on the same day the duty of 2½ cents per pound, being an excess of duty amounting to near \$12,000, gold. We then took possession of the cargo, and delivered it to the purchasers, Messrs. Rogers & Mitchell. A heavy bill of expenses was incurred for wharfage, watching, cooperage, Marshal's expenses, &c., in addition to which we ascertained that the casks lost near two gallons each in gauge by long exposure on the wharf, and from rolling in regauging, reweighing, &c. At the same time we made formal protest to the Collector against the whole proceedings, form of entry, &c., with appeals to the Secretary of the Treasury.

While these proceedings were in progress, we had a communication made to us, said to be from the Collector, that this difficulty might be compromised. We referred the person making the communication, to one of our legal advisers. Another person made us several visits, during one of which he stated that the Collector had given him permission, knowing that he was a friend of ours, to inform us that if we should not contest the question of the seizure of the "Lilla's" cargo, he thought there would be no further difficulty; that at the Custom House they were overhauling all our invoices from Manzanillo, and intended going back on our bonds; that the Collector knew of another shipment of molasses on the way from Manzanillo, by the "Central America," to our consignment, and that orders

had been given to the U. S. Revenue cutter, to bring under her guns this vessel, on her arrival in the bay, up to the city; and that if the "Central America" should attempt to go into any other port than this, she would be seized, and that word had been sent to the different ports, from Richmond to Portland, to this effect. This person also stated to us that the Collector had informed him that a Government detective had been in Cuba since last September (1867), who had full knowledge of all these shipments to us.

We did not heed these warnings or threats, and did not make any propositions to the Collector looking to a compromise.

On one of our visits to the Custom House, Collector Cate showed us the samples of the "Lilla's" cargo which he had in the vaults (a keg, several jars, and some lumps of sugar). He stated that one gallon of this article made 7 $\frac{3}{10}$ ths pounds of sugar, and that molasses should only yield 1½ pounds of sugar to the gallon.

Our friends, when advised of the difficulty about the "Lilla's" cargo, sent us the following certificates from Manzanillo, attested to by the U. S. Consular Agent at that port, Mr. Manuel R. Ecay, a member of the commercial firm of Caragol, Ecay & Co.

Consular Agency of the United States of America,
PORT OF MANZANILLO (Cuba.)

DECLARATION.

On this twenty-third day of May, in the year of our Lord eighteen hundred and sixty-eight, appeared before me Manuel R. Ecay, duly appointed U. S. Consular Agent of this port, the undersigned, Mr. José Agustin Rodriguez, partner of the firm Venecia, Rodriguez & Co., and after being duly sworn according to law, declared as follows:

"That he is a member of the firm of Venecia, Rodriguez & Co., merchants doing business in Manzanillo, in the Island of Cuba; that they are the owners of a sugar estate known as the 'Esperanza,' situated about three miles from this town.

"That the cargo of molasses, consisting of four hundred and forty eight hogsheads and thirty-three tierces, shipped by the said firm to Madeira & Cabada, of Philadelphia, per brig 'Lilla,' on or about the thirty-first day of March, 1868, was Muscovado and Centrifugal molasses, manufactured on said estate, with the exception of about twelve hogsheads 'Muscovado molasses, manufactured on the estates 'Limbo de los Angeles' and 'San José,' also situated within two and

"three miles of this town, being the purging or residue from the manufacture of Muscovado and Centrifugal sugars from cane produced on said estates. Part of the sugars made from the canes from which said molasses resulted, was shipped by us to Madeira & Cabada, in the brig 'R. S. Hassell,' on or about the first day of May, 1868."

Deponent further says, "that the parcel of molasses, consisting of three hundred and twenty-six hogsheads and twenty-five tierces, shipped to said Madeira & Cabada, per 'Central America,' on or about the second day of May, 1868, and the cargo of Muscovado and Centrifugal sugars, shipped to the same parties on or about the first day of May, 1868, per brig 'R. S. Hassell,' are molasses and sugar proceeding from the same canes grown on the 'Esperanza' estate last season, and manufactured by the deponents.

"That the color of both the sugar and molasses is lighter than they generally are, owing, to some extent, as deponent believes, to the peculiar nature of the land on said estate, which resembles the lands of Porto Rico, but principally to the use of sulphurous gas in the process of manufacturing the sugar."

I, the undersigned, hereby do attest and certify, at the request of Mr. José Agustín Rodríguez, that I know said gentleman to be a partner of the firm of Venecia, Rodríguez & Co.; moreover, that his foregoing signature has been subscribed in my presence and is genuine.

CERTIFICATE.

I, Manuel R. Ecay, Consular Agent of the United States of America at this port, do hereby attest and certify, that the foregoing is a true and correct copy of a declaration duly entered on this date in the consular journal of this office.

In testimony whereof, I hereunto affix my official seal and signature, at Manzanillo de Cuba, this twenty-third day of May, 1868.

MANUEL R. ECAY,
U. S. Consular Agent.

Los que subscriben, empleados del Ingenio "Esperanza" de los Sres. Venecia, Rodríguez y Ca., situado en esta jurisdicción, declaran, á petición de dichos Sres. que en dicho Ingenio no se ha hecho en esta zafra mas fruto, que azúcar Muscavado y centrifugo: y que las mieles que han salido de dicho Ingenio han sido todas de descarga y centrifuga, procedentes todas de la purga

de las dos clases de azúcar que se hacen en dichos Ingenios, y que el color claro de dichas mieles es debido á la calidad de los terrenos, y al uso del gas sulfuroso, que se emplea en dicho Ingenio en la fabricacion de los azucares. Y para que conste firmamos la presente declaracion en Manzanillo á 16 de Mayo, de 1868.

El primero Maestro Azucarero,
JOSÉ DIONISIO GUTIERREZ.

El Segundo Maestro de Azúcar,
DOMINGO GONZALES.

El Maquinista,
JAMES SCOTT.

El Mayoral,
AGUSTIN GONZALES.

El Mayordomo,
YGNACIO DE LA FERGA.

Consular Agency of the United States of America at Manzanillo de Cuba.

CERTIFICATE.

I, Manuel R. Ecay, duly appointed and confirmed U. S. Consular Agent at this port, do hereby attest and certify, that the foregoing signatures of Mr. Ignacio de la Ferga, José Dionisio Gutierrez, Domingo Gonzales, James Scott and Agustín Gonzales, overseer, sugar makers, engineer, and other persons employed on the sugar estate, are genuine and have been subscribed in my presence.

Witness my seal and signature at Manzanillo, this sixteenth day of May, 1868.

MANUEL R. ECAY,
U. S. Consular Agent.

TRANSLATION.

The subscribers, employés on the plantation "Esperanza" of Messrs. Venecia, Rodríguez & Co., situated in this jurisdiction, do declare, at the request of said gentlemen, that on said plantation there has not been made this season other product than Muscovado and Centrifugal sugar, and that the molasses which have been sent from said estate have all been centrifugal and residuum, all being the product of the purging of the two classes of sugar which are made on said plantation; and that the clear color of said molasses is due to the quality of the land and the

use of sulphurous gas, which is employed on said plantation in the manufacture of the sugars.

In witness of which, we sign the present declaration at Manzanillo on the 16th of May, 1868.

Los que suscriben comerciantes de esta Villa y á peticion de los Sres. Venecia, Rodriguez y Ca., de este comercio, certificamos que nos consta, que las Mieles que embarcaron dhos Sres. en el Bergn. Americano "Lilla" en Abril último para Filadelfia eran todas de Centrifugas y Descarga procedentes del Ingenio "Esperanza" que poseen dhos. Sres. en esta jurisdiccion y de descarga de otros pequeños Ingenios y que les consta que el color claro de las mieles del Ingenio "Esperanza" lo es debido á la calidad de los terrenos de dho, Ingenio y al uso del gas sulfuroso, que se emplea en la fabricacion de los azucares; tambien les consta que nuestra Aduana denomina á las mieles de Descarga y de Centrifuga, mieles de purga, porque nuestra Tarifa de Aduana, solo reconoce mieles concentradas y mieles de purga; por cuyo motivo se consideran como de purga las de Mascabado y Centrifuga por proceder tambien de la purga del azúcar.

Y para que los interesados puedan hacerlo constar donde les convenga, estendemos la presente que firmamos en presencia del. Sr. Consul Americano en Manzanillo á 14 de Mayo, de 1868.

RAMIREZ y ORO,
ESCALA CARBONELL y CA.,
CARDONA, FELIN y CA.,
CARAGOL, ECAY y CA.,
EDUARDO del CASTILLO,
MIR, ROVIRA y CA.

Consular Agency of the United States of America at Manzanillo de Cuba.

CERTIFICATE.

I, Manuel R. Ecay, duly appointed and confirmed U. S. Consular Agent at this port, do hereby attest and certify, that the foregoing signatures of Messrs. Ramirez & Oro, Escala Carbonell & Co., Eduardo del Castillo, Mir Rovira y Ca., Cardona Felin y Ca., and Caragol Ecay & Ca., merchants residing here, are genuine, and have been subscribed in my presence; moreover, that all the said persons are known to me as being respectable.

Witness my seal and signature at Manzanillo, this sixteenth day of May, 1868.

MANUEL R. ECAY,
U. S. Consular Agent.

TRANSLATION.

The subscribers, merchants of this town, at the request of Messrs. Venecia, Rodriguez & Co., merchants here, do certify that it is evident to us that the molasses which said gentlemen shipped in the Am. brig "Lilla," in April last, for Philadelphia, were all centrifugal and *descarga*, the product of the plantation "Esperanza," owned by said gentlemen in this jurisdiction, and of *descarga* of other little plantations, and that it is evident that the clear color of the molasses of the "Esperanza" estate is due to the quality of the land of said plantation, and to the use of sulphurous gas which is employed in the manufacture of the sugars. It is also evident to them that our Custom House denominates centrifugal and *descarga* molasses as purged, for our Custom House tariff only recognizes concentrated molasses and purged molasses, for which reason they consider as purged the Muscavado and Centrifugal, as they proceed also from the purging of the sugar.

Don José Antonio Lopez, Admor local de la Aduana de este puerto por S. M. C.

Certifico que con fha treinta y uno de Marzo del Año actual, se despachó por esta Aduana con destino á Filadelfia el Bergantin Americano "Lilla" su Capitan Day, llevando á su bordo un cargamento compuesto de cuatrocientos cuarenta y ocho bocoyes y treinta y tres tercerolas miel de purga, segun resulta de los documentos que ecsisten en esta oficina.

Y á pedimento de los Sres. Venecia, Rodriguez y Compa., consignatarios de dicho buque, espido la presente para que puedan asi hacerlo constar donde convenga. Manzanillo nueve de Mayo de mil ochocientos sesenta y ocho.

JOSÉ ANTO. LOPEZ.

Consular Agency of the United States of America at Manzanillo (Cuba).

CERTIFICATE.

I, Manuel R. Ecay, duly appointed and confirmed U. S. Consular Agent at this port, do hereby attest and certify, that the foregoing signature of Mr. José Antonio Lopez, Collector of this Custom House, is genuine, and has been subscribed in my presence.

Witness my seal and signature at Manzanillo, Ninth of May, 1868.

MANUEL R. ECAY,
U. S. Consular Agent.

TRANSLATION.

Mr. José Antonio Lopez, Local Administrator of the Custom House at this port, for H. C. M.

I certify, that on the thirty-first of March, of the present year, the American brig "Lilla," Capt. Day, was cleared by this Custom House, bound for Philadelphia, with a cargo composed of four hundred and forty-eight hogsheads and thirty-three tierces *miel de purga*, as is shown by documents on file in this office.

And at request of Messrs. Venecia, Rodriguez & Co., consignees of said vessel, I issue the present in order that such may be manifest to all whom it may concern.

Manzanillo, ninth of May, eighteen hundred and sixty eight.
 { Custom House }
 { Seal. } JOSÉ ANTO LOPEZ.

Los que suscriben hancendados de esta jurisdiccion certifican de peticion de los Sres. Venecia, Rodriguez y Ca., de este comercio que les consta que en el Ingenio "Esperanza," de dhos Sres situado en esta jurisdiccion no se ha hecho este año mas fruto que Azucar Mascavado y Centrifuga; que las mieles que salen de ese Ingenio son todas de Descarga y Centrifuga y que el ser su color mas claro que las mieles de igual clase de los demas Ingenios de esta jurisdiccion, es debido á la calidad de los terrenos del Ingenio, y tambien al uso del gas sulfuroso que se emplea en él en la fabricacion de los azucares.

Y para que los Sres. Venecia, Rodriguez y Ca., lo puedan hacer constar, firmamos el presente certificado, en Manzanillo á 16 de Mayo de 1868.

GREGO. SANTISTEBAN.
 MANUEL GARCIA NAPOLES.
 FERNANDO FONTAYNE.
 FRANCO. VICTE. AGUILERA.
 SILVERIO VALERINO,
 LUIS MA. BERTOT.

Consular Agency of the United States of America, at Manzanillo de Cuba.

CERTIFICATE.

I, Manuel R. Ecay, duly appointed and confirmed U. S. Consular Agent at this port, do hereby attest and certify, that the foregoing signatures of Messrs. Manuel Garcia Napoles, Gregorio Santisteban, Francisco Vicente Aguilera, Fernando Fon-

tainne, Silverio Valerino, and Luis Maria Bertot, sugar planters, residing in this neighborhood, are genuine and have been subscribed in my presence; moreover, that all the said persons are known to me as being respectable.

Witness my seal and signature at Manzanillo, this sixteenth day of May, 1868.

MANUEL R. ECAY,
 U. S. Consular Agent.

TRANSLATION.

The subscribers, planters of this jurisdiction, do certify, at the request of Messrs. Venecia, Rodriguez & Co., of this place, that it is known to them, that on the plantation "Esperanza," of said gentlemen, situated in this jurisdiction, there has not been made this year other product than Muscovado and Centrifugal sugar; that the molasses sent from said plantation are all centrifugal and residuum, and that their color being clearer than the molasses of same class from the other plantations of this jurisdiction, is due to the quality of the land on the plantation, and also to the use of sulphurous gas employed there in the manufacture of the sugars.

And that the Messrs. Venecia, Rodriguez & Co., may make it clear, we sign the present certificate at Manzanillo, May 16, 1868.

The schooner "Central America," with another cargo of molasses, shipped by Messrs. Venecia, Rodriguez & Co., and Ramirez & Oro, arrived on June 2d, but from the difficulty we were then experiencing with the "Lilla's" cargo, it was not prudent that we should make an entry of the "Central America's" cargo, as molasses. We made out two forms of entry; one an open entry, which we offered to the Collector, with the gold for duties, at the rate of eight cents per gallon, and also made an offer to pay a duty of two and a half cents, gold, per pound, under protest. All these propositions were refused. We, therefore, addressed the following letter to the Secretary of the Treasury.

PHILADELPHIA, June 6, 1868.

Hon. H. McCULLOCH,
 Secretary of the Treasury of the U. S.

SIR:—The petition of Madeira & Cabada, merchants of the City of Philadelphia, respectfully represents: That they are commission merchants, doing business in the City of Philadelphia, that their correspondents, Messrs. Venecia, Rodriguez &

Co., and Messrs. Ramirez & Oro, firms doing business in Manzanillo, in the Island of Cuba, have consigned to your petitioners the cargo of the schooner "Central America," consisting of 418 hhds. and 35 tierces, described in the invoices and bills of lading as containing molasses. That the contents of said 418 hhds. and 35 tierces, are, in fact, as your petitioners verily believe, what is known to commerce and designated by law as molasses; that it has been *bona fide* shipped as such by their said correspondents, and would have been entered as such by your petitioners without a suspicion on their part, that they were doing otherwise than right, or that they were exposing themselves or their correspondents, to loss or forfeiture, but for the fact that part of said molasses is of the same character and appearance as part of that which was consigned to them by one of the same parties by the Brig "Lilla," and which, under the belief that it was molasses, and without any reason to suspect to the contrary, they, about a month since, entered as molasses.

As to the cargo of the "Lilla," the local Appraiser, in his official return to the Collector, decided and returned that it was not molasses, but "concentrated cane-juice," an unenumerated article, and the Collector thereupon notified your petitioners that the duty on it was two and a half cents per pound, instead of eight cents per gallon, the duty on molasses. Notwithstanding this notice, he refused to receive the said duty of two and a half cents per pound, and the cargo was afterwards libelled on an information of the United States Attorney, wherein it is alleged that it was "syrops of sugar and of sugar cane and cane-juice," and pending this seizure the Collector has received the duty of two and a half cents per pound, paid by your petitioners under protest.

The article on board the "Central America" is not a prohibited article, and whether your petitioners are or are not right in believing it to be molasses, they are willing to abide by the law without defrauding the revenue in any event. They cannot make oath that the article in question is any one of the various articles which the local Appraiser, Collector and U. S. Attorney respectively, have called the article imported by the brig "Lilla," because your petitioners are firmly convinced that all said designations are wrong, and that while it is absolutely certain that they cannot all be right, the article in question is in truth nothing else than molasses.

Yet it would be obviously unjust to their foreign correspondents, that your petitioners should, under the circumstances,

take the risk of entering it as molasses, and thereby subject their correspondents and themselves to the expense and risk of defending it against forfeiture. They have therefore offered to enter it as either molasses or syrup, or cane-juice, as by the copy of the entry hereto annexed, will more fully appear, which entry the Collector of this port has refused to receive, tho' it is customary under similar circumstances, to make and receive such entries at New York and other ports of the United States.

Your petitioners therefore pray that you will instruct the said Collector to receive the entry as presented.

Very respectfully,

MADEIRA & CABADA.

And to this the following reply was sent to the Collector of the Port.

TREASURY DEPARTMENT,

June 8, 1868.

SIR:—I am in receipt of your communication of the sixth inst., relative to a cargo of molasses, so called, now at your port, consigned to Messrs. Madeira & Cabada, imported per schooner "Central America." In regard thereto I have to state that the department have this day agreed orally with Mr. J. J. Buchey, representing said parties, that entry of said merchandise as "cane syrup" may be made under protest, and that by making such protest the rights of the parties in the premises are not to be in any manner prejudiced thereby. You will please say to the District Attorney that it is the wish of this department, that the fact of such entry having been made, shall not be introduced by him on the trial of the cause now pending.

I am very respectfully,

H. McCULLOCH,

Secretary of the Treasury.

To J. W. CAKE, Esq.,

Collector of Customs.

This letter, signed by Mr. McCulloch, Secretary of the Treasury, informed the Collector of this port, we might be permitted to make an entry of the "Central America's" cargo as "cane syrup under protest," &c. As we were not disposed to make a false oath under protest, and as we believed the cargo shipped by the "Central America" to be molasses, we were

compelled to forego the opportunity to sell the same on the wharf at a favorable price, and allow the Collector to place it in store under "general order" as "unclaimed merchandise." When landed it could have been sold at sixty-two cents. After being in store at one time it could not have been sold at over fifty cents per gallon. The molasses was kept on the wharf from the fifteenth of June until the sixth of July, exposed during some of the hottest weather of last summer, losing in gauge by evaporation and exposure, and incurring heavy expenses for wharfage, cooperage, storage, portorage, &c.

In reply to our appeal from the decision of the Collector, we received a copy of a letter addressed to said officer and signed by H. McCulloch, Secretary of the Treasury, as follows:

TREASURY DEPARTMENT, June 30, 1868.

SIR:—Your letter of the 29th inst. is received, reporting upon the appeal (5,629) of Messrs. Madeira & Cabada from your decision, assessing at the rate of $2\frac{1}{2}$ cents per pound on certain merchandise imported by them per brig "Lilla," from Manzanillo, Cuba—the appellants claiming that it is "molasses from sugar cane," and liable to a duty of 8 cents per gallon.

It appears from your report that the article in question was returned by the appraiser at your port, as "concentrated cane-juice," and duty assessed thereon at the rate of $2\frac{1}{2}$ cents per pound, under the 3d sub-division of section of the Act of June 30, 1864. Your decision is hereby affirmed.

I am, very respectfully,

H. McCULLOCH,

Secretary of the Treasury.

J. W. CAKE, Esq.,

Collector, Philadelphia, Pa.

The case of the "Lilla" was down for trial on the 6th of July, but we could not go on, owing to the absence of a material witness, and we were compelled to ask for a postponement. On this occasion the District Attorney amended the libel, by naming the contents of the 430 hhds. and 33 tierces, as "containing syrups of sugar and of sugar cane, and cane-juice, concentrated molasses and concentrated melado." The trial was then to have taken place on the 13th of August, but was postponed by the District Attorney, to the 23d of November. We had our witnesses all ready at that time, having brought some of them from New York and Baltimore at considerable

expense; but the District Attorney procured another postponement, until December 14, when the case came finally to a trial.

On the 9th Dec. the following letter was received:

PHILADELPHIA, U. S. District Attorney's Office.

GENTS:—Please produce upon the trial of the case of the United States vs. 448 hhds. 33 tierces, containing syrups of sugar imported in the brig Lilla, all letters and papers in the possession or control of the claimants, received by them or any one for them, from their consignors or any other persons, in any manner relating to said cargo.

Yours truly, &c.,

J. P. O'NEILL,

J. K. VALENTINE,

B. H. BREWSTER,

GEO. L. CRAWFORD,

Dec. 5, 1868.

MESSRS. JOHN FALLON, and

THEO. CUYLER,

For Claimants.

[On the trial, none of our papers were asked for by the prosecuting officers.]

The following persons were subpoenaed by the government as witnesses:

Chas. M. Hurley, Wm. Flake, Geo. L. Broom, Lorin Blodget, W. Morris Davis, Dr. F. A. Genth, Saml. Broom, Thos. A. Newhall, N. Chapman Mitchell, Samuel Rogers, George R. Ayres, Henry Ficken, John Gaunt, Alfred Kusenburg, Henry Pierce, Elwood Clifton, Charles C. Haines, Lewis Kastner, James Gebhart, George C. Carson, John Haviland, Augustus Ludwig, August Smith, James Martin, Jairus Baker, Henry W. Andrews and James C. Booth.

But the District Attorney only called the following:

W. Flake, George L. Broom, Lorin Blodget, W. Morris Davis, Dr. F. A. Genth, Samuel Broom, George R. Ayres, John Gaunt, John Haviland, Henry W. Andrews.

We had intended calling Professor James C. Booth as a witness, but as he was out of town we could not introduce his testimony, which would have been very favorable to us.

We subpoenaed the following witnesses:

Samuel Field, Samuel B. Rodgers, N. Chapman Mitchell, August Smith, E. C. Knight, John Mason, Alfred Kusenburg,

Henry Jacoby, Richard Ficken, Martin Ney, Herman Sandermeier, Charles Ottens, Fred. Knoppel, John Welsh, Jr., C. W. Cushman, Thomas P. Stotesbury, Ed. O. Smith, B. H. Bartol, G. W. Bernadou, William Harvey, George C. Carson, George Helmuth, F. F. Bernadou, Samuel Harkness, Oscar B. Stillman, Daniel S. Barnes, W. T. Martien, Joseph C. Herr, Thos. H. Garrett, Wm. Flake, D. J. Driscoll, Aaron V. Gibbs, John H. Young, Joseph W. Cake, Lorin Blodget, Wm. Harbeson, Wm. B. Johns, G. A. Benson, J. J. Buchey, Saml. Bell, Isaac Phillips, Appraiser New York Custom House; Horace Averill, Examiner New York Custom House; W. L. Hartshorne, Sampler New York Custom House; John F. Meredith, General Appraiser Baltimore; James Graham, Chas. M. Hurley.

After we had called the following, to wit:

Saml. Field, Samuel B. Rogers, August Smith, E. C. Knight, John Mason, Alfred Kusenburg, B. H. Bartol, Chas. M. Hurley, John F. Meredith, Oscar B. Stillman, John H. Young, Isaac Phillips, Horace Averill, and W. L. Hartshorne—the Judge declined hearing further testimony, although we had other witnesses whose examination was very important for us.

REPORT OF THE TRIAL.

Messrs. JOHN P. O'NEILL,	Messrs. JOHN FALLON,
BENJ. H. BREWSTER,	THEO: CUYLER,
J. K. VALENTINE,	A. R. CULVER,
GEO. H. CRAWFORD,	<i>For Claimants.</i>
SIMON TOWLE, Special from Treary Dep't, Washington,	
<i>For Libellants.</i>	

List of Jurors.—Charles E. Armstrong, T. West Blake, John Bousted, John C. Cornelius, Job S. Ivins, William J. Jenks, Frank C. Knipe, Fred. W. Kohler, Tryon Reakirt, Isaac Starr, Jr., Charles D. Young, Henry Weldy.

Mr. VALENTINE in opening for the United States, stated that in consequence of the large difference in the duty between simple molasses and the juice of sugar cane, importers had been

induced to ship the latter under the name of molasses, and that Congress, in the year 1864, passed a law, in which it was declared that the shipment of sugar cane-juice, concentrated molasses and melado under the name of molasses would render it forfeitable.

CASE FOR PROSECUTION.

Lorin Blodget, sworn—Direct examination.

Mr. Valentine—

Question. Mr. Blodget, what is the present position you occupy?

Answer. United States Appraiser—General Appraiser.

Q. For the Port of Philadelphia, or generally?

A. For the Port of Philadelphia, and generally resident of this port.

Q. Have you seen the article in question, the cargo of this brig Lilla?

A. I have.

Q. Did you see it on board?

A. I saw it immediately after it was landed on the wharf.

Q. Do you know if specimens were taken from each of the hogsheds and tierces constituting that cargo?

Judge Cadwalader—

Are you aware, Mr. Valentine, you have given no invoice in evidence, as yet?

Mr. Valentine—

I am aware of it, your Honor.

Mr. Broom, bring in those specimens.

(A number of large bottles containing samples were produced).

Q. I will ask you, Mr. Blodget, whether you have had the practical experience so as to obtain a knowledge of sugar, cane-juice, cane syrup and melado—whether you have any practical experience in reference to sugar and molasses, so as to testify in regard to those different articles. I am asking as to practical experience, and as to whether you have chemical knowledge, so as to enable you to answer the questions fully; and if so, how long?

A. I have had both practical and chemical knowledge for three years. I have directed the examination and comparison of large numbers of cargoes, in pursuance of orders of the Secretary of the Treasury for the period of three years. I have

been specially directed to supervise the appraisements made within the last year.

Q. I am asking merely your knowledge at present. Are you able to distinguish molasses from syrup of sugar, cane-juice, melado and concentrated molasses? Are you able to distinguish them?

A. I think I am, by both practical and chemical tests.

Q. Have you examined the article in question?

A. I have, sir, critically.

Q. Have you both by chemical tests and as a person having experience?

A. Yes, sir. I have personally directed the examination, and saw and directed the drawing in each of the hogsheads.

Q. State, if you please, what this article that constituted the cargo of this vessel is?

Mr. Cuyler—

Distinguish between chemical and practical knowledge, or we will have to object.

Q. I ask you to state simply what this cargo is?

Defendants' counsel objects to question as irrelevant, the proper question being as to the commercial understanding of "Molasses" in the ports of the United States; but subsequently withdraws objection.

Q. Mr. Blodget, be good enough now to answer what this cargo is?

A. In my judgment, it is cane syrup, just as it came from the vacuum pan, after defecation, and before crystallization.

Q. Now, Mr. Blodget, I wish you would explain to the jury, first the difference between this article—practically, and then chemically—between this and molasses. In your own way, take up this article and explain to us what your operations were as to a chemical analysis, and what the result of your analysis was. Go slowly?

A. The practical tests applied to discover whether it was molasses or not, were first color. If molasses, it is dark. Secondly, its liquidity, by flowing freely like water; for molasses itself adheres to the fingers, and does not flow freely. Thirdly, if molasses, it has a sour and rancid smell, essentially different from syrup. Syrup retains its transparency, and when placed in jars for several months it is not affected, while molasses from the same cargo is dark.

Q. The article in the second jar is a portion of the cargo—the second jar, this way, which you say contains syrup?

A. When it contains syrup, it is as permanent almost as cane sugar. This is one that, has been exposed for some months, and it is a jar filled from the same cargo.

Q. The first jar in the order in which they are placed, is a portion of the cargo, and contains cane syrup?

A. Yes, sir.

Q. And the third is, also?

A. Yes, sir.

Q. The second is a portion of how many hogsheads?

A. It is of the second cargo.

Mr. Valentine—

We will say nothing more about the second cargo.

Q. What is this, Mr. Blodget (pointing to a bottle)?

A. That is a jar, broken by accident, showing its contents, which is transparent.

Q. And the first, Mr. Blodget, that you call molasses?

A. Yes, sir.

Mr. Brewster—

Q. What is that bottle you are holding up?

A. Crystallization of sugar.

Q. Is that a deposit from that syrup?

A. A part only, to illustrate. This jar has been exposed, to show the chemical change occurring in contact with the air. For three months it remained unchanged; then it commenced slowly to darken, and the lower part remains unchanged.

Q. You say that sample is a crystallization of sugar?

A. Yes, sir; two-thirds of the deposit in this jar, the crystallized part, was taken from the hogsheads to show the crystals of sugar.

Q. Mr. Blodget, from what hogsheads, and where?

A. From 15 or 20 separate hogsheads, separately on the wharf.

Q. Of what cargo?

A. Cargo of Manzanillo.

Q. Who put it there?

A. I did, sir.

Mr. Valentine—

Q. How long have these samples been in those jars?

A. Since the 19th of May.

Q. What was the appearance when they were first put in—were they as transparent?

A. More transparent and more limpid than now, though the change is not very great.

Q. You stated something about molasses; of that cargo, how many hogsheads contained molasses?

A. Eighteen out of 448 were separated as molasses.

Q. Be good enough to state whether or not you examined some of this, and ascertained what quantity of cane sugar was in it. Please state the process which you applied, and the result.

A. I weighed one half gallon on two occasions, and found its weight to be 11 lb. 2 oz. to the gallon, standard, United States, temperature 65°.

Q. What was the specific gravity?
Judge Cadwalader—

Q. Was it nearly 11 lbs. 2 oz., or exactly?

A. It was very near, or a fraction within 11 lbs. 2 oz., a little less. I subjected it to evaporation in an open vessel.

Q. Did I ask you the weight of a gallon of molasses?

A. The weight varies from 11½ to 12½ lbs. to a gallon of molasses.

Q. This was lighter, then?

A. Yes, sir; its specific gravity is 1.334, as near as may be.

Q. Not of the molasses, but of this syrup?

A. Yes, sir; it is 1.334, nearly identical with the specific gravity of a saturated solution of pure cane sugar. Its specific gravity as to molasses, is much greater.

Q. Go on, and state the result.

A. I subjected the standard half gallon of this liquid to evaporation in an open vessel, the result being, that nearly all of it was converted into sugar.

Q. Please state what kind of sugar, whether cane or grape.

A. It formed a light quality of Muscovado sugar, weighing at the time it was made —. This is the sugar (showing the sample).

Judge Cadwalader—

Q. Is that the result?

A. Yes, sir; that is the product by simple evaporation, in my office, over a lamp; and this is the molasses remaining from the half gallon. This is all the molasses in the half gallon, from which the sugar came; the original weight of the sugar was 3½ lbs.

Q. Forming the half gallon?

A. Yes, sir.

Q. The original weight of sugar in the half gallon was 3½ lbs?

A. Yes, sir.

X Q. The original weight is 3½ lbs. to the half gallon?

A. Yes, sir. (Showing another sample.) This is part of the same sugar.

D. Q. This is not all that was obtained?

A. The sample has been taken from the syrup, and this is not all.

[The samples were shown to the jury.]

Q. It made 7 lbs. to the gallon?

A. At the rate of 7 lbs. to the gallon.

Q. Mr. Blodget, if it would not interrupt you, just state how much cane sugar can be extracted from pure cane-juice.

X Q. Have you any knowledge on that subject?

D. Q. Have you any knowledge, practical or chemical, enabling you to answer that question?

A. I have consulted chemical works.

Q. Have you any practical knowledge, in any way?

A. Not other than by chemical works. I have never investigated cane sugar.

Q. Mr. Blodget, are you enabled to state the amount of cane sugar that can be obtained from a gallon of syrup of sugar cane, or cane-juice.

A. Only from works of practical science, which, in that connection, state 60 per cent. to be the result.

Q. How much would that be in pounds.

A. 6⅞ lbs.

Q. State, Mr. Blodget, the amount of cane sugar that can be obtained from molasses.

A. The quantity is very variable, from 10 to 40, and sometimes as high as 50 per cent.

Q. That is, stated in pounds, how much?

A. 1½ to 4 lbs.

Q. 1½ to 4 lbs. to the gallon?

A. Yes, sir; 1½ to 4 lbs. to the gallon.

Q. Now, Mr. Blodget, I do not mean to prevent you from going on in your own way, but taking up this analysis you have made, please explain the method, by chemical tests, of ascertaining the amount of cane and grape sugar, which you applied in this case—the process of evaporation.

A. I did not complete any absolute chemical tests. I anticipated, to some extent, chemical tests by the polariscope, which accurately indicates the chemical rates. It is used by the

Government of France officially, and to some extent by the British Government. The test by the polariscope indicated by the first reading, 57 per cent.

Q. You were present and saw it?

A. Yes, sir.

Q. 57 per cent. of what?

A. 57 per cent. of pure cane sugar—57 per cent. per gallon of pure cane sugar.

Q. Can you state precisely the ingredients which make up the gallon. You have given us the weight, can you state the ingredients?

A. I cannot state what the ingredients are, of cane sugar.

Q. I mean specifically?

A. Dr. Genth has the memorandum.

Q. You were present, however, and saw the test applied?

A. Yes, sir; I saw the test of the polariscope. I directed Dr. Genth, who has the memorandum, to make the chemical examination.

Q. Is there any other method than the polariscope?

A. It is tested by the precipitation of grape sugar; that is often applied. Some Chemists prefer it. In this case it agrees exactly with the test by the polariscope, and as a chemical test Dr. Genth will prove it satisfactorily.

Q. You have spoken of cane sugar, Mr. Blodget; is there any other kind of sugar that you find in the analysis of cane syrup?

A. Cane sugar is the primary form which should constitute the only product of the cane; but by a partial change, it is converted into grape sugar, which is an uncrystallizable article.

Q. What is cane sugar?

A. Cane sugar is composed of the formula of carbon 12, oxygen 11, hydrogen 11; but after decomposition, it has the equivalent of carbon 12, oxygen 14, hydrogen 14. Then it is in the uncrystallized state of molasses.

Q. In the original form, tell us what the forms of crystals are of cane sugar?

A. The crystals of cane sugar are large, oblique rhomboid. They crystallize by adhesion, or form in a solution from a saturated solution; they form in masses, and float in a saturated solution. They were found in every hogshead, floating, oblique, rhomboid. They cannot be formed in molasses.

Q. These specimens that you have shown, Mr. Blodget, were obtained from this cargo?

A. They were obtained by two officers in connection with myself.

Q. Please state whether you weighed the largest crystals, the largest body or conglomeration of crystals that was found, and what the weight was?

A. I did not weigh it; the other officers did; and they informed me the weight was 30 pounds.

Q. You did not see it weighed yourself?

A. No, sir.

Q. Mr. Blodget, please state the method of manufacturing molasses, melado, and grape sugar. Do it in your own way, but commence with the cane sugar—begin with the expression of the cane?

X Q. Have you any knowledge upon this subject, relative to the crystallization of syrups; have you ever seen the processes?

A. Not the expression from the cane; the subsequent processes, I have.

Judge Cadwalader—

Q. What is your knowledge?

A. I have seen the operation of the vacuum pans for the crystallization of syrups.

X Q. Have you ever been in a sugar growing country, at all?

A. No, sir.

Q. Have you ever been engaged personally, in the manufacture of sugar or molasses?

A. Not in a business way.

Q. Have you any knowledge on the subject, except from books?

A. I have seen the operation of the vacuum pans for the crystallization of syrups.

Q. May I ask you when you acquired this knowledge; has it been since this case was pending. Have you visited such establishments since, for the purpose of acquiring such knowledge?

A. No, sir; several times within 15 years past, I have had knowledge of the processes of crystallization in the making of sugar and molasses. My knowledge is wholly previous to this case.

D. Q. Go on, Mr. Blodget; please explain the manufacture of molasses from sugar cane?

A. The syrup of the cane is purified by lime and otherwise, and passed through the vacuum pan in which it is boiled, or fused down at a lower temperature than the boiling point; it is thus changed to cane sugar, which is crystallized then in the vacuum pan to a certain extent. Sometimes it is drawn off without

crystallization. It may be purged from molasses, either in hogsheads, which is sometimes done on the plantations, or in cans, which is done in refineries here, or in centrifugals, as a great share of sugar is now made, both in refineries and on plantations. The molasses is the product of purging or draining the sugar by the heating process. If it has not been crystallized, and placed in hogsheads, or produced in centrifugals to drive the molasses out by evaporation, we pronounce it cane syrup.

Q. If it were taken out of the vacuum pan, it would be cane syrup?

A. Cane syrup.

Q. What is melado, and where would that be found?

A. It is a product taken from the vacuum pan and placed in hogsheads in a semi-fluid state, the crystals mingling with molasses in a granular, semi-fluid mass.

Q. What is concentrated molasses?

A. Concentrated molasses is the molasses after draining and subjecting to reheating, either in vacuum pans or open vessels.

Q. Concentrated melado?

A. Concentrated melado. There is a possibility that melado may be dried in the vacuum pan, leaving an uncrystallized sugar in dry crystal masses mixed with sugar; it will be melado, it will not be fluid; that is concentrated melado.

Q. All these substances you have spoken of, cane sugar, melado, cane-juice and concentrated melado, weigh about how much to the gallon?

A. They are all heavier than pure syrup; the molasses is heaviest of all.

Q. You have said in your examination, the proportion of cane and grape sugar in syrup. Will you state the proportions in molasses?

A. Molasses made of pure cane sugar, or in commerce, contains from 10 to 40 per cent. of crystallized sugar. The highest grade of Muscovado molasses run fresh from the cane, sometimes runs as high as 40 per cent.

Q. Mr. Blodget, from your knowledge of the method of manufacturing, how would you say this article here was manufactured?

Judge Cadwalader—

He has already answered to the extent to which his own knowledge ought to lead him.

Mr. Valentine. We will not press the question.

Cross-examination.

Mr. Fallon—

Q. Mr. Blodget, I wish first to get you right with regard to our figures. You have said, in answer to the last question, that the molasses contains from 10 to 40 per cent. of crystallizable sugar. You have also stated in the early part of your examination, as I have it down, that molasses contains from 10 to 40, sometimes 50 per cent. of cane sugar; which is correct, or will you correct yourself as to what you intended precisely; these are your two statements?

A. I did not intend to say 50 per cent.

Q. You correct yourself, then?

A. I correct that.

Q. You say molasses never contains more than 40 per cent. of cane sugar.

A. I do not say the article sold as molasses contains no more; but the article from cane sugar cannot contain more than that.

Q. Then you say it cannot contain more than from 10 to 40 per cent.?

A. Yes, sir.

Q. You say the weight of a gallon of molasses is $12\frac{1}{2}$ lbs.?

A. It may be.

Q. From $11\frac{1}{2}$ to $12\frac{1}{2}$ lbs.?

A. Yes, sir.

Q. How many pounds of sugar did you say was made generally from a gallon of molasses; did you not say $3\frac{1}{2}$?

A. I could make no sugar from molasses. If we reduce the molasses, it would not crystallize.

Q. How much sugar did you say could be made from a gallon of molasses?

A. I think I did not testify to that point.

Q. I think you did. You said you produced 7 lbs. from that; and from information you told us how much was usually produced from molasses, about 40 per cent.

A. I should say from 3 to $3\frac{1}{2}$, and possibly 4 lbs.

Q. You say, Mr. Blodget, that the utmost that is made from molasses is 35 or 40 per cent. of sugar?

A. No, sir; they make more, because they reduce the large share of uncrystallized sugar in the brown product of finishing; they may get more.

Q. You said the customary amount was 60 per cent. from cane-juice and 30 to 40 from molasses.

A. I spoke of cane sugar, pure.

Q. That is 60 per cent. from cane.

A. Yes, sir.

Q. And about 35 to 40 per cent molasses.

A. I said variably from 10 to possibly 40 from cane sugar, not from ordinary sugar. Ordinary sugar, as obtained in refineries, is only about two-thirds of cane sugar.

Q. 40 per cent. in your 12½ lbs. would come to how much, sir?

A. 40 per cent. is not obtainable of that specific gravity. There is very little cane sugar if it has that gravity; it could not be 40 per cent. of 12½ lbs.

Judge Cadwalader—

Q. Suppose you take that vessel which has molasses, and say what percentage it is.

A. The percentage of sugar decreases by weight.

X Q. Do you know, sir, how much is contained in that dark article you produce there, which you call molasses?

A. I do not; I think about 20 per cent. of cane sugar.

Q. Have you ever seen cane-juice, Mr. Blodget?

A. I think I have, sir.

Q. When and where?

A. In this cargo.

Q. Apart from that, have you ever seen cane-juice?

A. I have, sir, at the port of New York.

Q. Will you be good enough to name the cargoes.

A. I could not do so without referring to the memoranda I have. I have examined those cargoes during the course of the present year—that is, portions of certain cargoes, small portions of cargoes.

Q. Who was with you at the time, sir?

A. Some officers of the port of New York were with me, sir.

Q. Can you name the officers?

A. The officer was the Examiner.

Judge Cadwalader—

Q. Was it an understood or a disputed cargo?

A. By direction of the Secretary of the Treasury, I went to examine three cargoes in dispute; portions of those were decided to be cane syrup.

Q. Except those, sir, did you ever see any cane-juice, or what you would take to be cane-juice?

A. Not pure cane-juice; no, sir.

Q. Have you ever seen any cane juice at all?

A. I have said, sir.

Q. With the exception of those?

Judge Cadwalader—

Q. Mr. Fallon means of understood cargoes.

A. I say I have not, previous to this, and the cargoes I have mentioned.

X Q. Previous to these, you have not seen cane-juice?

A. No, sir.

Q. What is the chemical difference, Mr. Blodget, according to your notions or information, between melado and molasses?

A. There is no chemical difference, except that melado contains a larger portion of cane sugar in crystals, and molasses has no crystals.

Q. The difference is, that melado contains a larger proportion of cane sugar than molasses; what proportion?

A. It is according to the mode of manufacture.

Q. According to your knowledge, what proportion does it contain?

A. I never examined it, but I think it ought to contain up to 60 per cent. of cane sugar.

Q. That is your idea, sir; up to 60 per cent. of cane sugar?

A. Yes, sir.

Q. Have you ever seen what you would call concentrated molasses?

A. Yes, sir.

Q. When and where?

A. On many occasions.

Q. Can you name any occasion?

A. I have seen that which, in my judgment, was concentrated, on frequent occasions. I cannot name the occasions, but it occurred frequently in the examination of cargoes.

Q. Have you ever seen the substance known as concentrated molasses?

A. It had no distinctive name as such.

Q. Then you have never seen the article known or named as concentrated molasses?

A. I have seen the article I call concentrated molasses.

Q. But you won't say how often you have been giving your ideas, or the recognized ideas of others.

A. The article of concentrated molasses is not known in commerce.

Q. And so far as you know, you have never seen the article designated to be concentrated molasses?

A. I have said I have seen it, sir, in my judgment; I could not declare from positive knowledge.

Q. You cannot mention where and when.

- A. I have seen it on twenty occasions within the last year.
 Q. Mention when and where.
 A. In the ordinary sample it frequently occurs.
 Q. Be good enough to mention any cargo or any place where you have seen it.
 A. I have the name of a vessel now in my mind. Practical concentration in small lots is very frequent. No distinctive classification is adopted in the customs of commerce, or of the trade.
 Q. Has any article of that kind been imported into this city within the past year?
 A. I think it has.
 Q. Do you recollect a single instance?
 A. You observe the rule of concentration varies from the slightest to the most extreme.
 Q. I am not asking you about the theories, but I want to test whether you have not testified by theories, rather than by experience. Have you experience. Have you seen here or anywhere else, and if so, where, any cargo called or admitted to be concentrated molasses, in your life?
 A. I cannot mention such cargoes.
 Q. Have you ever seen a cargo or part of a cargo called cane-juice?
 A. I have.
 Q. When and where?
 A. In the case before us.
 Q. Which you call cane-juice. Now mention any which was admitted to be cane-juice, or held to be unquestionably so.
 A. It is my province, sir, to determine what the article is.
 Q. Have you ever seen a cargo, or part of a cargo of cane juice?
 A. I have, sir.
 Q. Besides this?
 A. Yes, sir.
 Q. That is in New York, the disputed cargo in New York, of last year. Did you say they were decided in New York to be cane-juice?
 A. They were so decided.
 Q. By whom?
 A. I am not certain, sir.
 Q. You swear this to the jury—that certain cargoes in New York you saw, were decided to be cane-juice?
 A. I do not say so.

- Q. The Counsel of the Government just said to me you said so.
 Judge Cadwalader—
 He is now testifying from Custom House experience, as adopted from the tests, chemical and otherwise.
 X Q. Mr. Blodget, how long have you been in this business?
 A. In what business?
 Q. In the business of appraiser, or in any way connected with this molasses question.
 A. I was appointed appraiser in April, 1865.
 Q. Had you any knowledge of the subject prior to that?
 A. I had.
 Q. Did you write a letter to the local appraiser, on the arrival of this vessel, before you saw the cargo, on the subject of what it should or should not be called.
 A. I think not, sir.
 Q. You have no recollection of doing so, sir.
 Mr. Valentine—
 To whom?
 Mr. Fallon—
 To the local appraiser.
 Judge Cadwalader—
 The rule of examination is to show him the letter or a copy of it; you had better show him the letter, in order to save time.
 X Q. Did you write to the local appraiser, or to anybody else to the effect that he should call this something other than molasses?
 [Plaintiff's counsel objects.]
 Judge Cadwalader—
 You cannot do that, sir; you must produce the letter, if you are going to produce it.
 Mr. Fallon—
 I have given notice to our friends on the other side to produce it. I now call for the letter from Mr. Blodget to the local appraiser.
 Mr. Valentine—
 On Saturday last, we received the letter calling for the production of one from Mr. Blodget.
 Judge Cadwalader—
 The notice is too short to publicly produce it. The Collector of the Port, however, is present, and I would request him to search for it, as it may be important.
 Mr. Fallon—
 I will then postpone my cross-examination on that point.

Mr. Cuyler—

Q. Be kind enough, Mr. Blodget, to tell us in what business you have been engaged in the previous portions of your life; what has been your usual business; to what were you trained?

A. I was in the Science Department of the Smithsonian Institute for six years; I was six years Secretary of the Board of Trade of this city; I supervised the returns of the manufactures, and I have examined all the manufactures of this city.

Q. You compiled the book of manufactures of Philadelphia, for the Board of Trade.

A. I did; yes, sir—the official account.

Q. And also you were engaged in scientific pursuits, in the Smithsonian Institute at Washington; what department of science did you pursue there?

A. Physical science, as it is usually distinguished.

Q. What department of physical science, for that is a very comprehensive word. Have you been a professional chemist?

A. I have not practised as a professional chemist. I have sufficient to do in it; but I have attended to other of the physical sciences.

Q. Physical science includes astronomy, geology, anatomy, and, my friend suggests, the pugilists. You say you have never been a professional chemist; have you had a laboratory?

A. No, sir.

Q. Have you ever been engaged as an analytical chemist in your life?

A. No, sir.

Q. Have you been in the West Indies?

A. No, sir.

Q. Have you been on the sugar plantations in Louisiana or any other State?

A. Never to see them in operation.

Q. Therefore, you have never seen the sugar cane growing?

A. I have seen it growing.

Q. In a country where it was in practical operation?

A. No, sir.

Q. Therefore, your knowledge of the process of the manufacture of sugar and molasses is derived from books and conversations, is it not?

A. No, sir; from practical knowledge in visiting every refinery in this city.

Q. Then you have visited the refineries in Philadelphia. From what do they make molasses and sugar?

A. From the crude Muscovado and trade sugars, from molasses.

Q. Have you ever known cane-juice to have been brought, as an article of commerce, into this port, or to be known as such?

A. There has always been difficulty in distinguishing such.

Q. That is not an answer. Have you ever known a hogshead of cane-juice sold as such in Philadelphia, or imported into the port of Philadelphia?

A. I have not; the importations of that sort have been in dispute.

Q. In dispute between whom?

A. Between those whose duty it was to pass them and fix the duty, and the importers.

Q. That is to say, between the officers of customs and the importers?

A. Not wholly between them, sir.

Q. Between the officers of the Government at other places?

A. Yes, sir.

Q. Did you ever know of any one specific hogshead of cane-juice, as such, to be imported into Philadelphia?

A. Not admitted to be such by the importer; it is in the commerce of England, in large quantities.

Q. But I confine our question to our ports, not to English law. Have you ever known in New York of a hogshead of cane-juice, as such, imported into the port of New York?

A. Not entered as such by the importers.

Q. Or that of Baltimore?

A. No, sir.

Q. Or any other port of the United States?

A. I am not aware of any.

Q. You have never been in the West Indies, or on any of our plantations, and know nothing of your own knowledge as to the processes through which the juice of the cane has been passed before it reaches the American ports?

A. No, sir.

Q. Therefore, your own knowledge on that subject is not personal knowledge at all; you have no personal knowledge on that subject?

A. I have seen nothing otherwise.

Q. In answer to the question of Mr. Fallon, you said "molasses cannot contain more than 40 per cent. of cane sugar; but I do not say it is not sold as such, containing more." What do you mean by that, precisely?

A. I mean articles are sold as molasses which are mixtures of cane syrup and molasses.

Q. Are either of these jars which you have produced before us, mixtures of that kind?

A. No, sir.

Q. Have you ever seen the centrifugal process applied directly to the product of cane, yourself?

A. I have seen it applied to the formation of sugar, in Philadelphia?

Q. In whose manufactory?

A. Bartol, and three or four others.

Q. And when?

A. I cannot say when.

Q. Recently, or in a series of years past?

A. As early as they were introduced, and as recently as a short time past.

Q. Upon what species of molasses did you see that centrifugal process applied. Was it upon articles similar to this in these jars?

A. It was applied to purify the product of all ordinary Muscovado sugar, in some cases molasses.

Q. As an appraiser, sir, have you under the law any interest in forfeitures?

A. I am expressly precluded from any such interest by the law.

Q. You have no interest whatever in any forfeiture?

A. No, sir.

Q. In point of truth, sir, is there any understanding or arrangement of any kind between yourself and those who, under the law, are interested in forfeitures, whereby you derive benefit of any kind, direct or indirect, by reason of forfeiture, supposing one to take place in this case?

A. No, sir; there is not one word.

Q. Of any kind whatever?

A. No, sir; of any kind whatever, not one word has passed.

Q. Mr. Blodget, referring to the specimens which you have produced here, that were taken from the cargo of this vessel, have they been submitted by you to scientific experts?

A. They have, sir.

Q. Have they been taken by you to New York?

A. Samples have been sent to New York.

Q. And submitted there to whom?

A. Merely for the information of the officers there.

Q. Were they submitted to the General Appraiser at the port of New York?

A. They were sent to him for his information; they were not submitted to him.

Q. What do you mean by *information*?

A. It is the duty of the General Appraisers to exchange samples between the ports.

Q. Were they not also sent to him for his opinion?

A. No, sir.

Q. Were they sent to any officers of the New York Custom House for their opinion?

A. No, sir.

Q. Or to any officer of the government there?

A. No, sir.

Q. Or to any man of science there?

A. No, sir.

Q. You said, Mr. Blodget, that certain cargoes, not alluding to these in question here, however; that certain cargoes had been brought in, which were mixtures of cane-juice and molasses. How do you know that?

A. By various evidences.

Q. Such as, for example—

A. Personal examination of it, information derived from other sources.

Q. Do you mean that there had been an actual admixture purposely made afterwards, with an imperfect separation made before?

A. I can't say how it was made; it might have been a subsequent separation.

Q. Referring, then, to the examinations made by you, you say you have never known cane-juice, as such, imported into the United States. Commercially speaking, what, in the port of Philadelphia, is the article contained in those jars called, speaking by the rule of the Court?

[At the suggestion of his Honor, the question was withdrawn.]

X Q. Under what commercial name have you known the article which is contained in that jar, to be imported into the port of Philadelphia?

Judge Cadwalader—

Q. What article; the molasses?

Mr. Cuyler—

No, sir; the other jar.

A. I have not known it to have a single commercial name. In the transactions of several markets five years ago, it was classed as melado. I have not known it to have a distinct commercial name.

Q. Have you ever known it to have any other name in this port than molasses?

A. I have never known any other cargoes than that imported here, and do not recognize any commercial designation for it.

Q. I want a direct answer to my question?

Judge Cadwalader—

Mr. Cuyler is entitled to an answer to his question; but I think you have answered it, though Mr. Cuyler thinks not. As I understand, you say whatever be the proper name of that article, you have never known it imported in this port otherwise than as called molasses.

X Q. Does your experience extend also to the port of New York sufficiently to answer the question there?

A. Not positively.

Judge Cadwalader—

So far as you know, I suppose it is so there.

A. Yes, sir.

X Q. Now, sir; I have asked you in regard to the article imported here. I will now ask you if you have knowledge of the sale of that article, from other cargoes than that involved in this controversy?

A. I do not know of the selling of any other article than this.

Mr. Fallon—

Q. As regards the relative value of these articles, can you state, sir, have you any knowledge on the subject of how much more, or less, the article you call cane-juice you consider to be worth a gallon. Is it worth more or less?

A. It is worth two-thirds more.

Q. That is the light colored more than the ordinary molasses. Would it be worth two-thirds more than the best molasses?

A. No, sir.

Q. How will it compare in value with the best molasses?

A. The best molasses is worth \$1 per gallon.

Q. I mean the importing price?

A. We are not familiar with the foreign prices.

Q. Then would you consider that to be worth \$1 per gallon?

A. It is worth that in its pure state.

Q. I mean when imported?

A. Yes, sir.

Q. Is imported molasses worth \$1 per gallon; any imported molasses?

A. It is not now, sir.

Q. Has it ever been?

A. I think a year since, the best imported molasses, the New Orleans, was worth \$1 per gallon.

Q. I am talking of imported molasses, Cuba molasses.

A. The best of the foreign molasses was?

Q. The best of the foreign molasses was \$1 a year ago.

A. I am not certain. I may have the price of a year and a half ago. I cannot testify as to the prices.

Mr. Cuyler—

Q. You say you are not familiar with the prices of foreign ports?

A. I say our duty is not to mention the foreign prices.

Q. Is it not your duty, as Appraiser, to be informed of the prices in foreign ports?

A. We do know them, but the clerks determine the foreign value.

Q. But still it is your duty?

A. It is my duty to compare those prices.

Juror—

Q. Is the article in that last jar frequently imported into this port?

Mr. Cuyler—

That is the jar I called his attention to.

A. No, sir; not frequently, it is very rarely. It has been supposed to be in parts of cargoes, but never in whole cargoes.

Juror—

Q. How was it imported; under what name?

A. It was entered as molasses.

Juror—

Q. You say there was lime used in the process on the sugar plantations. In case an excess of lime is used, what will the effect be?

A. I am not sure. It may injure the color; it may have to be purified to remove the effect of excessive lime.

Q. Would it affect the specific gravity?

A. I think not; I think it would not injure the specific gravity.

Q. Then, in that case, if it would not alter the specific gravity, the glass would not show it; that is, there would be more molasses?

A. I am not sure; possibly.

X Q. Mr. Blodget, as you have been asked about that, what would be the effect of sulphurous gas used on plantations; or are you not informed?

A. I do not know. I have heard it rendered it lighter.

Mr. Brewster—

Q. You are familiar with the proceedings of the Custom House?

A. Yes, sir.

Q. On the invoice, on the entering of the goods, that is signed in duplicate, who designates the article as molasses; the importer, is it not?

A. Yes, sir; the importer.

Collector J. W. Cake was sworn to testify in regard to the papers of entry, but the claimants waived the necessity.

Plaintiffs' Counsel offers in evidence entry of goods dated April 21, 1868, with invoice of importation dated Manzanillo, March 31, 1868, for 448 hogsheads, 33 tierces of molasses, with accompanying papers.

A

Prof. Fred. H. Genth, sworn—Direct-examination.

Mr. Valentine—

Q. You reside here, in this city, I think?

A. Yes, sir.

Q. You are a professor?

A. I am a chemist.

Q. How long, sir, have you had a knowledge as a practical chemist?

A. Since 1839.

Q. What has been your business and occupation?

A. I have been a practical and analytical chemist all my lifetime.

Q. Did you make an analysis of samples furnished to you by Mr. Blodget, who was on the stand?

A. I did.

Q. You have some memoranda of that, I suppose; are you able to state from your recollection all the results of your analysis. First state the specific gravity and weight?

A. I had two samples of the syrup furnished, and the sample of sugar from the Lilla. The specific gravity of one was 1.3389, and the gallon weighed 11 $\frac{18}{100}$ lbs.

Q. Now, go on, and state the analysis of that gravity. What did it contain?

A. It contained 30 $\frac{36}{100}$ per cent. water, 1 $\frac{36}{100}$ per cent. of gum and inorganic matter; grape and uncrystallized sugar, 9 per cent.; cane sugar, 58 $\frac{11}{100}$ per cent.; ash, 1 $\frac{17}{100}$ per cent.; that is all.

Q. Be good enough to state, Professor—

X Q. One moment; I have made some mistake. My own account does not add up to 100. Water is how much?

A. 30 $\frac{36}{100}$.

X Q. That is my mistake. That amount comes out right, now.

D Q. Now, take a gallon of this substance, and give us the constituent parts in the same way?

A. A gallon would contain in pounds 6 $\frac{50}{100}$, or 6 $\frac{1}{2}$ lbs. of cane sugar. Grape sugar and uncrystallized sugar, 1 $\frac{10}{100}$ lbs. Gum and inorganic matter, $\frac{28}{100}$ lbs. Water, 3 $\frac{30}{100}$ lbs. Total, 11 $\frac{18}{100}$ lbs.

Q. Which was the weight of the gallon?

A. Which was the weight of a gallon of syrup.

Q. Please state how you made these tests, by what method?

A. The analysis was made by drying the syrup at a temperature of 100° centigrade, until no more water was lost. The gum was precipitated in the form of lead salts; the lead salts was analyzed into oxyde of lead, and the difference in weight was the gummy matter.

Q. What was the first experiment made with; was any instrument used?

A. I only used the usual apparatus, the usual chemical apparatus.

X Q. For evaporation, then?

A. The grape sugar was determined by the Fehling process, which is that alcohol in the presence of acid, oxalic acid, forms into a compound in the form of oxide of copper. The usual inorganic matter was determined by insinordation, the cane sugar by difference in weight.

Q. Did you make any other analysis by any other process?

A. I made an experiment with the polariscope, and found it contained 58 per cent. of cane sugar, which fully agrees with the analysis just made.

Q. Explain, will you, how you made this analysis with the polariscope.

A. It is too complicated to understand without the apparatus.

Q. Be good enough to state the comparative quantity of cane and grape sugar in the cane syrup, as compared with molasses.

A. I only know from book-knowledge that there is about 60 per cent. of cane sugar in syrup; I do not know from positive knowledge.

Q. How much grape sugar?

A. I do not know.

- Q. How much in molasses?
 A. I do not understand that question.
 Q. Is there any?
 A. Molasses is the drippings from crystallized sugar.
 Q. Is there any?
 A. What?
 Q. Cane sugar?
 A. There is certainly some cane sugar in molasses.
 Q. What proportion?
 A. I cannot tell; it is variable.
 Q. Molasses is drippings from cane sugar?
 A. Yes, sir.
 Q. Can you tell what proportion, what amount of sugar can be obtained from a gallon of molasses?
 A. It depends upon what we designate or call molasses.
 X Q. How would you take it out?
 A. I am not a practical sugar refiner.
 D Q. Now, in your opinion, what is the article that is submitted to you for analysis?
 [Defendant's counsel objects, but withdraws objection.]
 A. Cane sugar syrup, I might add in explanation, that if I know, the pure cane sugar syrup contains about 60, and I find 58 in this—that is about the nearest thing; I find in this over 58.
 Q. You have said what this article was. I will ask you whether it could have been drained from crystallized sugar?
 A. No, sir.
 Defendants' Counsel objects, unless witness be shown to have competent knowledge.
 X Q. Could this article have been drained from cane sugar?
 A. I do not believe it can.
 Q. Why?
 A. Because there is too large a quantity of crystallized cane sugar, and too small a quantity of uncrystallized grape sugar.

Cross-examination.

Mr. Fallon—

- Q. When were these samples given to you by Mr. Blodget?
 A. On the 24th of October.
 Q. That is just last month. In what vessel were they contained?
 A. They were contained in a gallon bottle, one sample was, and the other was contained in boxes.
 Q. Was it corked, sir?

- A. Yes, sir.
 Q. How?
 A. By a stopper put on a glass bottle, a cock stopper.
 Q. Have you any knowledge as to how this sample was drawn, and from where?
 A. I know it only as an official sample.
 Q. You only know what Mr. Blodget told you in October?
 A. Yes, sir.
 Q. Mr. Genth, are not all solutions of sugar called syrups?
 A. Well, it is a general name for a solution.
 Q. You have said that cane sugar syrup contained 60 per cent. of cane sugar. Now, what kind of syrup do you mean?
 A. I mean that syrup which has taken up as much sugar as it can take up.
 Q. That syrup which has taken up as much sugar as it can take up, has 60 per cent.
 A. About 60 per cent.
 Judge Cadwalader—
 Q. That is the maximum?
 A. Yes, sir.
 X Q. Without any impurity with it?
 A. Of course not.
 Q. You said you have found that out from books, can you mention any book that gives that? I will say, in fairness to you, I believe you are mistaken to a great extent.
 A. I only say, I suppose it is, about.
 Q. We are not supposing; we want witnesses who know. Can you name any book from which you could sustain such a notion?
 A. I cannot.
 Q. What reason have you for saying 60, instead of 70 per cent.?
 A. My reason is, I have read it; but I cannot put my finger on it.
 Q. You have read it?
 A. Yes, sir.
 Q. You have never analyzed any solution containing the maximum quantity, yourself, have you?
 A. I have not.
 Q. Do you know what the refiners call "white liquor?"
 A. I do.
 Q. That contains, I suppose, about the maximum?
 A. I do not know.
 Q. Do you not know it contains over 80 per cent.?

A. I do not know anything about it.

Q. Then about foreign molasses; do you know about what that contains?

A. I have told you already, molasses contains different percentages.

Q. How about foreign molasses?

A. I have not analyzed any.

Q. From your reading, do you know what is the maximum of foreign molasses?

A. That is not in my province to say.

Q. Then you do not know from reading. Have you any other reason for saying that this is cane syrup, in your opinion, than the one you have stated, because it contains 58 per cent?

A. I think that is good reason enough.

Q. But have you any other?

A. No, sir.

Q. Have you ever analyzed other samples?

A. I have analyzed samples these twenty years.

Q. For whom?

A. For whoever comes.

Q. Of other matters, that is; but as to molasses and syrups, have you ever made analysis?

A. I have only analyzed one sample for analysis.

Q. That is the only one?

A. Yes, sir.

Q. Have you any knowledge of the commercial article of molasses?

Mr. Cuyler—

Q. Mr. Genth, is the combination between the cane sugar and the juice mechanical or chemical?

A. That is a mechanical mixture; it is not a chemical mixture, strictly speaking.

Judge Cadwalader—

That is implied in the word "solution."

A. There is a great deal of doubt upon that point. You had better not meddle with it.

Mr. Cuyler—

Q. Supposing the mixture to be mechanical, and not chemical, is there not a gradual settling in the vessel?

A. Of course, by evaporation.

Q. Would not the upper part of the vessel from which the evaporation proceeded, contain less of the mechanical combination than the lower part? In other words, if you had a specimen from the surface, and then another from the bottom, would not

the part near the bottom contain a larger portion of matter than the top?

A. I could not answer without a sample.

Q. Would not the proportions be that way?

A. I cannot answer about the proportions.

Q. Would you think the proportions would be that way?

A. I do not think anything about it.

Q. Then, I ask you as a man of science, where there is an actual substance of solid matter on the bottom, whether a sample taken from the top would not show a less amount than one from the bottom. Where the combination is mechanical and not chemical, and there is an evaporation going on, I ask whether, as a usual matter, there would not be more of a deposit of matter near the bottom than near the top?

A. It is not very likely.

Q. Taking one of these casks in which sugar is said to be deposited, would you look for that sugar at the top or down at the bottom?

A. It would make very little difference.

Q. You would just as naturally look for a deposit on the surface as at the bottom. I put it to you as a practical man, as a scientific man, whether, looking into one of these hogsheads in which sugar is said to be deposited, the sugar would be found to be deposited on the top or the bottom of the cask?

A. On the bottom of the cask; it would crystallize there.

Q. Well, is not the liquid thicker, then, on the bottom than on the top?

A. I do not think it would be.

Q. You do not know what part of the cask these specimens were taken from, that you examined?

A. I know nothing about them.

Mr. Fallon—

Q. What is a saturated solution, as understood by chemists?

A. One that cannot take up more at a given temperature.

Q. If, then, there is a certain saturated solution of sugar at a given temperature, and you increase the temperature, would not the necessary consequence be a partial crystallization, if you evaporate any water from it?

A. No, sir; your question, as you have given it to me, I would say just the reverse.

Q. It would not crystallize?

A. No, sir.

Q. If there be evaporation from it, then, must not that necessarily create crystallization?

A. Of course, if you evaporate water, crystallization will take place.

Q. You cannot condense it any further, or concentrate it at a given temperature; there is no such thing as condensing a solution without crystallization. After a time the part that remained liquid would be—

A. That is an entirely different question.

Q. Take a solution of sugar, and evaporate a portion of it, the remainder would remain the same degree of richness; it would be saturated, only as it was before; would it not?

A. Certainly.

Mr. Cuyler—

Q. You have no knowledge about these samples, as to from where they were taken; they were simply brought to you; you did not see the samples taken out?

A. No, sir; I only know they were brought to me.

Redirect Examination.

Mr. Brewster—

Q. You said you had made one analysis of this; you have made a great many analyses of various substances. Did you mean you had analyzed cane-juice and molasses, and sugar?

A. I mentioned occasionally substances were brought to me for analysis; I only meant that I had *not* analyzed any sugars or molasses previously.

Q. You did analyze a number of sugars and molasses previously yourself?

A. Yes, sir.

Q. And had been doing so for a number of years?

A. For many years.

Recross Examination.

Mr. Cuyler—

Q. Is there any difference between sugar and starch in their components?

A. I should think there is, in their components, carbon, hydrogen and oxygen.

Q. Is there any difference which chemistry can detect between the proportions of those?

A. That is a disputed question between chemists; it is very probable there exists a great difference.

Q. But can you detect it. A chemist once told me it was impossible for them to detect the difference, by the nicest test

known to the art, between a bit of a pocket handkerchief and sugar; they contain the same articles, and, so far as chemistry could detect, contained the same elements?

A. It is not the ultimate elements we have to detect; it is their properties we have to look to.

D Q. Do you know, Professor, whether or not the crystals, which form in cane syrup, float at any time on the surface or in the fluid; or whether they are at the bottom?

A. They certainly may float for a time; but then they sink when they get heavy enough.

William Flake, affirmed—direct examination.

Mr. Valentine—

Q. Mr. Flake, you are an Examiner of Customs?

A. I am in the Appraiser's Department.

Q. You examined this cargo?

A. Yes, sir.

Q. Where did you see it?

A. A part at Arch street wharf, and a part below Almond street.

Q. On board the vessel?

A. It was on the wharf, I think. It came on the 21st, and I examined it near the last of April; I think on the 30th of April.

Q. You saw it twice; did you not, sir?

A. Yes, sir.

Q. Do you know whether samples were taken from every hogshead?

A. Every hogshead was opened on the second time.

Q. How many of these were found to be molasses?

A. Mr. Blodget marked all that he supposed to be molasses, more or less.

Q. Did you examine them all?

A. Well, on the second occasion, yes, sir. I examined them myself, also.

Q. How long have you been an Examiner?

A. I have been an Examiner for many years. I have been regularly associated with the sugar and molasses about six or seven years, at least six.

Q. Do you know, have you had experience to know, what molasses is, to distinguish it from other substances, such as cane syrup?

A. Yes, sir; I should think so.

Q. Please state what the article in question is?

A. Although the report was cane-juice, I made up my mind it was molasses. I had never seen any cane-juice in my life, and I had seen melado, and I knew what melado was; and I made up my mind it was molasses, and I fell back on a man who manufactured sugar, and I made up my mind to be guided by him. He pronounced it—

[Defendant's counsel objects to evidence as incompetent, but withdraws objection.]

A. I fell back on this man, where I had never saw any cane-juice.

D Q. Who was that person you spoke of; give us his name?

[Defendant's counsel objects.]

Cross-examination.

Q. Mr. Flake, you say you have had experience for six or seven years in molasses and sugar. Now, to the best of your knowledge and opinion and belief, was not that cargo what was understood commercially as molasses?

A. So I understood it.

Q. And that is your belief now; is it not, sir?

A. Yes, sir.

Q. You returned it concentrated cane-juice; did you?

A. Yes, sir.

Q. Did any person urge you to make any such return as that; were you urged by any person from the Custom House to make that return?

A. No.

Q. You have no knowledge on the subject of concentrated cane-juice?

A. No, sir.

Juror—

Q. Had you ever examined such an article as that before?

A. I had never examined such an article as that before. It is all fluid-like; I had made up my mind it was centrifugal molasses.

Mr. Brewster—

Q. How did it differ from what you saw before?

A. Centrifugal molasses is more fluid-like.

Judge Cadwalader—

Then this is more fluid than any molasses you ever saw before?

A. Yes, sir.

Mr. Brewster—

Q. You say you had never seen such as this before; never, at any time?

A. I never saw any so fluid-like. I had seen 16 or 17 hogs-heads at Welch's centrifugal, but that is all. The centrifugal is a new process.

Mr. Fallon—

You say you never examined centrifugal before. You have seen Porto Rico; is this anything like that?

A. Porto Rico molasses is as light as that; but it has more body.

Q. Have you examined any Manzanillo molasses?

A. I recollect having a cargo of molasses at Arch street wharf; but there was more body in it than this, and there was more sugar; it was not so crystallized.

Q. How was that passed?

A. It was passed as molasses.

Q. How long since was that?

A. It was last fall, what aroused me to this being cane-juice, I saw so much crystallized sugar in it that I hesitated to pronounce it molasses until I called on an expert. He said it was cane-juice, and so I reported it was cane-juice.

Mr. Cuyler—

Q. Did Mr. Blodget see the molasses you have spoken of, as having seen on a former occasion? You say, on a former occasion, you saw some molasses on Arch street wharf, imported from the West Indies, and that it had more sugar in it than this?

A. He may have seen it; I did suggest it to Mr. Hurley, one of our appraisers.

Q. Did you mention it to Mr. Blodget?

A. No, sir.

Q. Did you see Mr. Blodget up there?

A. He may have been there.

Q. Did you see him there?

A. I am not certain whether I saw him there or not.

Q. But that cargo was passed as molasses, and paid the duty as molasses?

A. Yes, sir.

Q. And without question?

A. Yes, sir.

Q. Do you know what part of Cuba it came from?

A. It came from Manzanillo.

Juror—

Q. The molasses you saw at Arch street wharf, was it imported?

A. Yes, sir; centrifugal.

Q. How did that look, as compared with the jar that is nearest to you there; that is centrifugal molasses?

A. It was more fluid-like than that, or equally as fluid-like as that.

Mr. Cuyler—

Q. Just look at that carefully, and turn your recollection to what you saw at Welch's?

A. It was fluid like that; but I cannot say about the color.

Q. Does your mind suggest any difference; or does it look substantially the same?

A. I saw so much crystallized matter in it that I was doubtful, and I asked the expert about it.

Q. The question I asked you is, whether your mind suggested any difference between the appearance of this jar and the centrifugal you saw at Welch's?

A. I said before, it is more fluid-like; but I cannot recollect the color.

Q. Which of the two did you think more fluid?

A. This is a little more fluid than that.

Mr. Brewster—

Q. You have been asked about Porto Rico molasses. Wherein does Porto Rico molasses vary?

A. It has more body.

Henry W. Andrews, sworn—Direct examination.

Mr. Valentine—

Q. What is your business, Mr. Andrews?

A. I am now U. S. Storekeeper.

Q. What were you formerly?

A. I was merchandise broker.

Q. For how many years were you in business as a merchandise broker?

A. About twenty years.

Q. What was the merchandise in which you dealt?

A. Coffee, sugar and molasses.

Q. You had a knowledge of sugar and molasses?

A. Yes, sir.

Q. What was the name of the firm you were connected with, sir?

A. Andrews & Morris.

Q. Do you know what molasses is, sir?

A. Yes, sir.

Q. Did you examine the cargo of the Lilla?

A. Yes, sir; I examined it on the 7th of May, in assisting the Collector. I tried the molasses, as it is called, with a stick, and found large lumps of candied sugar, and in the bottom crystals. As soon as I saw the package, I had no hesitation in pronouncing it not molasses. I declined to pass the goods from sample, but examined it in the packages; when I examined it, I pronounced it not molasses, but in my opinion it was cane-juice.

Q. Did you boil it?

A. It had been boiled, or it would not have kept.

Q. What is molasses?

A. Molasses is the drippings of sugar.

Q. What is syrup as distinguished from molasses, and cane-juice as distinguished from molasses?

A. What I understand by cane-juice is, that this never had dropped off from sugar; the taste was different. I never saw it in all I had examined; and I suppose I had seen 50, 60, or 100,000 hogsheads. I never saw a cargo of such syrup as this.

Q. How did it differ?

A. It differed, in the first place, in the fluid, and the fullness of immense crystals, which, in all my experience, I never saw equalled, a larger body of crystals than I had ever before seen in molasses. I came to the opinion it was cane-juice, and not molasses.

Q. Did you see in any of those hogsheads, any large body of crystals that particularly attracted your attention?

A. Yes, sir; I did. I saw one, in fact, that I should judge would weigh 25 lbs. I thought it very extraordinary; I felt a great many that I judged, in answer to my stick, would weigh from 5 to 10 lbs., and in every instance, wherever I tried the casks, instead of grape sugar I found these strong crystals.

Q. What is the kind of substance that you found in the bottom of most of the hogsheads. How does it differ from this?

A. I have seen hogsheads of molasses having 110 lbs. of grape sugar, or smear sugar, but I never saw any cargo with such crystals.

Mr. Brewster—

Q. How many hogsheads did you say you had examined in your life?

A. Well, sir, I do not know.

Q. You said 50 or 60,000 a minute ago.

A. It may be more than that.

Mr. Valentine—

Q. Did you see the lump of these crystals weighed?

A. No, sir; I saw the lump itself.

Q. Do you know how much sugar can be obtained from Muscovado molasses?

A. I have no knowledge myself of it, except from chemistry and what the refiners tell me; I can answer you what the refiners tell me. I forgot to say, that when I sampled that cargo, at the solicitation of the Appraiser and Collector, I took a sample, a fair sample of it, without touching the bottom, and put my name and date on it, and placed it in a jar; I put my name on it, and it was sealed.

[A neck of a bottle, with paper attached, was shown to witness by Mr. Blodget.]

A. May 7, 1868. That is my writing.

Mr. Brewster—

Q. This top fits the jar exactly.

Mr. Cuyler—

It is not its fitting, sir, but it is the being open of the bottle, so that it may be affected by the air or otherwise.

Juror—

One of the witnesses said he had placed some sugar in that jar.

Mr. Fallon—

Then if that is the jar that it fits, that is the answer to that question.

Cross-examination.

Mr. Fallon—

Q. Mr. Andrews, when did you make this examination?

A. May 7th.

Q. What was your business then?

A. I was in no business whatsoever.

Q. When were you appointed storekeeper?

A. May 27th.

Q. About a month after that?

A. May 27th.

Q. At that time you had no business. How long since were you in the coffee, sugar and molasses business?

A. The fall of 1866 or spring of 1867.

Q. Now, sir, between May and June, before your appointment, did you not act as messenger between Mr. Cake and the gentlemen who are claimants here, backwards and forwards, or did you?

A. I came to Mr. Madeira, having heard of this intended seizure, and I, having been a seller and broker for Mr. Madeira, I thought, out of friendship, I would say certain things as a friend, and he thanked me for it. If you want any more, I can go on.

Mr. Cuyler—

We want everything you know, sir—that is, the truth.

Mr. Fallon—

Q. Now I ask you whether, between that time and your appointment as Storekeeper, you did not act as messenger between them?

A. I did not.

Q. Did you propose to these gentlemen any terms as terms?

A. I mentioned to Mr. Madeira I should act as a friend; if he would take certain advice, which I gave as my own advice as a friend, I should pursue a certain course.

Q. Did that come from Mr. Cake?

A. No, sir.

Q. Did you report that to Mr. Cake, or to Mr. Blodget, or to either of them?

A. I think I did, sir.

Q. Did you then go back, sir, with further messages?

A. I think not, sir?

Q. You did not go a second time?

A. After the time I have mentioned, I think Mr. Madeira asked me to come again; and I think I went again, and did not get to see him.

Q. What connection had this matter with your appointment as a Storekeeper, sir?

A. Not the least.

Q. Have you ever seen lumps of this kind in hogsheads of molasses (showing a sample)?

A. No, sir; nor nothing like it.

Q. Do you know what is the difference between crystals that Muscovado molasses will precipitate and that which Centrifugal will produce?

A. That is not in my experience.

Q. You have spoken of "smear" sugar; that is in Muscovado, is it not?

A. In all kinds of sugar.

Q. But do you know the differences of the sugar that is called Muscovado, and what is called Centrifugal?

A. Yes, sir.

Q. Is not Centrifugal more granular than Muscovado?

A. Yes, sir.

Q. And will not Centrifugal have larger crystals than the Muscovado?

A. Yes, sir; they are larger and more prominent than the Muscovado.

Q. This smear sugar you have talked of, you have implied or spoken as if it were grape sugar and not cane sugar. Is it, or do you know whether it is, one or the other, in ordinary molasses? Do you know whether it is grape?

A. I have considered it grape sugar.

Q. Do you know whether it is one or the other?

A. I have understood always that it is called grape sugar.

Q. This is stuff that deposits from ordinary molasses and sugar?

A. And substance that is not molasses. I have seen the deposits in hogsheads, but different from that, very different.

Q. Have you ever seen molasses that has been made by the centrifugal process mixed or treated with sulphurous gas, in the process of manufacture?

A. I do not recollect any.

Q. You have never had occasion to examine molasses of that kind; have you?

A. It is out of my knowledge.

Mr. Cuyler—

A question. I understand you to say, in the first place, this had been exposed to the heating process, but had not kept?

A. My opinion is, cane-juice would turn sour; that is—

Q. You understand this has been?

A. Yes, sir.

Q. And then I understand you to say, molasses is the drippings of cane sugar?

A. Yes, sir.

Q. I want to know whether there is any difference between the liquid that dropped off the sugar and that is gathered in the vessel below it, and the liquid in the vessel itself, if the cane sugar has been deposited?

A. I could not answer the question.

Q. I think it is quite as much a question of common sense as any other. Do you understand there is any difference between the liquid that drops off—suppose this vessel I hold had two holes in the bottom, would there be any difference in the liquid that drops and the liquid that remains deposited in the vessel? Would the liquids be just the same?

A. It would depend on the quantity of sugar at the bottom; it would be richer.

Q. In other words, I want to ask you whether the upper part of that jar you see there, is molasses—that jar in which the sugar has deposited itself on the bottom of the jar. I wish to know whether the liquid above is just the same as it would have been if there had been holes in the bottom and the sugar had been deposited below. What is the difference between the precipitation of sugar with the fluid above, or the drippings of sugar and the sugar remaining above? Is there any difference, in your judgment, is or is not that molasses in that jar?

A. I don't think it is.

Q. Why is it not?

A. The reason I do not think it is, is because I think I recognize it as the jar I put my name on.

Q. I want to know whether it is not the liquid you saw in the vessel, with the sugar precipitated down to the bottom of that vessel?

A. Yes, sir; I think it is.

Q. Then what is the difference in the liquid that remains after the sugar is precipitated below, and in the vessel where the liquid is allowed to drip below and the sugar remains?

A. I answer the molasses drippings would be a little richer.

Q. In either case it would be molasses?

A. Yes, sir.

John Gaunt affirmed.—Direct examination.

Mr. Valentine—

Q. What is your business?

A. I am not in any business just now.

Q. What has been your business?

A. I have been in several different kinds of business.

Q. Have you been a chemist, sir?

A. Yes, sir.

Q. How long have you had a knowledge of chemistry?

A. Well, sir, I have been practising, I should suppose, for about twenty-five years.

Q. Did you examine this cargo, or any portion of it?

A. Yes, sir; I examined a sample which was given me to examine.

Q. By whom was it given to you?

A. By George L. Broom, in Mr. Blodget's office.

Q. Did you make an analysis of that?

A. Yes, sir; I made an analysis of it.

Q. What was the result of that examination?

A. The result of the examination was, that I found 91 per cent. was cane sugar; that is, of the saccharine matters, which I suppose to be about 58 or 59 per cent. of the whole thing—about 58 per cent. $91\frac{7}{8}$ per cent. of cane sugar.

Q. Explain that, if you please.

A. $91\frac{7}{8}$ per cent. of cane sugar in the saccharine matters contained in solution.

Q. In how many parts?

A. Of saccharine matter? I do not say that was the amount of saccharine matter. That was the percentage of saccharine matter.

Q. State how that percentage was made up. For instance, in cane sugar, state any proportion of that; state the amount?

A. $91\frac{7}{8}$ per cent. of the saccharine matter was cane sugar. Recollect, this solution consisted of waters as well as saccharine matters.

Judge Cadwalader—

Q. You said it was equal to about 58 per cent. of what?

A. About 58 per cent. of cane sugar of the whole thing; the same percentage as Mr. Genth had, or it is very nearly the same thing.

Q. Did you make sugar from this, taking a gallon or half gallon?

A. No, sir. I found the amount of the grape sugar contained in the solution. Here is the memorandum.

Q. If you can refresh your recollection, state what it was.

A. Here is the memorandum I made, which I will read. 200 grains of solution of sulphate of copper is given, which was used for such experiments. Below, I see, is given the number of grains of syrup or molasses which at each experiment precipitated the whole amount of oxide of copper. This was a solution of oxide of copper I prepared two or three years ago for testing syrups. I suppose I have tested with it some fifty cargoes, perhaps, and 200 grains of that, the whole of the oxide of copper, was precipitated by four grains of pure grape sugar. A solution of pure honey required just exactly four grains to

do the same thing. The syrup in dispute required 46 grains to do the same thing, which amounted to $91\frac{7}{8}$ per cent. The best molasses, $73\frac{1}{2}$ of cane sugar. That is the saccharine matter, recollect. Another sample required 12 grains to precipitate the whole of the oxide of copper, which is equal to $66\frac{2}{3}$ of cane sugar. Now, this sample of molasses is the best I ever saw, the very best. It contained $73\frac{1}{2}$ per cent. of cane sugar—that is, of saccharine matter.

Q. Have you had large experience in testing cargoes?

A. I have tested about fifty cargoes, maybe more; but I will state that many. Of course I did not keep an account of them.

Q. From the examination you made, what do you pronounce this to be?

A. Well, commercially—

Q. What is it?

A. I don't know whether I can say commercially at all. I could not call it molasses—I could not. It appears to be a solution of cane sugar principally, containing $8\frac{1}{2}$ parts of grape sugar, with $91\frac{7}{8}$ cane sugar.

Court adjourned.

TUESDAY, December 15th, 1868.

John Gaunt recalled.—Cross-examination.

Mr. Fallon—

Q. Mr. Gaunt, what was the total percentage of saccharine matter in this article?

A. The whole weight of it I did not take; I did not think it to be necessary. What I understood was wanted was to find the amount of cane sugar in this thing.

Q. Have you any memorandum from your analysis there?

A. Yes, sir.

Q. Can you from that memorandum tell us what the total weight of that saccharine matter was?

A. I do not know that I could; I know what the proportion of cane sugar was.

Q. Mr. Gaunt, can you tell us the percentage of weight in the saccharine matter which you analyzed?

A. About 65 per cent., very nearly; very nearly 65 per cent., sir.

Q. Well, then, of that, $91\frac{1}{2}$ was cane sugar?

A. $91\frac{7}{8}$.

Q. I call that $91\frac{1}{2}$; that was cane sugar?

A. Yes, sir.

Q. How much of that was grape sugar?

A. $9\frac{1}{2}\%$ per cent. of the saccharine matter.

Q. Well, sir, you will be good enough to think for a moment, and you will find that is a mistake, for that amounts to more than 100.

A. It would be $8\frac{2}{3}\%$, or $\frac{1}{3}\%$ instead of 9.

Q. That makes about 5 per cent. in rough.

A. 5 per cent. of grape sugar in the whole; just about that.

Q. According to your calculation; and about $60\frac{1}{2}\%$ per cent. of cane sugar. When was this calculation made by you, Mr. Gaunt?

A. I don't know the time.

Q. About what time?

A. I think it was in June; it was about the time the law suit first commenced.

Q. It was in June, was it?

A. I think it was.

Q. I don't know whether you know about the commencement of the suit?

A. I do not know.

Mr. Cuyler—

Q. You say the result was 91 per cent. of cane sugar?

A. Yes, sir.

Q. Are you sure that was all cane sugar? Did you carry your analysis no further?

A. No, sir; I did not think it was necessary.

Q. You stopped on that?

A. Yes, sir; I suppose it contained about 30 or 31 per cent. of water, or thereabouts, in the solutions.

Q. Did you carry your analysis no further than that?

A. No, sir; I thought that was all that was necessary to be understood.

Q. Everthing that was not grape sugar that remained there, you called cane sugar?

A. No, sir.

Q. How, then?

A. I did not call it anything.

Q. It was all either grape sugar or cane sugar?

A. That is the saccharine matter. I did not take into consideration the water, or the gum, or the vegetable albumen, or anything of that kind.

Q. But after expelling these particular things you have mentioned, and having what you would call your saccharine residuum,

you treated the whole as either grape sugar or cane sugar, carrying your analysis no further?

A. No, sir. The cane sugar is ascertained by the difference. I only ascertained the amount of grape sugar; of course, if I found one-half to be grape, the other half would be cane sugar.

Q. In point of truth, is it possible anything else was contained in that mixture as it originally came to your hands—gum, grape sugar, cane sugar, and the vegetable albumen; do they compose all the ingredients of the mixture that came to be analyzed?

A. I suppose, chemically speaking, there might be other things, but not enough to be appreciable; for instance, coloring matter, and I believe a small part of lime, or something of that kind, but not enough to make a difference. There might be twenty or fifty different things, in such small quantities as not to be found.

Q. Have you any knowledge of the samples that were furnished you, as to where they came from; were they drawn off in your presence?

A. I was in the room when they were taken out of one of those jars, I think.

Q. Then the samples you received were not taken directly from the casks?

A. I think they were taken out of the jars; I do not say positively.

Q. Were there any casks in the room where you were?

A. No, sir; there might have been some down stairs. I do not know whether he got it from the jars, or whether he sent down below for it. Mr. Broom gave it to me, at Mr. Blodget's office.

Q. So far as your knowledge goes, they were taken from these jars?

A. So far as my knowledge goes. I did not inquire, because I did not think it would make any difference whether it was from the jars or the casks.

Mr. Valentine—

Q. Who gave you the samples?

A. Mr. Broom.

Q. Mr. George L. Broom?

A. Yes, sir.

George R. Ayres, affirmed.—Direct Examination.

Mr. Valentine—

Q. You are a resident of Philadelphia?

- A. Yes, sir.
 Q. Where did you formerly reside?
 A. In the West Indies.
 Q. How long, sir?
 A. I think a matter of about sixteen years.
 Q. Are you familiar with sugar and molasses, sir?
 A. I was somewhat, so.
 Q. Are you acquainted with the various products of cane and cane syrup?
 A. I formerly was somewhat in the business. I saw a sample supposed to be of this lot.
 Q. Who furnished you samples?
 A. Either Mr. Broom or Mr. Blodget; I think it was Mr. Broom.
 Q. The old gentleman, the elderly gentleman?
 A. Yes, sir.
 Q. Did you examine them, sir?
 A. I did.
 Q. Well, now, from your examination are you able to tell what they are?
 [Defendant's counsel objects.]
 Judge Cadwalader—
 Mr. Broom has been called several times and has not answered; you had better first examine him.

George L. Broom, sworn.—Direct Examination.

- Mr. Valentine—
 Q. What position do you hold?
 A. I am Inspector of Customs, and have been in that position since last August a year.
 Q. Have you any special duty?
 A. My duty is to look after this saccharine matter; this molasses and sugar.
 Q. And you say you have been in that position how long?
 A. A year the 27th of last August.
 Q. Before that, what was your business, Mr. Broom?
 A. Sugar refiner.
 Q. How long were you in business as a sugar refiner?
 A. Twelve years refining sugar, and eighteen years boiling molasses into sugar.
 Q. Making thirty years altogether?
 A. Yes, sir.
 Q. Do you know what molasses is?

- A. Yes, sir; when I see it.
 Q. Did you see this cargo?
 A. Yes, sir.
 Q. All the hogsheads?
 A. Every one of them.
 Q. And examined them?
 A. Yes, sir.
 Q. You examined the contents in the original packages; did you?
 A. All the hogsheads on the wharf.
 Q. What did they contain?
 A. Cane syrup, except eighteen, they contained molasses.
 Q. Did you take samples of those?
 A. Yes, sir.
 Q. Did you furnish Mr. Ayres, who was here a moment ago, with samples?
 A. Yes, sir; the samples furnished by me to him were taken by me out of the hogsheads.
 Q. Did you furnish samples to the witness who preceded him, to Mr. Gaunt?
 A. Yes, sir.
 Q. Where did you obtain those samples?
 A. On the wharf below Almond street.
 Q. I mean, were they fair samples of that cargo?
 A. Yes, sir.
 Q. How many hogsheads were they taken from?
 A. That in the keg was taken from some thirty or forty hogsheads.
 Q. Where were the samples taken from that were furnished to Mr. Gaunt and Mr. Ayres?
 A. They were taken from the same kind as the keg.
 [The keg was brought into Court.]
 Q. Now, you have said this was cane syrup; will you please tell us what molasses is?
 A. Well, there is different kinds of molasses.
 Q. Well, how is it made?
 A. Well, some molasses is made in one way and some in another. Some molasses is made from the centrifugal process; centrifugal molasses is made by the centrifugal process; clayed molasses is made in another process.
 Q. We know that; but tell us how they are made?

Mr. Fallon—

Has he said he was in the West Indies, or that he knew anything about making molasses?

A. Yes, sir; I know about making molasses; and I have been in Cuba.

D Q. Have you seen it manufactured?

A. Yes, sir.

Q. We know it is made by different processes; tell us how Muscovado molasses is made, first?

A. Muscovado molasses is made by boiling sugar, and putting it into hogsheads with holes in the head, and setting it over a large tank to drain.

X Q. By boiling what?

A. Cane sugar—cane syrup.

D Q. Where is that boiled?

A. In different ways; sometimes in vacuum pans, and in a number of other pans that I cannot just think the names of. They are not all just alike, but they act just in the same way.

Q. After the cane is crushed, where does it go?

A. It goes into the vat.

Q. What is done after that?

A. It goes from the vat into the vacuum pan.

Q. What is done in the vat?

A. It is placed in there to pump it out.

Q. Is anything done with it there?

A. Nothing is done with it there but to boil.

Q. Then you put it into the vacuum pan, then you put it into the cooling pan?

A. Some houses do not use a vacuum pan. This vacuum pan is a new operation, and is getting into operation more every day.

Q. Do they all use cooling pans?

A. Yes, sir; they all have to use cooling pans.

Q. What is the condition of that in the cooling pans?

A. It is put in there after it is boiled.

Q. What takes place while it is in the cooling pans?

A. It is left there long enough to get hard; then they have it taken out; before it is taken out it is heated up again.

Q. Then it is put in the hogsheads sometimes?

A. Yes, sir.

Q. Now, Mr. Broom, you have got it into the hogsheads; what takes place then?

A. It is kept there to drain.

Q. What do you call the draining?

A. Muscovado molasses.

Q. What is left? What remains in? Tell us as if we knew nothing about it; tell us in your own way.

A. I will tell you. It drains out of these hogsheads into the vat, and that is called Muscovado molasses. It is then put into hogsheads and sent here.

Q. What is left in the hogsheads is called Muscovado sugar?

A. What is left in the hogsheads is Muscovado sugar.

Q. Tell us another way.

A. When they make clayed sugar, they generally put it in moulds after it is boiled, and it is left to drain.

Q. Where do they take it from to put it into the moulds to drain?

A. Out of the heater, or cooler, as I call it. They take it out of the same place to put it in the hogsheads, as to put it in the moulds.

Q. Tell us how that is fixed.

A. When it is put into the hogshhead it is a thicker substance than when put into the moulds. The drainings of that is the clayed molasses.

Q. Tell us about the centrifugal molasses.

A. The cane syrup is boiled, and put in large coolers for some three days.

Judge Cadwalader—

Do not go so fast.

A. The cane-juice is put into the vacuum pan, out of the pan they boil it in; and after it is boiled, they put it in coaches, as we call them here, and it stands two or three days; then they take the molasses and sugar altogether, and put it into the centrifugal to make the sugar drive the molasses out of it.

Juror—

Q. Describe this machine, this process, if you please.

A. This centrifugal process is a round cylinder, driven by steam, and running a thousand times a minute, and there is some of them washes with jets of water; for they wash to make good sugar, for common they do not. The molasses is rather thin, and is not as good as other kinds of molasses.

Juror—

Q. Describe the principle and construction of that centrifugal machine.

A. Well, I could not well; but it is a round cylinder that is about, I should judge, two foot across, about eighteen inches high, and is lined with copper wire, very fine gauze wire, and is perforated with holes. The substance is thrown into this cylinder, and then it is stirred around.

Mr. Cuyler—

Q. Then the molasses flies off?

A. The liquid flies off, and leaves the sugar inside.

Juror—

Q. You spoke of this being washed. When it gets washed, how is that done?

A. That is done inside the cylinder with a jet of water. It is run enough to clear the sugar. They could make it white, but in doing so they would waste too much of the sugar, and turn it into molasses.

Mr. Brewster—

Q. You have already said, I believe, the amount of molasses made in this process was less than in any other way?

Mr. Cuyler—

Q. He has not said so.

A. It is a poorer quality.

Mr. Brewster—

Q. Did you say less, or poorer?

A. Poorer.

Q. Now, you have had a great deal of experience with molasses. Tell us of crystals forming in molasses?

A. Molasses does not form crystals.

Q. What does it form?

A. Muscovado molasses forms grape sugar, a waxy kind of sugar, that there is no substance or strength in.

Q. How much sugar are you able to get from a gallon of Muscovado molasses?

A. It depends on the quality of the molasses.

Q. Give us the best amount and the average, both.

A. Well, we cannot do that until we go and examine it, and look at it.

Q. Well, the result of your experience?

A. The result of my experience in boiling brown sugar out of molasses, would average $2\frac{1}{2}$ to $3\frac{1}{2}$ lbs.; it is very seldom we ever get a cargo that will bring 4 lbs.

Judge Cadwalader—

Four pounds to how much?

A. To the gallon. It is very seldom we get four pounds out of the gallon.

Mr. Valentine—

Q. Now, then, how about the kind of crystals that are here, that you saw in the hogsheads? State how they differ from Muscovado?

A. These crystals here crystallized like rock-candy; and you cannot crystallize molasses as that is crystallized.

Q. Now, did you see the crystals in this cargo?

A. Yes, sir.

Q. Will you state what size they are, and what they weighed?

A. I got one piece out, and put it in that box, but it has been carried off; it weighed 38 lbs. I saw many others that would weigh 40 lbs.

Q. How did you obtain the specimen that weighed 38 lbs?

A. I examined the hogshead, and took the head out and samples.

Q. Was that all in the one hogshead?

A. These large lumps were all in one mass, and hundreds of small ones the size of my fist.

Q. But the one that weighed 38 lbs., was that all in one mass?

A. That is all in one mass.

Q. You spoke of the amount of sugar that could be made from Muscovado molasses. Can you tell us how much could be made from clayed molasses?

A. Sometimes we get good clayed molasses, but latterly they have got to managing their molasses and sugar, and fixing it for the refiners here, and it produces more than it used to produce; but it is done by priming it with sugar.

Q. I want you to repeat that.

A. I say the molasses has, the last few years, been producing more sugar than it commonly produced. They have a fashion in Cuba of priming it with sugar, of putting sugar into the molasses. That is the way they make \$300,000 or \$400,000 a year out of the operation.

Juror—

Q. For how many years has it been carried on?

A. The last four or five years.

Mr. Cuyler—

Q. You are talking about what you know, Mr. Broom?

A. I am talking of what I know.

Q. Who makes four or five hundred thousand dollars a year out of molasses?

A. I don't.

Mr. Valentine—

Q. What do you mean by the term "liquoring?"

A. In molasses, they put a liquid into it which stands a day or two, and then the molasses is taken up stairs, and mingled with better molasses or sugar. The liquid that drains from that sugar into the molasses, is sugar-house molasses, made out of

the sugar. It is liquored with the best molasses they can find, of the lightest color.

Mr. Fallon—

Q. You are talking of the practice here in Philadelphia?

A. Yes, sir.

Cross-examination.

Mr. Fallon—

Q. Mr. Broom, what do you found your opinion on that this article was syrup, not molasses; why do you say that?

A. Because I never saw no molasses equal to it.

Q. But in what respect; I want to know?

A. Because there is sugar in it.

Q. I believe there is sugar in all molasses; is there not?

A. Very little in common molasses.

Q. Now, just tell me, why you suppose this had too much sugar?

A. Because this is cane syrup, or cane-juice.

Q. I ask you the reason why you consider it cane syrup?

A. Because I boiled it, and got the sugar out of it. That is the reason why I called it cane syrup, or cane-juice, either one you choose.

Q. Because you boiled it and got sugar out of?

A. Yes, sir.

Mr. Brewster—

Q. I want you to tell what you mean by *the* sugar?

A. This sugar here; that sugar in that paper. I boiled it to see what sugar was in it.

X Q. You got what sugar?

A. I got this paper of sugar, here.

Q. Is it because of the quality, or of the amount of sugar?

A. The amount of sugar.

Q. How much did you get from half a gallon?

A. $3\frac{1}{2}$ lbs., and over.

Q. You got $3\frac{1}{2}$ lbs., and over?

A. An ounce over, I think it was; I would not be sure of that.

Q. To the best of your knowledge, you got 3 lbs. 9 oz. from the half gallon. Well, now, Mr. Broom, will you state how you boiled it for the purpose of getting that.

A. I boiled it over a gas jet, in a small tin pan.

Q. An open pan?

A. Yes, sir.

Q. And just boiled it until it was dry?

A. Just boiled it as you would in an open pan in a sugar-house.

Q. And you got 7 lbs. or so to a gallon. Who were present at the time?

A. It was in the Custom House, in Mr. Blodget's office.

Q. Who were present?

A. Mr. Blodget, Mr. Curran and myself.

Q. What else did you get from it; did you weigh the balance besides the sugar?

A. I weighed the sugar.

Q. Was there anything else remaining in the pan?

A. The molasses remained, but that we did not weigh.

Q. How did you separate the molasses from the sugar?

A. I had no convenience to do it, of any kind; I put it in a funnel. If the refiner had had that, he would have made white, crushed, or loaf sugar out of it, if they had had it to be treated as it should be treated in a refinery.

Q. You then allowed the molasses to drain from it?

A. I did.

Q. How much did the molasses weigh?

A. I did not weigh the molasses; we have the molasses here.

Q. Have you any other reason for pronouncing that cane syrup than the fact you got 7 lbs. odd from one gallon?

A. Nothing more than the taste and the looks of it, and the difference between that and molasses.

Q. Well, now, with regard to the taste?

A. You can taste it and tell it is not molasses.

Q. Can you describe any difference? Is there any peculiarity?

A. Yes; this color is a handsome color, and molasses is dark and black.

Q. Well, then, with regard to color, you never saw molasses colored like that?

A. I never saw molasses with the substance that has.

Q. Have you ever seen molasses the same color as that?

A. I have seen molasses as colored as that, but not with the substance. I have seen Porto Rico molasses with not as handsome color as that. You never saw molasses with the handsome color that has; molasses is generally thick and cloudy.

Q. You said something with regard to taste. What is there in the taste that makes you imagine there is any difference from molasses?

A. The taste is different entirely. We will show you, if you

let me, the molasses and the syrup. It is more sweet and pleasant; it has a kind of a queer taste, a cany taste.

Q. How many years since were you in the Island of Cuba, Mr. Broom?

A. I was there in 1848, 1850 and 1852.

Q. How many years since they have commenced to make fortunes by putting sugar into molasses there?

A. Since about 1862.

Q. Well, then, you have not been there since?

A. No.

Q. How do you know anything about what they have been doing there?

A. Nothing more than practical knowledge in looking at it and handling it. I can tell what is in it and what is not.

Q. You mean in handling the article?

A. Yes, sir.

Q. Nobody has told you that? Do you just judge from the article?

A. Yes, sir.

Q. You judge from that this lot has been primed?

A. Yes, sir.

Q. Do you know the value of sugar?

A. Not to-day.

Q. Can you tell us what it was last spring?

A. I know when I come to handle it that there is a great deal of sugar brought here that is not fit to be sold to our merchants and our grocers.

Q. I did not ask you that.

Judge Cadwalader—

Go on.

A. They have a great deal of sugar there, and they do not know what to do with it, so they mix it up in molasses.

Q. All that, you judge from the appearance?

A. I know they do it in Cuba.

Q. Can you tell us the value of sugar there?

A. Some sugar there is valued at two cents, some three and some five.

Q. What would it be worth here?

A. I cannot tell you; I am not in the trade.

Q. Do you think it would be a profitable thing to put sugar in molasses there, and to send it here in the shape of molasses?

A. If it had not been, there would not have been so much done.

Q. Yes, sir; but the question is whether it is done?

Mr. Cuyler—

Q. Mr. Broom, did you draw these samples yourself from the casks?

A. Yes, sir.

Q. From what part of the casks?

A. I assisted; I had two assistants; I could not do it all myself; I had some men to help me.

Q. Who were the men that assisted you?

A. There is a gentleman by the name of Martin.

Q. Who else?

A. Mr. Rhoads.

Q. From what part of the cask were these samples taken?

A. The bungs were knocked out of some of them, as in the usual way, and when we found they contained so much of this crystallization, we had to take the heads out of some of them, to see what was in them.

Q. That does not answer my question. From what part of the cask were these samples taken?

A. When we draw the bungs, they are generally taken from the middle part of the casks; sometimes they are taken all over the casks.

Q. How were these samples taken?

A. These samples were taken out of the heart of the cask until we could not sample, and then we upheaved it, and took as near down to the bottom as we could.

Q. These samples in these jars, were they not taken very generally from the bottom?

A. No, sir; not from the bottom; the floating crystals were all through the molasses.

Q. Where were these particular samples we have here, taken; the molasses samples and the crystal samples?

A. From the centre of the hogheads.

Q. Do you say that of your own knowledge, and know that these were taken from the centre of the hogheads?

A. Yes, sir; in taking these samples we did not skim them off; we took them as I generally sample.

Q. Have you ever been present and seen, so that you speak from your own knowledge, when you say that in the West Indies they put sugar into the molasses after the sugar is made?

A. No, sir.

Q. How did you know that; you stated it as a fact?

A. I stated it as a fact that they put in this garbage sugar they could not do anything with; of late years I have been told this by others.

Q. Then all this testimony is hearsay?

A. No, sir.

Q. Have you ever seen it done?

A. No, sir; never myself, but my own knowledge of molasses shows me it is done.

Judge Cadwalader—

On an examination of the substance?

A. Yes, sir.

X Q. That is done after the molasses is actually prepared?

A. It is done when the molasses is ready to ship?

Q. After the molasses of commerce is prepared to ship, they enrich it by putting in sugar?

A. These men know how it is done, and it is done in different ways. They make arrangements about the molasses, to have it fixed in different ways.

Q. You are talking about what you know?

A. I am talking about what I have been told.

Q. That is not evidence?

A. But I know that by my own experience in examining molasses here.

Q. Well, now, in your experience does any one of those jars contain molasses; is this molasses (showing a sample)?

A. No, sir.

Q. What is it?

A. Cane syrup. That other one in the middle is molasses, sir.

Q. Now, I separate these two, and that one contains molasses. Now, I ask you, if either of these two jars contain molasses?

A. No, sir.

Q. What does it contain?

A. Cane syrup.

Q. Speaking of your own knowledge that you have acquired, and of which you have given us an account, how has that cane syrup been prepared?

A. After the cane has been ground and turned into syrup or turned into liquor, it is then boiled.

Q. Now, pause a moment. The contents of those jars in your judgment have been boiled?

A. Yes, sir.

Q. That you believe?

A. Yes, sir.

Q. And what other process?

A. They have been boiled up to 130 or 132 degrees—enough

to keep it in that liquid state. If that had been boiled up to 138 or 140, and put into hogsheads, they would have to take the staves or the hoops off to get it out. I do not say how much they boiled it, but enough to keep it in that particular state.

Q. Up to 130 or 132 degrees, you suppose it has been boiled. In a vacuum pan?

A. Yes, sir. Then they turned it out into a cooler; and after it has been cooled to a certain extent, they have pumped it into hogsheads. Then after it was in the hogsheads it formed these crystals you see here.

Q. Are the hogsheads to which you allude, and into which you think it has been pumped, the shipment hogsheads in which they came to this port, or the plantation hogsheads?

A. No, sir. I think it was pumped directly and shipped.

Q. You think it was pumped directly from the cooling pan into the hogsheads and shipped?

A. I do.

Q. Now, suppose that instead of being pumped directly into the hogsheads of shipment, it had been pumped into the plantation hogsheads?

A. Then that would never have been pumped into the shipment hogsheads; because that never could have been pumped into the bung holes.

Q. What is the difference of the liquid that drains off of the plantation hogsheads and the liquid that remains in the shipment hogsheads?

A. It is different.

Q. What difference does it make whether the liquid drips through?

A. They would have to boil it a great deal higher.

Q. Is there any difference in the liquid?

A. There is a difference in all the liquid they make.

Q. Is there any difference in the liquor that drips off through the percolator of the hogshead from that in the cask in which the sugar is deposited from standing in the cask?

A. Yes, sir.

Q. What is the difference, and what causes it?

A. The one is a Muscovado molasses.

Q. In other words, the question is this, What difference does it make whether you take the molasses from the sugar, or the sugar from the molasses?

A. I want to answer you in this way, I want to tell you the difference: One will make the solid Muscovado sugar, in the other the sugar is there. You could boil that so that you could

roll it over the room, and walk over it, and then could boil the Muscovado high to get the sugar out of it. If they had boiled that low, and put it into the hogsheads, it would all run out. They differ in this way, that this has been boiled as though you were going to make sugar out of it. When you turn it into sugar, you boil it entirely different.

Juror—

Q. But are the constituents different after it is boiled?

A. I do not understand.

Q. Does it alter the constituent parts to let the molasses or the constituent parts granulate, or not?

A. Muscovado sugar is the granulated.

Q. What is the substance that is found in such quantities in the crystals, sir?

A. That is grape sugar.

Q. What is grape sugar?

A. The substance that forms, and which is not granulated.

Q. That is called grape sugar?

A. Yes, sir.

Juror—

Q. Then these drippings and this cane-juice in the hogsheads are in constituents the same, and will produce the same sugar.

A. No, sir; this will produce better sugar. This is put up to send here, and save \$18 to \$20 the hogshead.

Q. I do not care about the price. Will the drippings from the cane-juice granulate in crystals? Will the drippings from clay sugar granulate?

A. No, sir.

Q. What you got out of clayed molasses, when you were in the business of boiling molasses, would not that granulate?

A. No, sir.

Juror—

Q. Did you not get out of molasses granulated sugar?

A. I would not call it granulated sugar.

Q. Don't you get granulated sugar from molasses?

A. I never call it granulated sugar.

Mr. Cuyler—

Q. That you say on your oath?

A. I never call it granulated sugar.

Q. I did not ask you what you would call it.

Mr. Fallon—

Q. Mr. Broom, is the molasses brought from the West Indies

to this port, sold for any other purposes or uses than those of sugar refiners?

A. Yes, sir.

Q. In other words, have you ever known of the ordinary molasses of domestic use to come from the West Indies direct to any of the refineries here?

A. Yes, sir.

Q. To any extent?

A. Yes, sir.

Q. In other words, taking the molasses that is brought into this port, and that has been for a long series of years past, and going back to the period when you were a sugar refiner, to whom was the molasses, as a general thing, sold?

A. It was consumed here.

Q. Consumed by whom?

A. By the population, by the people generally.

Q. In ordinary domestic use?

A. Yes, sir.

Q. For the manufacture of whisky, and so on?

A. I believe there is a great deal consumed in that way, and in the country.

Q. As a general rule, is not all the molasses brought into this port, and other ports of the country, bought by sugar refiners?

A. No, sir; the grocers buy more than the sugar refiners, I think.

Q. Of the direct importation?

A. Yes, sir.

Q. In the experiment you tried, sir, when you evaporated some of the contents of the cask, did you make any effort to separate the grape from the cane sugar at all, in the residuum you had?

A. No, sir.

Q. In what condition was it after you had carried it through the evaporation process?

A. It was in the condition all sugar is in when you boil it.

Q. And that is a very thick molasses.

A. A very thick substance. It is put into a mould, with a funnel stopped up at the end with a cork, to leave the molasses drain out of it.

Q. Did you put it through that draining process?

A. Yes, sir.

Q. What was your method of draining it?

A. After I boiled it, I put it into this funnel, and let it drain

through my funnel; stopped it up for two days with a block, and then pulled the block out.

Q. In other words, you let it settle and gathered the residue, taking off the liquid on the top.

A. The liquid evaporated through it.

Juror—

Q. Mr. Broom, what consistence would 90 per cent. of saccharine matter be; would it be as thick as molasses?

A. It would be as thick as molasses, I suppose, after it is boiled.

Mr. Cuyler—

Q. Did you exhibit these samples to any experts?

A. I exhibited these samples to Mr. Geo. R. Ayres and Dr. Gent.

Q. Did you take any of that to New York?

A. No, sir.

Q. Did you exhibit that to any New York experts at all?

A. I never exhibited that to anybody there.

Q. Or to any merchants of Philadelphia?

A. I believe not.

Q. Can you be positive with regard to that?

A. Well, I am not certain; but I do not think I did. All the merchants went to the wharf to look at it, without my exhibiting a sample; they felt an interest in it.

Q. And they generally resorted to the wharf and did examine the casks?

A. I do not know that they did, but I think it is likely they did. I do not think I exhibited the sample to any merchant in Philadelphia or New York. They may have seen it at the office, but not through me.

Q. Did you take anybody down to the wharf with yourself?

A. Yes, sir; I took my son down with me.

Q. Who else?

A. Well, I don't know anybody else in particular; but there were generally more or less people there who felt an interest in examining it.

Q. Did you not personally take leading merchants in Philadelphia down to the wharf and exhibit it to them?

A. Well, I don't remember, it has been so long ago.

Q. It is only six months ago; your memory ought to run back six months.

A. I don't think I did, though I might have done it. I will not say so, positively.

Q. Did you take Mr. Audenried down there?

A. I don't know.

Q. Or Mr. Charles Ottens?

A. I don't know the gentleman.

Mr. Fallon—

Q. Mr. Broom, let us understand you before we part. By granulated sugar, do I understand you to mean cane sugar as contradistinguished to grape sugar? You have used the term, "granulated sugar," and said where it could be found and where not. Do I understand you to say cane sugar, as contradistinguished to grape sugar? I want to know what you mean by "granulated sugar?"

A. It is in the box on the table there.

Q. Is nothing else but that granulated sugar?

A. I do not know anything else.

Q. By that term, "granulated sugar," you mean what is in that box on the table?

A. It is crystallized sugar which you cannot pack crystals into.

Q. By granulated sugar, you mean that, and nothing else; that is what you mean by granulated sugar?

A. I mean that. There is nothing there but that, and I mean that.

Q. Is granulated sugar ever in that shape; do you not call that white sugar on the table granulated sugar?

A. I do not mean that is granulated sugar; and I do not mean brown sugar is granulated sugar. That is mere sugar made out of molasses; there are several samples there made out of molasses.

Q. Is that granulated sugar or not?

A. Which one do you mean?

Q. That which is on the plate.

A. I do not call that granulated; I call that just produced out of the syrup. The way we had to handle that, over the gas, in a tin pan, we could not make anything else out of it. With that in a refinery, I think they would have eight pounds out of it.

Q. Or in a boiler refinery where they boil molasses?

A. No, sir; not where they boil molasses.

Q. Does not the relative price of molasses in the market determine as to whether you make more or less of sugar?

A. In the office they could not make it much better than that; in the refinery they can.

Q. You have been a refiner and boiler. When you were a boiler, did not the relative price of molasses in the market, as

compared with sugar, govern you in your manufacture as to whether you would make two or three pounds from a given amount of molasses?

A. In the refinery? We never bought molasses in the refinery.

Q. In your boiling-house, where you made sugar out of molasses?

A. Then we tried to produce all the sugar we could out of molasses; we did not care for the price in the market.

Q. Did you not produce molasses also?

A. Yes, sir. We generally sold it for a less price than we paid for the original molasses; but sometimes the market would change and we would have an opportunity to charge a little more for that molasses, and we would do so.

Juror—

Q. What class of molasses would you call that in the last jar?

A. I did not boil that.

Q. What would you have got of that?

A. We might have got $2\frac{1}{2}$ or probably 3 pounds to the gallon.

Q. What kind? The same as you have there?

A. No, sir; not the same as that. I can show you a sample of what we would get out of it. [The witness showed a sample to the jury.] That is about the color you could have got out of that molasses.

Mr. Fallon—

Q. You have been a boiler and refiner for some thirty years. Now can you, upon your oath, say that from that darkest molasses you could not get white sugar, just as well as you could from any other molasses?

A. Not through the same process.

Q. I do not ask about the process?

A. Not through the process that we generally used at our mills to make sugar.

Q. Could you not get white sugar, or anything you chose?

A. It would not pay to make; these gentlemen could not afford to do it, because it would not pay for the coal they would burn.

Judge Cadwalader—

Q. Could they reasonably do it for commercial purposes?

A. No, sir. I doubt if they could do it at all; and if they could, I doubt whether they could make anything out of it.

Q. From Porto Rico molasses could you not get sugar as light as that in the plate, and profitably?

A. Sometimes I have seen Porto Rico molasses you could not boil at all.

Q. Of a good color and quality?

A. Yes, sir; of a good color and quality you could not turn into sugar, and a gummy substance that would not make a pound to a gallon.

Q. I understand the color of those two samples to be different. I want to know whether those two samples of sugar are not identically the same in character, in crystals?

A. No; the lightest sugar would bring the least price.

Q. I understand that. I want to know whether you can produce from this sample that quality of sugar?

A. No, sir; and if you do, it would produce so little it would not pay.

Juror—

Q. Explain the difference between these two samples of sugar?

A. You must understand there was no chance to try to make this sample of sugar as it should be made. This only goes to show the weight and substance of sugar that is in this cane syrup; it does not show the color, because there was no chance to give it any color. It just stands there in its natural state. If I had had the chance to have taken and liquored that with some light liquor, I would have a sugar that is worth 12 or 15 cents. You must understand, gentlemen, we had not the tools to work that. This is only a trial to show what cane sugar could be produced from molasses.

Juror—

Q. Are they both of cane sugar?

A. No, sir; that sample is grape sugar.

Q. Mr. Broom, do you consider this article that was imported a manufactured article, or raw material?

A. I do not understand.

Q. The material in question in these hogsheads, do you consider it a manufactured article, or a raw material?

A. I think it is a raw material; it is a raw material, and it is just manufactured up to keep it from getting sour and spoiling.

Q. Mr. Broom, this is just to prevent it from getting sour, and then what?

A. From getting sour, and from getting granulated in the hogsheads.

Mr. Cuyler—

Q. I understand, Mr. Broom, that you did not take Mr. Ottens down to the wharf, and do not know him?

A. I might have taken him to the wharf; I do not know the name, and do not think I did. If I could see the man I could tell whether I know him; but by name I do not.

Judge Cadwalader—

Is Mr. Charles Ottens in the Court-room; if so, will he be good enough to come forward?

[A gentleman came forward.]

A. Yes, sir; I know that man. Let me ask him a question. Did I—

Judge Cadwalader—

Q. You have been asked whether you invited this gentleman to see any portion of the cargo; that is the substance of the question, I suppose. Just answer that question?

A. Yes, sir; I asked that man. I had him in the office; but I do not know him by name.

Mr. Cuyler—

Q. Was not this gentleman in your employ?

Mr. Ottens—

A. This gentleman was in my house several times.

Q. Was not this gentleman in your employ?

A. Yes, sir.

Q. Were you not in his house time and again?

A. I have been there a half-dozen times altogether.

Q. How long have you known him?

A. I have known Chas. Ottens for sometime, but have never known his name. We have so many men in our place that I do not know his name. He has been out of my sight some fifteen years, except only occasionally. I doubt very much whether I took that man down to Almond street wharf to look at that cargo of molasses. There was a cargo before this landed from the brig Magee, at Arch street wharf, that I think he went down with me to look at, but I have no recollection of his going with me to Almond street wharf to look at this.

Mr. Cuyler—

Q. But part of that was landed at Arch street wharf. Did you go with him to Arch street wharf?

A. I do not recollect; but I recollect inviting him to the office.

NOTE.—See deposition of Charles Ottens.

Redirect examination.

Mr. Valentine—

Q. Mr. Broom, you spoke about two kinds of sugar that were here. Now cane juice, you say, is manufactured from this particular syrup. Could you produce what you call granulated or crystallized sugar from that; if so, by what process, and in what quantity.

A. If the refiner had had that cane juice, and handled it as they should have handled it, they would get standard white sugar, such as loaf and pulverized.

Q. That is what you call rock-candy, crystallized in that way?

A. No, sir; for crystals we do not make sugar generally loafed. You make rock-candy in crystals.

Q. Could that have been made into rock-candy?

A. Yes, sir; that substance could have been taken out of the hogsheads and put through the process, as they generally know how to handle it at the refinery, and they could turn it into anything in white sugar.

Q. Now, from this syrup how much white sugar by the process of refining, could be produced?

A. It would produce as much as any sugar would produce; there is as much saccharine syrup to produce sugar as in the cane itself, or in any kind of sugar the refiners use.

Q. How much cane-sugar, which makes the white crystallized sugar you have spoken of, would be produced from 3½ lbs.?

A. It would have produced that much white sugar, if it had been handled right.

Q. Now, is that what you mean by granulated sugar—sugar that would make white loaf sugar?

A. Granulated sugar is this syrup; it is not different.

Q. Do you mean by granulated sugar, the sugar when it is refined?

A. No, sir; I mean that crystallized sugar is granulated now.

Q. Which crystallized sugar?

A. That in the box.

Q. That is the granulated sugar.

A. Yes, sir.

Q. And this on the plate is not granulated sugar?

A. No, sir; that is merely sugar.

Q. What would you call that?

A. Common brown sugar.

Q. But out of that common brown sugar you could make white sugar?

A. Yes, sir; I could turn it into standard sugar.

Q. And this syrup, this granulated sugar, if you allowed it to remain could be made into white standard sugar?

A. You could take both, mix them together, separate and make white sugar out of them.

Q. Out of this molasses, taking the other sample of it, you would make sugar?

A. Yes, sir.

Q. Would there be any granulation, such as in that box, or in that jar?

A. No, sir.

Q. That is one difference, then. Now, taking the sugar from that molasses, could you make white loaf-sugar in any quantity?

A. You could fix it and work it out, but you could make such a trivial quantity of white sugar that it would not pay to manufacture it, or for a man to attend to it.

Q. Now, I am going to ask you how the crystals came?

A. I put them in.

Q. Where did you take them from?

A. Out of some fifteen or twenty hogsheads.

Q. And that is the keg you spoke of as containing from thirty or forty hogsheads samples of syrup or molasses?

A. The crystals and syrups mixed together.

Mr. Cuyler—

Q. How many gallons altogether do you think you have taken away from this cargo?

A. Well, I should conclude we had taken about—there is the keg and here are the samples.

Q. You have carried away crystals that weighed thirty-eight or forty pounds, and you have had quantities of molasses for testing.

A. Here they all are; we had three jars besides these; that is all the syrup we have had.

Q. Mr. Broom, how is rock-candy made?

A. I could easily describe it to you; it is made in moulds that hold about five gallons.

Q. Five gallons of what?

A. Syrup; then it is boiled and put in the first place into tin pans holding five gallons; these pans are perforated full of holes, and are thrown backward and forward for the crystals to adhere to them.

Q. And is this liquid prepared that is put into these tin vessels?

A. This liquid is cleared through bone-black, and is made as clear as can be.

Q. What was it before you cleared it through bone-black?

A. It was sugar; for white candy it was white sugar; for yellow or other candy it was a different kind—dark sugar. It was thrown through the pan for the crystals to settle; and then, after it was boiled, it was set in a large kiln and kept for ten or twelve days in this heat without being disturbed, and then it was set on strings half as thick as my wrist, sometimes smaller.

Juror—

Q. Mr. Broom, in your experience as a sugar boiler, did you ever see any raw molasses as rich as the sample of this molasses? Did you ever see Moscovado molasses as rich in sugar as this sample you speak of?

A. No, sir; I never saw anything like it.

George R. Ayres, recalled—Direct examination.

Mr. Valentine—

Q. Mr. Ayres, you said you had examined the articles in question by specimens furnished you by Mr. Broom?

A. Yes, sir.

Q. Now, be good enough to state what it is?

A. I came to the conclusion that it was a syrup of some kind, not what they call molasses.

Q. Now, state why you came to that conclusion?

A. It was because its taste is different, and its color and appearance are different from any molasses I had ever seen, and the crystals in it different from any molasses I had ever seen.

Q. You speak of the crystals of sugar differing from anything you had ever seen. Describe the difference, as to the crystals?

A. Those in molasses are generally soft; these were hard and gritty. I do not pretend to be a refiner or a manufacturer; I formerly imported sugar and molasses, some years ago.

Q. You said that you had been in Cuba; have you seen the process of manufacturing sugar there?

A. Yes, sir; I have, at various times.

Q. Now, please state how sugar is manufactured, and how molasses? What is molasses?

A. It is drippings from sugar.

Q. Well, now, will you explain how it is made?

A. After the cane is pressed through the sugar mill, it is then boiled to a certain point, which I believe sugar men there

call the "sugar point." Then it is put out into coolers, or a kind of vats; there it remains until it is somewhat cooled off; then it is carried out and put either into hogsheads or moulds, and from those hogsheads it is called Muscovado molasses, and from the moulds it is called clayed molasses.

Q. How about what is known as the centrifugal process; what process is that?

A. That is forcing molasses out of sugar by centrifugal motion.

Q. Explain that, if you please?

A. That I am not well versed in.

Cross-examination.

Mr. Cuyler—

Q. You do not know anything about the centrifugal process?

A. No, sir.

Q. You have never seen it?

A. I have seen it, but never paid much attention to it?

Samuel R. Broom, sworn—Direct examination.

Mr. Valentine—

Q. Mr. Broom, what is your business?

A. I am a sugar-boiler.

Q. How long have you been in that business?

A. 15 or 16 years.

Q. Here, in this city?

A. Yes, sir; and in New York.

Q. Have you any knowledge of molasses?

A. I have, sir.

Q. Do you know how to distinguish molasses from cane-syrup?

A. I could distinguish molasses from cane-syrup; yes, sir.

Q. Did you examine this cargo?

A. I did, sir.

Q. What is it?

A. In my opinion it is cane-syrup.

Q. What is molasses?

A. Well, molasses is the drippings of the sugar of the West Indies.

Q. And what is cane-syrup?

A. Cane-syrup is what is expressed from the cane, and no sugar extracted from it.

X Q. The last answer was, cane-syrup was—

A. The juice of cane with no sugar extracted from it.

Mr. Valentine—

Q. I ask you whether you examined all the packages or hogsheads, as they are called?

A. The majority of them.

Q. You saw it in the original packages?

A. Yes, sir.

Q. And you saw it in the specimens which are here produced?

A. Yes, sir.

Q. How does this syrup differ from molasses?

A. In color, in body, and in the granulations—the crystalizings, as it is called.

Q. As to the taste, could you distinguish it?

A. It tasted different from any molasses, prime molasses, such as Porto Rico and Trinidad.

Q. Have you had a large experience in sampling?

A. Yes, sir; I have.

Q. State how large?

A. I have sampled a large amount for Harris, Heyl & Co.

Q. As to the crystals you spoke of; does it differ from molasses in the character of its crystals?

A. Yes, sir.

Q. State how?

A. In the firmness of them, and the quantity of them.

Q. Did you ever see molasses similar to that?

A. No, sir.

Q. Did you see the crystals in the original packages here?

A. I did see the large crystals; I did not see any taken out; I felt the large crystals with the stick I sampled with.

Q. You have seen them since; have you not?

A. Yes, sir; I have seen them since.

Q. Now, have you ever boiled molasses?

A. Yes, sir.

Q. Did you obtain sugar from it?

A. Yes, sir.

Q. State how much sugar could be obtained?

A. $3\frac{1}{2}$ to 4 lbs.

Q. What is the kind of sugar?

A. Good brown sugar, sir, according to the color of the molasses, and the quality of the molasses.

Q. Could you make white sugar from that?

A. We could make white sugar by washing in the centrifugal process.

Q. Any quantity?

- A. We would wash one-half away.
 Q. Could it be profitably washed?
 A. No, sir.
 Q. Did you see the sugar that is here?
 A. Yes, sir.
 Q. How about that, sir; did you see that sugar manufactured?
 A. I did not see it manufactured; but I have seen it since.
 Q. From that, what kind of sugar could be manufactured?
 A. We could manufacture white sugar.
 Q. Take a specimen here; what amount of white sugar could be manufactured from that?
 A. I cannot say what amount can be manufactured out of that, because I am not an experienced refiner; my experience is in molasses.
 Q. What are the relative proportions of grape and cane sugar, in the sugar obtained from molasses?
 A. That is what I cannot say. I find in the bottom of the hogsheads a thick substance we call sugar; some is more and some less thick. It is a sticky substance and is an inferior sugar.
 Q. In that sticky consistency it is different from this?
 A. Yes, sir; very.

Cross-examination.

Mr. Fallon—

- Q. Mr. Broom, where did you ever see cane syrup?
 A. I saw one cargo here, in 1866.
 Q. Imported by whom?
 A. I do not remember who, sir.
 Q. Do you remember the name of the vessel?
 A. I do not, sir; I was called to look at it without any design.
 Q. You say you saw a cargo of cane-juice imported in 1866?
 A. Something just like this (pointing to sample).
 Q. Something like that?
 A. I call that cane-juice.
 Q. That is what you mean?
 A. Yes, sir.
 Q. Have you ever seen cane-juice admitted to be so?
 A. Yes, sir; and that was the once I have seen it.
 Q. And you do not know who imported it, or who was connected with it, or where it came from?
 A. No, sir.
 Q. And that is all you have seen of this article?

- A. Yes, sir.
 Q. What makes you say this is cane-juice?
 A. Because it differs from every other article I have ever seen.
 Q. Why do you give it that name?
 A. My experience tells me no such molasses comes here.
 Q. Why do you give it the particular name of cane syrup?
 A. From the granulation, the crystalizing, and the color.
 Q. Do you know the color, or crystallization of cane syrup; have you ever seen it?
 A. No, sir.
 Q. Do you know what the color of it is?
 A. No, sir.
 Q. Do you know it granulates?
 A. Yes; I know it granulates.
 Q. How do you know?
 A. I have been told it does. I am satisfied what sugar does after it is colored; I know that granulates by itself.
 Q. What sugar?
 A. Raw sugars, after it is colored and passed through the vacuum pan.
 Q. It granulates, of course; it crystallizes?
 A. Yes, sir.
 Q. Does all sugar crystallize?
 A. No, sir. This syrup, in these hogsheads, by itself, as you will see by this sample on the plate, forms sugar of itself, and molasses will not do it.
 Q. That is, you have never seen molasses that crystallized like that?
 A. No, sir.

Redirect Examination.

Mr. Valentine—

- Q. What do you mean by syrup?
 A. I should call that cane-juice?
 Q. How is syrup manufactured?
 A. It is the drippings from refined sugar; that is what we call it. It is the drippings from brown sugar; that is what we call it.
 Q. That is the home manufactured article?
 A. Yes, sir.
 Q. When you speak of this as a syrup, what do you mean?

A. I mean cane-juice; that is what I would call that.

Judge Cadwalader—

Q. That is what you believe to be extracted from the cane?

A. Yes, sir; and from which sugar is to be extracted from.

Q. And you, from your experience, believe yourself capable of determining what has been expressed from the cane?

Q. Yes, sir; having handled a great deal of prime molasses, I am satisfied I can.

Mr. Fallon—

Q. But you never did see cane syrup.

Judge Cadwalader—

That is necessarily unimportant. The question is, whether this is *bona fide* molasses, or something of a saturated kind, in that name produced; or whether, instead of being molasses, it is sugar in disguise.

W. Morris Davis, affirmed—Direct Examination.

Mr. Valentine—

Q. Of what firm are you a member?

A. Davis, McKean & Co.

Q. What business is carried on by that firm?

A. Sugar refining.

Q. How long, in one way or another, Mr. Davis, have you been connected or concerned in that business?

A. Since 1842, with an interval of two years that I was not actively engaged in it.

Q. What do you mean by sugar refining?

A. By sugar refining, I understand, the removing the impurities found in the raw sugars of commerce, and the placing them in the various forms as the market demands, whether it be loaf, crushed, granulated, pulverized, or the lower classes of sugar known as "B" and "C" sugars, or yellow sugar.

Q. Do you know how much sugar can be obtained from a gallon of molasses?

A. No, sir.

Q. Do you know the character of sugar that is obtained from molasses, whether it differs from the sugar you have spoken of, and if it differs, state how?

A. It differs in what we call the strength of sugar. And to explain that, I would say that the sugar obtained by the second process, or the boiling, although in appearance and in crystallization it may be the same, in all chemical properties the same,

by rotation of light in the polarizing instrument the same, and all the tests would show exactly the same constituents as cane-sugar; yet, when brought into the refinery, and reduced to a liquid, we can never obtain from it the hard, loaf, refined sugar. There is a difference in what we call the strong and weak sugars; and we would never purchase a sugar, no matter how bright, if we knew it to be a molasses sugar, and we would never admit it into the refinery, for remelted, it passes into syrup or molasses.

Q. Can you produce a white sugar from it?

A. No, sir; and each additional melting reduces a larger and larger percentage of it into molasses.

Q. Then there is a very marked difference between them. Have you seen any of the syrup in question?

A. Yes, sir.

Q. Did you weigh it, or see it weighed?

A. I tested the specific gravity of it.

Q. What was it?

A. I must refer to my notes; for I never trust to my memory in figures. The specific gravity of the sample that was furnished to me of Manzanillo syrup, 448 hogsheads, at a temperature of 68° was 1.345.

Q. As to the specific gravity, how would that differ from a pure solution of cane-sugar?

A. A pure solution of cane-sugar, known as white liquor, which is simply saturated at the temperature of the sugar-house; its specific gravity is 1.34.

Q. It differs from the other only a very little?

A. 5-1000ths.

Juror—

Q. It differs 5-1000ths?

A. Yes, sir.

Mr. Cuyler—

Q. At sugar-house temperature. Is 68 the ordinary sugar-house temperature?

A. No, sir; I say the saturated solution in sugar-house temperature. But the specific gravity was taken at 68; and I must say that had this remained for a sufficient period of time at 68, no doubt it would have deposited sugar in the form of crystals. I say it is saturated at the temperature of sugar-house, our object in that being to have a liquor that is capable of dissolving no more sugar in such temperature?

Q. What is the temperature of the sugar-house.

A. The temperature of working the white sugar department is about 85; we try to keep it at about 85 or 90.

Mr. Valentine—

Q. Did you manufacture sugar from this?

A. Yes, sir.

Q. What kind of sugar was that?

A. It was a plain yellow sugar, somewhat resembling the sample I see in the plate, somewhat lighter than that in color; decidedly lighter, and a better crystal.

Q. Could you use that sugar for refining purposes?

A. No, sir; we would not admit it into the process of the refinery?

Q. It is not such as you would purchase?

A. No, sir.

Q. By any process could white sugar be manufactured from that?

A. That could be, of course; by the simple application of liquor, that could be made very nearly white.

Q. Explain that process?

A. By the process of liquoring, as I term it. But allow me to say, at this point, I suppose the whole point is to arrive at the signification of terms, and a great deal of confusion arises from not understanding these terms. The crystal of sugar in itself is white. The color found in raw sugar, is generally the molasses or syrups that remain after it is drained. Now, to make sugar white, we, in the sugar-house, resort to what we term "liquoring." To explain this, may I exhibit samples I have brought to show each process, and thus to save a great deal of time?

Mr. Valentine—

Certainly, sir.

(The witnesses exhibited a number of samples.)

A solution of raw sugar, as we purchase it for melting in the blow-up, makes a liquor, as we term the liquor or solution of sugar, of a density of 39° Beaumé, at the boiling temperature; that is our standard. This contains all the impurities found in raw sugar of commerce, mechanical and chemical, and by analysis would agree very nearly with the analysis furnished by Dr. Genth; I was struck with the coincidence. Taking this syrup, which will deposit no sugar, for it is merely a saturated solution of the impure sugars of commerce, our experience teaching that 32° Beaumé is nearly permanent, not subjected to transforming changes, either by fermentation, or crystallization

By filtering through cloth, we remove the mechanical impurity and leave a clear solution. Then by filtering through animal carbon or charred bone we remove the particular chemical

impurities; and then the sugar is pronounced refined, still in a solution, but weighing a trifle lighter than it did before, it contains all the cane-sugar; it contains all the molasses sugar, ordinarily termed grape-sugar, but all the impurities of gum, caramel, and various acids that injure crystallization, have been removed; and it comes from the vat in this condition (showing a sample).

That is the same solution, and it is refined. I beg pardon! That is not quite the same; it is simply illustrative of color. It is a sample of white liquor, containing very little grape sugar; but in color it is illustrative of what we are endeavoring to arrive at. This liquor thus refined is now to be restored to the crystallized form. For that purpose, the excess of water is evaporated in the vacuum-pan. The excess of water holding sugar in solution, is carried off in the vacuum-pan, *in vacuo*, for the purpose of getting rid of the excess of water at a low temperature, a high temperature being very destructive to sugar. That is converting cane sugar into molasses and fluid sugar; therefore we evaporate in the vacuum pan. Crystallization takes place in the vacuum pan, by the skill and art of the boiler, by injecting new liquors into it to crystallize into such sized grains as we wish. We have almost absolute control of the size of the crystals in the vacuum pan, within reasonable limits, from the very fine, white, beautiful grain of French loaf, to almost the size of grains shown here in these samples.

It is frequently discharged from the vacuum pan into what is ordinarily termed the cooler, with us termed the heater, a large vessel surrounded by a steam-jacket; because we evaporate or crystallize at a lower temperature; then we place it in the mould. It is placed in this heater, and stirred with stirrers for about an hour, until brought to a temperature of 180°. We discharge it from the pan at a temperature of about 158° or 162°. It is heated to 180° for the purpose of making it more fluid, so that the crystals may arrange themselves properly in the mould. This mould is a can of sheet iron, with a plug in the bottom to secure the contents until it is properly cooled, congealed or crystallized. As soon as this takes place, it is hoisted to an upper floor, where the temperature is maintained at 85° or 90°. The plug in the bottom is removed, and what we term the green syrup flows from it.

Now, in the ordinary process of the plantation, this is understood as molasses. It is the residuary process of sugar crystallizing, containing other sugar as well. This is the ordinary accepted term in the old usage of manufacturing.

Next comes the process of whitening. This a sugar (showing a sample) obtained from the mould precisely as it comes from the vacuum pan. It is a large, fair grained, but yellow lump sugar. This yellow is increased by the action of heat in the vacuum pan, by the presence of lime in the solution acting upon the molasses and sugar in it, and it comes away more yellow than it goes into the pan. In this form, it would scarcely be a marketable sugar. But the moulds are arranged on the floor, and forty-eight hours after being filled up, they present this form of sugar, dry, the green syrup having drained from it, and being found in the pots beneath. I would say that every crystal within that is purely white, and the color you perceive is owing entirely to the syrup enveloping it, the mother liquor or syrup surrounding each crystal.

Under the old process of claying, they would whiten it by placing upon the top of it masses of clay holding water in suspension—mechanically—to wash this syrup from the crystal, and carry it away with the molasses; but this is destructive. Of course the water dissolves a certain portion of the crystallized sugar, consequently the loaf is somewhat lighter. To obviate this difficulty, we substitute the liquor saturated with sugar, capable of dissolving no more sugar at the temperature of the refinery. We substitute for the old process of claying, the process now known as “liquoring,” which I will now describe. This is a solution that, at the temperature of the sugar-house, is incapable of further solution of sugar. But under a law that runs through the whole of solutions, a solution of one salt is always capable of taking up additional quantities of some other salt, thereby increasing its specific gravity, as a matter of course. When we place this liquid, although saturated with cane sugar, it is still capable of taking up and dissolving the molasses or fluid sugar. So we place it on top of the loaf, as it stands in the mould, without disturbing it, and it slowly finds its way through, and by displacement, carries out this coloring syrup and converts this yellow sugar into this (showing a sample). In this the only loss that we expect in the loaf, is the washing away of the syrup that is in it. If our process is complete, as we believe it to be, we will not lose a particle of cane sugar in the loaf. On the contrary, we have substituted an envelope of pure white solution around the crystal, in the place of the colored syrup, which increases the volume and power of the crystallized sugar, thus leaving the latter pure, white and beautiful.

Judge Cadwalader—

Q. Is there any refuse in obtaining the sugar?

A. That I am coming to. Now, the terms syrup and liquor are technical terms, well understood in the trade—not well understood outside. This solution goes on the top of the loaf white liquor; it comes away at the bottom of the loaf second syrup.

Judge Cadwalader—

Q. What you hold in your left hand is the draining?

A. It is the draining having this color. Now, here is a point I would specially call your attention to. The specific gravity of *that* white liquor was 1.34; the specific gravity of *this* second syrup is 1.355, and yet we suppose that there is not a particle more of cane sugar in that. Its specific gravity is increased, but not by cane sugar; its specific gravity is increased by the grape or molasses sugar that it has washed away. Here is the action of a solution of one salt taking up another, and increasing its specific gravity by it.

Now, to carry this point one step further. This syrup we boil, as a matter of course, because it contains all the fine, clean sugar, that was originally melted in it; this, with the green syrup before mentioned, as equivalent to the molasses of the planter, we boil and obtain a dark sugar. The crystal is finer and is capable of being brought through the same process of liquoring, to a light sugar; this is a sample almost as white, you say, as the other. Such are the fruits of liquoring in refining. Now, although these two sugars at the distance you are placed, perhaps, you can scarcely distinguish a difference, yet this one is what we term strong sugar, and will give us a very large percentage of refining product, and no refiner, in his senses to make loaf sugar out of this, would give you one cent.

[The samples were shown to the jury.]

The difference between these two sugars is, that one is what we would term strong sugar, the other weak; although if these were subjected to an examination of the nicest analysis, the chemist would declare the two sugars identical by the polarizing apparatus—exactly similar by fermentation and the spirituous process; alcohol would give you the same result, and further tests would give the same result; and although he would say there is 100 per cent. of saccharine matter in each, yet the refiner knows there is this distinction, that he cannot make loaf sugar out of this one. Of this he can make white sugar, but it will

never be loaf; it will be porous and soft, very easy of solution, and not so valuable for preserving purposes; pound to pound of that may be required, where three-fourths of this would answer. There are distinctions of sugar in these recognized in the refinery, but yet the chemists have not been able to detect them.

Judge Cadwalader—

Q. Do they not endeavor to compress sugars?

A. They may compress loaf. We could not get it into loaf ordinarily; but we place it in a strong brass vessel, and by strong mechanical pressure we can force it together and compel it to remain.

Juror—

Q. Is that sugar on the plate strong sugar?

A. No, sir; I would pass that as a weak sugar, but to all intents and purposes cane sugar.

Q. Do you think, sir, there has ever been any sugar extracted from this article?

A. Well, I am not exactly clear in my mind with regard to that. After experimenting with it, after boiling and examining it, so far as I could, I finally arrived at this conclusion: that it was a residuum resulting from these improved processes of managing sugar manufactories on the estates.

Mr. Cuyler—

Q. It is a residuum from some of the improved modes of manufacturing?

A. If I were, perhaps, to give a name or take a name for this substance, as far as my mind has gone in it, I would call it an equivalent of this (showing a sample), a second syrup. Thus, after the sugar has been refined on the plantation—now I am speaking of the processes of the plantation, which are identical, so far as they go, in manufacturing, in the manipulation and handling of the sugar—the demand of this country for a refined article has led the planters to the adoption of partial refining processes. On the best ordered estates they now use the liquor as we use it; they use the bone-black as we use it; they use the vacuum-pan as we use it; they place it in moulds or in centrifugal machines, and throw off what we term the green syrup.

Mr. Cuyler—

Q. The result of the centrifugal process is the equivalent of the green syrup?

A. That is the equivalent of green syrup; but it is that which has before in commerce been known as molasses; that is, the residuum from sugar. Now, if I am right in my views with regard to this case, this is the conclusion—after the crystallization of the sugar from the juice—the green syrup has been drained from it by the centrifugal machine—then a liquor made from a light colored cane-juice, evaporated to proper density, is poured upon it, and passing through leaves a clear bright crystal in the machine—as it is liquored, and the residuum of that process seems to me to be this (showing a sample). It is drained from sugar, but it was sugar placed upon sugar; that is, it was a solution of sugar placed upon granular sugar, for the purpose of washing the color.

Mr. Valentine—

Repeat that, if you please.

A. I am reasoning from data before me every day. The sugar is imported from these estates and thrown upon the American market, and cannot possibly be produced without liquor; the molasses has been washed from it. Now, there is not a refiner in the world but if these two samples were presented would by a course of reasoning, or by theoretical knowledge obtained, declare at once that that sugar—of course to the best of his knowledge and belief, under oath—had been liquored, and so with very many clarified articles in the market, which it is known must have been liquored. There are many that have not been liquored; but it is apparent to the refiner what has been liquored and what not. The whole result of this seems to me to show that it was the result of such manufacturing. It seems to me it was a very profitable one; I know very well, with my knowledge of the production of sugar, and I may say my experience in the production of sugar from the cane, is nothing except this: that sugar planters thus engaged are coming to me very frequently to consult with me and advise in regard to processes, because they know in our refineries we have perfected processes which they desire to introduce on their plantations; therefore, my knowledge goes no further than that, and the acquaintance sometimes closes with the matter.

Judge Cadwalader—

Do you know the theory of the centrifugal process; have you ever seen it practically illustrated?

A. It is perfectly simple.

Q. Were the centrifugal process applied to such a product as that, would it coincide with the products you have introduced?

A. My idea is this: that in the form in which this is presented to us, it would never be subjected to the centrifugal; it would be further concentrated, and whatever portion of sugar it had would be removed. But it is evident the cane-juice would be converted into sugar, for it is of course the interest of every one to get the largest result in the form of sugar from his cane-juice; therefore, he evaporates to the furthest point, and will freely purge his syrup. Now, the simple question that comes to me, is in the form of a percentage. If this comes in the form of Muscovado, after paying our duties, it may be worth to-day 11 to 11½ cents, that is, as good refining sugar. If submitted to this sugar refining, it will be worth in the market 13 or 13½ cents.

Judge Cadwalader—

You believe that to be a product of second liquid, in some form?

A. It seems to me to carry in all respects the character of what we would call a second syrup, that is, the liquor has been used to wash the sugar in the centrifugal or mould, I will not say which; the pure sugar or cane solution has been poured on the top of the sugar, for the purpose of washing it, and thereby increasing its value in the American market; and then they have gathered the residuary product and sold it afterwards. If this house had sufficient machinery in it, if it had purging vessels enough and vacuum pans, I say the man who would import that into this market, is a born fool; that is my opinion, as a refiner. But I further think, that if he has a large crop of cane, in excess of his machinery, it may give a profit to him, to grind that down, boil it into syrup, to liquor the rest of the sugar and increase the value of it, and then sell it at a cent or a cent and a half a pound higher, and thus secure to himself a good profit.

(A crystal was shown to witness).

A. This syrup is very rich in sugar. Judging from that alone, it is about equal to what I would suppose very good cane-juice might produce; but I am not willing to take this alone, in forming my judgment in regard to this article.

Juror—

Q. What induced you to believe the brown syrup was a rich one?

A. I did not say that with regard to this sample, I say it alone with regard to the syrup, that I myself boiled and manufactured. It was by the manner in which it crystallized, by the thing that is only understood by sugar refiners, by what we term the "proof of touch," (which can never be conveyed or taught.) It is by these, and the experience of years that I arrive at the conclusion that it was a strong syrup. If *this* syrup was presented to me in *that* form, I would say, I judge this to be strong syrup; I am speaking here for syrup, simply from the sample sent to me. It was a sample sent to me at my own request; not with the view that I would testify here, but simply for my own curiosity. I had no knowledge in the world of its value in the market; its value was determined by syrup boilers. But I was curious on examining the hogsheads, and finding the large crystals so different from what I had known, that I asked for a sample; and I determined by experiment that it was very thoroughly clarified and defecated, and that the sugar contained in it was what we term a weak or molasses sugar. I would call *that* product if presented in the market, a molasses sugar, and I would never have bought it; but the other may be the result of changes which always occur when molasses is in the presence of the air. Evaporation is going on continually; it is constantly being changed from strong to weak sugar, and from weak to molasses sugar.

Juror—

Q. If the crystallized sugar was dissolved in that syrup, as it must originally have been dissolved, whatever the percentage of sugar therein, would there not have been considerably more than there must have been in molasses formed by the centrifugal process?

A. Unquestionably. The sample presented to me was simply a pure liquor, as it was put into the cask. It had no sugar in it; therefore my experiment determined nothing, in regard to what it might have been. As this strong sugar has crystallized out of it, there remains merely a weak sugar. I can hardly tell the result; it would depend on the proportions. I merely judged as to the syrups sent me; as to the percentage of the cask, I cannot tell. I infer that if there had been 15 per cent. of this dissolved in the liquid, that my result would have been very different.

Q. You think this solution was simply your second syrup, or solution?

A. Yes, sir.

Q. I would like to ask, whether second syrup is not a perfectly saturated solution?

A. It is a perfectly saturated solution of pure cane sugar.

Q. Then this article placed in these hogsheads, must have been a perfectly saturated article.

A. It was a perfectly saturated solution of sugar-cane and grape, with such a small percentage of gum, and so on, as determined by chemical analysis.

Juror—

Q. That is, your second syrup and this are equal in strength, without considering the strength of the crystals?

A. With a single exception: excepting color. This contains simply the molasses sugar and the coloring matter; but that contains, in addition, various products that are left from the cane, other than sugar. No doubt at all, there is the presence of lime there, though there is not in this, and many impurities. But I would say, that in the process of manufacture, it was analogous to this.

Q. In any process of manufacturing in Cuba, would they be apt to make such a superabundance of sugar?

A. I think not intentionally.

Juror—

Q. This article placed in these casks must have been a perfectly saturated solution, or it could not have crystallized.

A. Yes, sir.

Q. Therefore, the solution must have been perfectly saturated at the time.

A. Allow me to correct you. The question of solution of sugar, is entirely a question of temperature. When I speak of a saturated solution of sugar, it is at 68°. If the temperature falls to 50, there will be a portion of the sugar deposited, because it is saturated with less sugar. If you increase it to a temperature of 135, you have got to the point of temperature we call the "striking point," which is perfectly clear; but allowed to granulate, it becomes solid loaf. The point of saturation is dependent entirely upon temperature. Melado, the old fashioned melado, which is concentrated cane-juice, came to us in the hogsheads in which it was placed. Those hogsheads would be three-fourths, four-fifths, sometimes nearly full of granulated sugar. It was ordinarily shipped in the pure form, but it was allowed to cool. The whole question of solution is one of temperature. If placed in a cask at 135, 150 or 180,

and cooled to a certain point, it will deposit always its exact equivalent of sugar; so much percentage of sugar for every degree that the solution falls.

Juror—

Q. What would be the particular temperature of cane syrup made on the plantation?

A. Cane-syrup is made at a lower temperature; but I have no doubt it would be made in that form, because it is ordinarily liable to change in a hot climate, with a little evaporation to allow for the variation of climate. You must recollect that in all this testimony I am not testifying as to what I see before me. Your questions are all pointing to this. My experiments have all been made on syrup sent to me in which there were no crystals; and what I see here I know nothing about. If my opinion is asked: if that had been heated to a higher point than this temperature, the water would have evaporated and the sugar would remain.

Juror—

Q. Is it customary to evaporate molasses to that point?

A. It is not customary, and the provisions in the tariff laws, in regard to the concentration of molasses were merely a protection, as an incidental guard against excess in richness. Melado was first introduced as a fraud upon the revenue. Cane-juice was concentrated to a high point and introduced when there was no tariff on molasses, and a cent or so on sugar. A western house imported large quantities and made a fortune; then the Government took the alarm, and a tax was put upon melado. It was believed possible that if molasses paid $\frac{1}{2}$ cents on a pound, or 8 cents a gallon, it might be possible to reduce that to 100 lbs. of solution and throw in 150 lbs. of syrup. I never saw concentrated molasses; but it is possible to produce it, under a temptation to avoid the duty.

Mr. Valentine—

Q. Mr. Davis, be good enough to give us again the definition of molasses.

A. It is the draining from sugar.

Juror—

Q. Could any such drainage contain a percentage of sugar equivalent to the amount of syrup itself and the crystals, after evaporation?

A. I should say, of course, from experience, that it could not by any possibility. I am speaking here simply of what I see before me.

Mr. Valentine—

Q. Mr. Davis, from seeing this article incidentally, you say that the solution you speak of in the hogsheads was fully saturated with sugar, at the time that it was put in?

A. I should judge so, from the form of the crystals, it must have been a slow crystallization.

Q. You have seen the crystals here. Would molasses contain such crystals as those?

A. I am not enough acquainted with molasses, to answer that. With my ideas of molasses, I would not conceive it possible.

Q. From whom, Mr. Davis, did you get the sample you used for your test?

A. I requested a sample from Mr. Field, and received it in a package by a clerk that, I suppose, was a messenger from Field & Keehmle.

Cross-examination.

Mr. Fallon—

Q. Mr. Davis, you have used the word molasses, as I understand it, at various times in your testimony as synonymous with grape sugar, have you not, sir. You have used the term "molasses sugar."

A. Yes, sir. Molasses sugar is an indefinite term.

Q. How many cargoes of foreign molasses have you ever examined?

A. I never examined a cargo, never examined a specimen other than this West India molasses; that I acknowledged to his Honor, the Judge, when I was appointed an Appraiser. Of its value in the market, I know nothing.

Q. You have given us a very intelligent and interesting description of the manufacture of refined sugar. Your knowledge of refined molasses is generally derived from your knowledge of that subject, and your theoretical reasoning as to what it should be. Have you any practical knowledge as to foreign molasses?

A. No, sir.

Q. This importation of molasses interferes with your business in this, especially, of hard-sugar refining; does it not, sir?

A. I think not.

Q. Have you had any part or interest in the legislation that has been had on the subject of which you have given us a history?

A. I believe I framed the law pertaining to sugar. With regard to molasses and syrups, I had nothing to do with it.

Q. You say frauds were committed on the revenue by the introduction of melado?

A. Yes, sir.

Q. That is the same thing that the French call "*sirop de battrie*?"

A. No, sir.

Q. Is it a different article?

A. It is different in point of concentration. For that purpose it is concentrated higher, because it simply remains in the hogshead in the form of molasses; in the other case, it was sent to the refiner here.

Q. But I mean melado, as it is?

A. Yes, sir.

Q. It is that which we know by that name?

A. Yes, sir.

Juror—

Q. Mr. Davis, you have said that this article, in your opinion, was the residuum from some improved method of manufacturing on the plantation. Can you give us your opinion as to what would designate this article here?

A. I would suppose, under the present Tariff Act, it would be denominated molasses.

Q. You say you have framed these laws?

A. With reference to sugar; with molasses I have not.

Mr. Fallon—

Q. You have spoken as to the color. What would be the effect of using sulphurous gas in the process of manufacturing sugar by the centrifugal process?

A. Sulphurous gas always makes the syrup very much lighter in color.

Q. What would be the effect if the centrifugal were not formed perfectly, if they are not in very good order and used roughly; would it not be to make a larger quantum of molasses and a less quantum of sugar.

A. If there were holes in it, it would throw out more sugar.

John Haviland, sworn—Direct Examination.

Q. Mr. Haviland, in what employment are you, or in what business?

A. I am a Custom House laborer.

Q. Did you see the cargo of the brig Lilla, these hogsheads spoken of?

A. I did not.

- Q. Did you not assist in sampling these?
 A. No, sir.
 Q. You have seen the samples?
 A. Yes, sir.
 Q. Who showed them to you?
 A. Mr. Broom.
 Q. You had the custody of them in charge?
 A. I had at that time.

Plaintiff's Counsel offers in evidence, Ure's Dictionary of Art, 2d vol. Edition 1865. Title Sugar, page 767. Also, same. Title, Molasses. Also same, title Syrup, p. 804.

Surrey's History of Sugar and Sugar-yielding Plants.

Edwards' West Indies, 2d vol., page 221. Also, pages 230-233.

Annual Statement of Trade of Great Britain, 1865, with Statements from 1861-1865.

Evidence for Plaintiff closes.

CASE FOR CLAIMANTS.

Mr. John Fallon opened for the defence. He said that testimony would be offered to show how the molasses which the revenue officers had seized as sugar cane-juice, had been produced, how and by whom it had been sold at this port some days before the first step had been taken for its seizure, what it had been sold for and under what name, and that it had not brought by sample as much by fifteen cents in the gallon, as the first quality Muscovado molasses was bringing in this market. Mr. Fallon said that they would call merchants, sugar-makers, and lastly, revenue officers, from the ports of New York and Baltimore, to show that the article is just what it was imported and sold for.

Depositions of witnesses produced—

Defendants' Counsel offers in evidence, and reads deposition of Captain Day, of the Brig Lilla.

In the District Court of the United States in and for the Eastern District of Pennsylvania.

THE UNITED STATES

vs.

448 Hhds. and 33 Tierces Cane Juice, &c., imported in brig Lilla.

Sworn and examined on behalf of claimants, before W. Grier Hibler, United States Commissioner, at his office, No. 435 Library street, Philadelphia, under a rule to take testimony of going witnesses at forty-eight hour's notice, on July 27th, 1868, at 11 o'clock, A. M., with notice to the counsel of record of the opposite party, a copy of which is annexed, marked Exhibit "C," W. G. H. Mr. Fallon, for respondents, appears with witnesses, and the case is continued till 1 o'clock, P. M., and at 1 o'clock, P. M., Mr. Fallon appears, and the case is continued till Wednesday, July 29th, at 10 o'clock, A. M.

July 29th, 1868.

Present, Mr. Fallon, with witness.

JAMES E. DAY being sworn, says that, I am captain of brig "Lilla," from Boston. Have been captain of her seven years. Last March, I was at Manzanillo de Cuba; on 13th of March, 1868, I made a charter party with Venecia, Rodriguez & Co., for taking sugar and molasses to Philadelphia. This is the original charter party, signed in triplicate, marked "A," W. G. H. After we commenced loading with molasses, the charterers changed their minds, and loaded her entirely with molasses. I brought no sugar. This is one of the original bills of lading for whole cargo. [Exhibit "B," W. G. H., shown witness.] I was paid my freight according to this bill of lading.

Venecia, Rodriguez & Co. have a sugar estate called Esperanza, near Manzanillo. The greater part of this molasses, all but about 24 hogsheads, came from there. While I was there at the estate they were manufacturing molasses and sugar—the very molasses forming my cargo. It was run down to Manzanillo, and shipped as fast as made. I was out at the estate, and saw the manufacture. They were making sugar at the same time as they were making molasses. This concern have a dome, which was called a vacuum; the molasses was led from that by a pipe. They have at the side of this a glass tube, and when the molasses is at the right stage, the molasses is run into the concerns called centrifugals, inside of which is an affair like an old-fashioned coffee-mill, and the molasses weeps from that down into vats, and it is filled right out of them into hogsheads. I think they had six centrifugals, but I won't say positively. They were working very fast, night and day, and Sunday, without stopping a moment. Their storehouse was full of sugar. When the cane-juice first comes from the rollers, it looks like milk and water; then it passes through a trough into the kettles, from which it passes from one to the other. By the time it got to the third one, it had changed its color. From the third kettle, it passed into the vacuum pan, as it is called. I did not hear anything about sulphurous gas; I know nothing about that. I was on the estate three times. They also made some clayed sugar on the estate, but I did not take any of that. All the molasses that I took was from the centrifugals, except 24 hogsheads, which came from other estates. At the same time the molasses is dripping out of the centrifugals, they stop the

machines, and take top off, and take out the sugar, from time to time.

The centrifugals are some three or four feet in diameter.

JAMES E. DAY.

Sworn and subscribed before me, this 29th day of July, A. D. 1868.

W. GRIER HIBLER,
U. S. Commissioner.

EXHIBIT A.

It has been this day mutually agreed between Captain Day, master and agent, for owners of the brig Lilla, of Boston, of the burthen of 244 tons, or thereabouts, register measurement, now lying at the port Manzanillo de Cuba, on the first part, and Venecia Rodriguez & Co., on the second part, the following terms for a voyage from Manzanillo to Philadelphia.

The vessel being in every way fitted for such a voyage, shall receive on board a full and complete cargo of sugar and molasses, under and on deck, charterers to pay for the use of said vessel during the voyage aforesaid, fifty-five cents (55c.) per 100 lbs. of sugar, net delivered, five dollars (\$5), for every 110 gallons molasses under deck, delivered, and four dollars (\$4), for every 110 gallons molasses on deck, delivered; all in United States currency; freight to be paid on discharge of cargo at the port of discharge, and vessel to pay her port charges at Manzanillo. The lay days for loading at Manzanillo shall be (if not sooner dispatched), twenty-five running days, and usual dispatch in discharging at the port of discharge. Lay days to commence on the 14th inst., and loading and unloading according to custom of the respective ports.

Advances to be made by charterers at Manzanillo for ships ordinary disbursements against freight, free of commission, and subject to insurance and interest only.

Demurrage shall be paid at the rate of twenty-five gold dollars per day for every one detained by the charterers beyond the 25 running days above stipulated. Made and signed in triplicate at Manzanillo de Cuba, this 13th day of March, 1868.

JAMES E. DAY,
VENECIA RODRIGUEZ & Co.

EXHIBIT B.

Shipped, in good order and condition, by Venecia Rodriguez & Co., of Manzanillo de Cuba, on board the good brig Lilla, whereof James E. Day is master, for this present voyage, now lying in the port of Manzanillo and bound for Philadelphia, to say V. R. & Co. (448) four hundred and forty-eight hogsheads, (33) thirty-three tierces of molasses, being marked and numbered as in the margin, and are to be delivered in like good order and condition at the aforesaid port of Philadelphia (the danger of the seas and fire only excepted), unto Messrs. Madeira & Cabada, or to assignees, he or they paying freight for the said goods, as per charter party; without primage, and average accustomed.

In witness whereof, the master of the said vessel hath affirmed to five bills of lading, all of this tenor and date; one of which being accomplished, the others to stand void.

Dated at Manzanillo, the 31st day of March, 1868.

JAMES E. DAY.

EXHIBIT C.

THE UNITED STATES, &c.,

vs.

448 hogsheads, &c., alleged to contain Syrups of Sugar.

CHARLES GILPIN, Esq.,

United States District Attorney.

DEAR SIR:—Please take notice of a rule entered in above case, to take the depositions of witnesses, for claimants on 48 hours' notice, and that under it depositions will be taken on Monday, July 27th, at 11 A. M., before Commissioner Aubrey H. Smith, Fifth street.

Yours, respectfully,

JOHN FALLON,

For Claimants, &c.

July 21st, 1868.

Coddington C. Clunet, being duly sworn, says, That on Tuesday 21st day of July, 1868, he left a notice of which the foregoing is a copy at the office of District Attorney Charles Gilpin, Esq., between 9 and 10 o'clock, and that on Monday the 27th day of July, he called again at the same office, and Mr. Gilpin being absent, requested the young man in attendance there to inform Mr. Gilpin that Mr. Smith was out of town, and that the depositions would be taken before Commissioner Hibler.

C. C. CLUNET.

Sworn and subscribed before me, this 29th day of July, 1868.

W. G. HIBLER,

Commissioner.

Graham Calvert, being duly sworn, says, that on Monday, the 27th day of July, 1868, about one-quarter past eleven, A. M., Mr. Hollingsworth called at the office of John Fallon, and stated that he had been to the office of A. H. Smith, but did not find any one there to take the depositions referred to in within notice; whereupon deponent informed Mr. Hollingsworth that A. H. Smith had gone out of town that morning, and that the depositions would be taken before Mr. Commissioner Hibler, at his office; that the witnesses were then at Mr. Hibler's office.

GRAHAM CALVERT.

Sworn and subscribed before me, this 29th day of July, 1868.

W. G. HIBLER.

Commissioner.

UNITED STATES

vs.

448 Hhds. and 33 Tierces, Cane-juice, &c.
July 27th, 1868.

D. C. U. S.

No. 189.

1868.

1½ P. M.

CHARLES GILPIN, Esq.

DEAR SIR:—At 11 o'clock this morning, I attended before Mr. Commissioner Hibler, acting in the absence of Mr. Commissioner A. H. Smith, before whom you had notice that depositions of witnesses would be taken under the rule granted in the above case. At the same time, 11 this morning, Mr. Hollingsworth, apparently not aware of the change of Commissioner and the absence of Mr. Smith, attended at the office of Mr. Smith, as your representative. He was then informed that

we were going on before Mr. Hibler. No one appearing for the United States before Mr. Hibler at 11 this morning, the examination of witnesses was postponed to one o'clock, when the witnesses and parties were again in attendance, and now, 1½ o'clock, you and Mr. Hollingsworth being in your own office disengaged, and refusing to attend before Mr. Hibler, on the ground that the original notice stated the testimony would be taken by Mr. Smith; though, under the circumstances, I think we are entitled to go on without further notice. The examination of the witness has been again postponed to Wednesday morning, the 29th inst., at ten o'clock, before Commissioner Hibler, at the office of the Clerk of the U. S. District Court, when and where you may attend, if you think proper.

Respectfully yours,

JOHN FALLON,

For Madeira & Cabada.

Coddington C. Clunet, being sworn, says, that he left the original notice, of which the foregoing is a copy, at the office of Mr. Gilpin, District Attorney, with a gentlemen in attendance there, on Monday, 27th July, 1868, about one-quarter before two P. M.

C. C. CLUNET.

Sworn and subscribed before me, this 29th day of July, 1868.

W. G. HIBLER,
U. S. Commissioner.

John Fallon, being duly sworn, deposes and says, that on Monday, 27th, Captain Day, the witness intended to be examined, was in attendance at Mr. Hibler's office, at or shortly after 11 o'clock, and remained there with deponent, for a quarter of an hour or twenty minutes after. Mr. Hollingsworth had been informed that the witness and parties were there in attendance, as stated in the annexed affidavit by Mr. Calvert; the examination was then adjourned to 10 o'clock, when, after waiting about one-quarter of an hour, deponent went to the office of the District Attorney, and then saw both Mr. Gilpin and Mr. Hollingsworth; at about quarter after one o'clock, he then informed Mr. Gilpin that the witness was in attendance, and requested him to go to Mr. Hibler's office, or send some one to represent him; this he de-

clined to do, stating he was not bound to do so, because the notice to him named Commissioner Smith, and not Hibler, as the Commissioner before whom the examination was to be had, and stating no other reason or objection.

JOHN FALLON,

Sworn and subscribed before me, this 29th of July, 1868.

W. G. HIBLER.

Deposition of Manuel Fortich.

In the District Court of the United States in and for the Eastern District of Pennsylvania.

THE UNITED STATES

vs.

448 Hogsheads, &c., Cargo of Brig Lilla.

Deposition of witness on behalf of claimants, taken through a duly sworn interpreter, before W. G. Hibler, U. S. Commissioner, pursuant to adjournment.

September 24th, 1868.

Present, Fallon, for claimants; Blodget, for United States.

Manuel Fortich, being duly sworn and examined through Mr. John Merino, an interpreter, deposes and says:

I am in the employ of Venecia, Rodriguez & Co., of Manzanillo de Cuba.

Mr. Blodget objects to the admissibility of the testimony of this witness.

Mr. Fallon desired to have the grounds of objection stated.

I have been in their employ about ten years. I reside in Manzanillo de Cuba. I am about to return there shortly. The principal business of Venecia, Rodriguez & Co., is the making of sugar and molasses. Their principal plantation is called Esperanza. The distance of this estate is about two miles from Manzanillo. From February to June of the present year, I resided on the estate. I had charge of the embarkation of the sugar and molasses.

Q. By what process is sugar made on that estate, and more especially describe the process by which it was made last spring, while you were on the estate?

A. By the vacuum pan and by centrifugals. Four centrifugals. I recollect the brig Lilla having been loaded last spring. It was loaded principally from that estate. I superintended the loading of the vessel.

Q. What character of *miel* was loaded on that vessel?

A. *Miel* proceeding from the manufacture of sugar.

Q. Did you see it made?

A. Yes. I was present, and saw it made and superintended the loading.

Q. Was it made by the process you have described?

A. Yes; it was made by the process I have described.

Q. Do they treat the cane-juice with water in the process?

A. Yes, in the centrifugals, but not in the vacuum pans.

Q. What became of the sugar that was made at the same time with the molasses loaded in the Lilla?

A. I can't recollect.

Q. The word *miel* covers all liquids proceeding from the sugar cane, does it not?

A. That is so.

Q. What is the meaning of the words, "*miel de descarga*?"

A. The *miel* that comes from the sugar while making.

Q. Was there any other *miel* than the *miel de descarga*, made on the estate last spring?

A. No, no other.

Q. Do you ever make any other upon that estate, and if so, for what purposes and to what extent?

A. There is some very small quantities made for consumption upon the place; but they are not made upon this, but other

plantations, for home consumption. On the Esperanza, we never made anything else but the *miel de descarga*.

Q. How many hogsheads of sugar, and how many of molasses were made upon that estate last season?

A. About 3,000 altogether, and near about an equal number of each.

Q. What proportion of the cargo of the Lilla came from that estate? How many hogsheads?

A. Almost the whole.

Q. Can you name how many came from other sources?

A. I can't recollect.

Cross-examined by Mr. Blodget.

Q. Do you direct the work of the manufacture of sugar on this estate?

A. No.

Q. Did you witness the filling the hogsheads from the vats, pans, coolers, or other receptacles, with your own eyes?

A. I was present, inasmuch as I had charge of sending it forward. I refer to the cargo of the Lilla. I saw the hogsheads filled myself.

Q. Did you see them filled from the tanks?

A. Yes, sir.

Q. Were they filled by dipping from the coolers?

A. It was taken out with a pump and hose.

Q. Are all the hogsheads filled with the produce of the Esperanza estate marked Esperanza?

A. Some are not marked Esperanza.

Q. Do Venecia, Rodriguez & Co. ship the products of other estates than the Esperanza?

A. Very little.

Q. What is the local name of the cane syrups as made for consumption upon the estates?

A. *Miel*.

Q. Is this or any other form of cane syrups exported to England or the United States?

[Objected to, unless the interpreter is requested to inform the witness that the word *syrup* is used to mean that from which no sugar is taken; and he is instructed accordingly.]

A. There is none shipped but what is the residuum of sugar. All the *miel* that is shipped is the product of sugar.

Q. What is the difference between *miel de purga* and *miel de descarga*?

A. Very little; the process alone by which the sugar is made.

Q. Do you consider yourself a skilled person in the manufacture of sugar?

A. No, sir. They have persons entrusted with that on the plantations.

Q. Is all the cane-juice boiled in vacuum pans on the Esperanza estate?

A. All the juice on the Esperanza estate passes through the vacuum pan.

Q. Is all the sugar made by Venecia, Rodriguez & Co., made by the centrifugals?

A. Most all; some not, because there is not sufficient capacity.

Q. How is the other made?

A. When sugar acquires a certain consistency, it is allowed to cool, then put into hogsheads with holes in the bottom, from which the molasses purges or trickles and leaves the sugar.

Q. What is the local name of the molasses from the centrifugals?

A. *Miel de descarga*.

Q. Does the same name apply to that that draws through the hogsheads?

A. The same name is given or applies.

Q. How many cargoes did you ship for Venecia, Rodriguez & Co., since January, 1868?

A. I don't recollect exactly, but think three or four. I recollect having assisted at three or four.

Q. Where did you ship the sugar?

A. I don't know; that was not my business.

Q. Please state again how much sugar you shipped from the estate?

A. I don't recollect how much of it I shipped.

Re-examination resumed.

Q. What is the meaning of the words, "*miel de caña*?" What does it apply to?

A. The liquid product of the cane. It includes all liquid products of the cane.

Q. What particular process is that from which *miel de purga* results? If you know the English term applied to the sugar, let us have it.

A. I do not know the English term; but *miel de purga* is the

same as *miel de descarga*. It is particularly applied to the old way of making sugar.

Q. *Miel de descarga* I understand to be a more general term, comprehending the *miel* residuum from the manufacture of sugar by all the various processes? Am I right?

A. It includes all the *miel* proceeds from the sugar by all the processes of manufacture.

Recross-examination.

Q. Is there such an article as *melado* or *meladura* known in Manzanillo, in the trade of Manzanillo?

A. No; we do not know such an article in the commerce of the south side of the island. When the juice is in process of manufacture in the boilers, sugar makers call it *meladura*.

Q. You mean by this, when it is brought from the vacuum pans and put in the coolers?

A. No; I don't mean that, but before that, when it commences to change color in the vacuum pans. It is then called *meladura*.

Q. Do you mean to clarify and become clear?

A. I mean when the juice begins to clear, and takes a lighter color; then it is that the manufacturer calls it *meladura*.

M. FORTICH.

Sworn to and subscribed before me this 24th day of September, 1868.

W. GRIER HIBLER.
U. S. Commissioner.

Wednesday, December 16th, 1868.

ISAAC PHILLIPS sworn, by uplifted hand.

Direct Examination.

Mr. Fallon—

Q. What is your business?

A. I am one of the appraising officers of the port of New York.

Q. How long have you been in that business?

A. Twenty years or more.

Q. Is it part of your duty, sir, to examine and pass cargoes of molasses?

Judge Cadwalader—

The Act of Congress states that?

A. Yes, sir.

Q. I need scarcely ask you if you are well acquainted with the article molasses, and able to judge of it?

A. Yes, sir.

Q. Have you been consulted in this case by Mr. Blodget, of Philadelphia?

Judge Cadwalader—

The question is, what are the facts.

Q. Were samples taken, or sent to you, of the cargo of the Lilla, by Mr. Blodget?

A. Yes, sir; I had some samples sent to me; I think they were from Mr. Blodget, if my recollection is right, and they represented the cargo of the Lilla.

Q. The samples, I believe, are in Court. Well, sir, did you examine those samples, and with what result?

A. I examined those samples.

Q. Just state to the Jury what the article is; what you would consider it?

A. I examined the samples, and came to the conclusion that they must be classified as molasses.

Q. About what time was this, sir?

A. Sometime last spring.

Q. Are those the samples? (Samples were shown to witness.)

A. Yes, sir; I think they are.

Q. Now, Mr. Phillips, I want your attention to the fact, that two of these bottles have no sediment in them, and the other has. Can you state from recollection, whether, as regards the sediment, it was in that condition when you received it, or when you first saw it?

A. I think there is rather more sediment than there was when I saw it last.

Q. But there was some then?

A. Yes, sir; there was some then.

Mr. Cuyler—

Q. Mr. Phillips, you have been for twenty years an officer of Customs in New York?

A. Yes, sir.

Q. Continually?

A. Yes, sir.

Q. State whether there has been any difficulty in passing that article in New York?

Judge Cadwalader—

The question is, what the article is. We ought not to administer the Revenue Laws according to the judgment of the Revenue Officers.

Juror—

Q. Have you any doubt of what this is, under the law?

A. I have not.

Q. What is it?

A. It is molasses.

Judge Caldwell—

Q. It is the residuum of what has gone through a process of crystallization. Do I state your words I have taken down, rightly—it is a residuum of what has undergone a process of crystallization. Is that right?

A. A process of granulation.

Q. Mr. Phillips, have you seen this article, so far as your senses can pronounce, or articles precisely such as this, passing through the New York Custom House?

A. I have seen, I cannot say precisely, I have seen similar, generally.

Q. In all respects, apparently similar?

A. Apparently so.

Q. To what extent has that been the case; large quantities, or small?

A. Moderate quantities, not large quantities.

Q. What was it passed as; what was it regarded as being; as what did it pass through the Custom House?

A. It passed through the Custom House as molasses.

Q. For what did it pay duty, as what article?

A. As molasses.

Q. Did Mr. Blodget consult or confer with you?

A. Not personally, that I remember.

Q. Did he by letter. (The question was withdrawn, at the suggestion of the Court).

Cross-examination.

Mr. Crawford—

Q. Mr. Phillips, you have had twenty years' experience, you say, of molasses in New York?

A. Yes, sir.

Q. In what connection?

A. In appraising hogsheads of molasses.

Q. In any other mode?

A. Not in any other mode.

Q. All that you know, then, has been the samples from the kegs which you have inspected?

A. Yes, sir.

Q. You have never seen molasses or sugar raised?

A. No, sir.

Q. You have never been in Louisiana or Cuba?

A. No, sir.

Q. You know nothing of the article, except as you have examined it as an appraiser?

A. No, sir.

Q. Have you ever seen cane-juice, or syrup of cane, or cane-sugar; or has your experience been confined to what you have seen imported in New York as molasses and sugar?

A. It has been of those particular articles altogether; I have seen melado; I have never seen cane-juice.

Q. You have seen melado?

A. Yes, sir.

Q. How often?

A. Hundreds of times.

Q. As an article of importation?

A. Yes, sir.

Q. Within how many years past, for the first time?

A. Well, 8 or 10 years, I think.

Q. How did you distinguish melado from molasses?

A. I don't know how to answer that question, excepting it is a very different article.

Q. I want to know in what respect it appears to you to differ.

A. It is a thick substance, and has a great deal of sugar in it, with a flavor and taste peculiar to itself.

Q. You say it is thicker?

A. Yes, sir.

Q. Is there a sediment?

A. Not much, and often more.

Q. It is full of sugar?

A. Yes, sir.

Q. In what form?

A. Granulated substance.

Q. Do you mean in crystallized lumps, or rather in small granulations?

A. Generally all through.

Q. In small granulations?

A. Small granulations, and sometimes large.

Q. In large crystals?

A. I have seen such.

Q. To what extent in weight and amount, as compared with the whole mass. In the melado is it agglomerated together in masses?

A. The fluid surrounded the solid.

Q. This is in what proportion of the whole mass?

A. I have seen lumps, and chunks, and considerable pieces.

Q. And that distinguishes it from molasses; does it?

A. There are other things, too.

Q. But that agglomeration of large quantities of sugar, in your mind, distinguishes this from molasses?

Defendant's counsel objects.

Q. What did you say it was; is that, to you, the distinguishing quality?

A. It was semi-fluid.

Q. I want to know any other effect by which melado, to you, is distinguished from molasses. You said the taste was peculiar; in what way is it peculiar; is it cane flavored?

A. Yes, sir, it is of a perfectly sweet character, different from molasses.

Q. You cannot describe it any closer than that?

A. No, sir.

Q. Well now, sir, besides melado, have you ever seen any of

the other products of boiled cane-juice; that is to say, syrup of sugar-cane, or cane-juice?

A. I never saw any juice called by that name.

Q. Do I understand you have never seen syrup of sugar, or cane-juice?

A. Not that I know of.

Q. Have you ever seen concentrated molasses?

A. I hardly know what it is; I have seen an article that has been so named?

Q. Mr. Phillips, with the experience you have told us, the only reason you called this molasses is, it is more like the thing you have seen called molasses than anything else you have ever seen?

Judge Cadwalader—

He has not given that reason.

X Q. Have you any other reason for calling that molasses, except that it be more like what you have seen imported into the market, called molasses. Have you any other reason, except what you have formed from hearsay?

A. Finding there was a question about this matter—

Q. I do not want your hearsay?

A. I am not going to give you hearsay. I took the opportunity to endeavor to strengthen my opinion.

Q. By hearsay?

A. By the testimony of others. Finding there was a question likely to rise with reference to this article, I found it advisable to strengthen my opinion by consultation.

Q. Independent of what extent you were strengthened by the hearsay of others, had you any other reason than what I have suggested, of your own?

A. I cannot say that I had.

Q. Mr. Phillips, not to speak, now, of any samples that you may have seen of disputed articles, what is the extent and character of crystals you have seen in the molasses that has been imported from the West Indies?

A. I have not seen any large extent.

Q. What character first?

A. Well, I have seen small granulated bits; I have seen small pieces. By small bits, I mean single grains; and I have seen them in small pieces; I have seen them in, what you might call chunks?

Q. You have seen, I suppose, in molasses, what is called smear sugar, or the soft sugar which ordinarily occurs in molasses hogsheds?

A. Often.

Q. And that in large quantities?

A. Yes, sir.

Q. Do you suppose you have seen chunks of small granulated sugar?

A. Yes, sir.

Q. Of what size?

A. Well, I have seen big substances often?

Q. As big as your fist?

A. Yes, sir.

Q. As large as that?

(Showing a sample).

A. Fully as large as that.

Q. Have you ever seen crystals weighing 28 pounds, or like crystals?

A. I have no recollection of any such case.

Q. Did you ever see anything like this?

(Showing the large crystal in the box).

A. That is larger than I have seen; I have seen pieces like this (showing a smaller sample).

Judge Cadwalader—

Q. How soon or when does your inspection of a cargo occur?

A. My inspection has ceased very soon after the arrival of a cargo.

X Q. Your experience has not always been confined to molasses at the time it was imported.

A. I have seen it as late as six months after importation.

Q. Mr. Phillips, do you know what quantity of crystallized cane sugar of that kind will deposit in cane-juice?

A. No, sir.

Q. From whom did you receive these samples personally; who handed them to you?

A. I am not clear who it was; my impression is that they were brought on to me.

Q. If you have got a recollection of the person who gave it to you, I want that?

A. The impression on my mind is, they were brought on to me by a special agent; I think his name is Toole.

Q. That is all that you know?

Mr. Cuyler—

Q. Is that the whole of your answer to that?

A. I am not positive even about that; that is the impression on my mind, that they came in that way to me.

X Q. Did you, of your own knowledge, except as derived by

hearsay from others, know the source of the samples you got, excepting they were brought to you by this man?

A. That is all; but I recognize upon these sample-bottles the handwriting of Mr. Blodget.

Q. Will you look at the contents of this keg?

(The keg was shown to witness, and was examined by him.)

Q. In the same way that you have spoken of those samples, with the same opinion and experience that you have had, what do you say that is?

A. This?

Q. Yes, sir.

A. The taste of it to me seems to be molasses; I could not discriminate it by any other name; there is an immense deposit of sugar in that cask.

Q. And yet, with that immense deposit of sugar, you say you would call it that, because you know no other name to give it.

A. I know it by no other name than that; at the same time there is an extraordinary amount of sugar for the fluid that is there.

Juror—

Q. Mr. Phillips, had you, or not, the opportunity of seeing large deposits of crystals in the hogsheads, in case there had been any; or did you only see through the bung-hole?

A. I should not necessarily see them, unless my attention had been particularly called to it.

Q. You never saw the heads taken out of the hogsheads?

A. Yes, sir.

Q. You saw them taken off?

A. Yes, sir.

X Q. Would your duty as examiner make you thoroughly acquainted with those articles?

A. Sugar and molasses I have paid particular attention to.

Q. I understand you to say, you never saw anything like that in molasses—such large crystals?

A. I have not.

Juror—

Q. But they might have been there and you have not seen them. What is the nature of crystals you have seen compared with that large chunk?

A. The character of the crystals is not different from that, but the size of that is greater.

Q. You have seen, sir, very large chunks or crystals, one quite as large as your fist. I should like to know whether the character, the nature, the planes of the crystals of that large

one, are the same as those you have seen in molasses; I refer to this largest sample?

A. The character of the crystal is the same.

Q. It is, then, merely a difference in bulk?

A. Yes, sir.

X Q. That is the largest you ever saw?

A. Yes, sir.

Juror—

Q. You have said, in that cask there is apparently a very large amount of sugar. Do you state that is in the liquid, or do you derive it from the fact of having stirred it up and brought it from the bottom?

A. From the bottom.

Q. You do not recognize it in the liquid itself?

A. No, sir; it seems to be the sediment.

Juror—

Q. Is the deposit in that keg principally grape sugar, or crystallized?

A. Crystallized.

Q. Have you any knowledge whether the deposit settled there from the original amount of the hogsheads?

A. The full sediment there, never came from the contents of the keg.

Q. Was that sediment formerly in solution through that cask when it was filled?

A. No, sir.

X Q. Mr. Phillips, do I understand you to say that this substance you have seen in these samples is a different article from what you have seen?

A. It corresponds to the general character of molasses in its liquid and color, and crystallizations.

Q. What test, if any, did you put to any specimens which you have had; did you apply any test, to test how rich this was with sugar?

A. I did not myself; I had a sample tested.

Q. Not by yourself?

A. Not by myself.

Q. You do not know, then, except what you have given us from your taste, how rich it was in sugar?

A. No, sir.

Judge Cadwalader—

Q. From your test, was it not extraordinarily rich in sugar?

A. It was very nice.

X Q. What do you mean by nice—rich in sugar?

A. Strong, rich in sugar.

Q. Do you know, sir, the effect of boiling cane-juice, not up to the point or height of permanent crystallization; that is, whether it would retain in solution for sometime a large quantity of cane-sugar.

A. I don't know.

Q. Do you know, sir, whether an article as rich in sugar as that in solution, is apt or inclined to deteriorate in the cane-sugar into grape or molasses sugar, so that it becomes less of sugar?

A. I don't know anything about that.

Q. Do you know, sir, whether there is an export duty on sugar?

A. I believe not.

Q. Have those samples changed in any respect since the time you first saw them?

A. I think they have changed. There appears to be a great deposit in this. This bottle was full when I saw it, and it is only half full now. I think this other bottle was full when I saw it. I see that that bottle does not contain all the fluid that was in it when I saw it.

Juror—

Q. I want to know, as far as you know, had any deposit been put into it?

A. Not that I know of.

Q. Have you any reason for thinking it had?

A. No, sir.

X Q. Do you think the deposit here is larger than the deposit in that keg?

A. That is my opinion.

Q. Take a look again, and see.

A. (After examination) I think so.

Q. A little more, you think?

A. I think so.

Q. Much more?

A. I think so.

Juror—

Q. Was there any deposit in that sample when you received it?

A. There was a little.

Q. But the bottle was full of liquor?

A. Yes, sir.

X Q. Are you sure it was full?

A. I think so.

Q. Have you a recollection that it was any fuller than it is?

A. Yes, sir; I am sure of that.

Q. How much fuller, do you think?

A. I think it was at least up to there (pointing to the neck of the bottle).

Q. Have you a recollection, or are you merely guessing?

A. I recollect there was more in it than there is now; but whether it was up to there, or up to there, I can't say.

Juror—

Q. Mr. Phillips, is there any difference between the two samples you hold in your hand. I should like to know why in one of those samples sent to you there was a sediment, and in the other two there was not?

A. I suppose they were sent to give a better idea of the goods.

Q. What is the idea of sending you several samples of the same cargo; one with a deposit, and one with none?

A. I suppose to give a larger sample of the goods.

X Q. Mr. Phillips, what, according to your idea, is molasses; how do you define it?

A. It is the residuum or drainings from sugar.

Q. From liquor containing crystallized cane-sugar?

A. Yes, sir.

Q. And how made?

A. Do you mean the molasses?

Q. Yes, sir.

A. In different ways. Either by draining from the hogshead after the stuff is put into the hogshead, or by the centrifugal machine.

Q. Do you mean after it is boiled up to the crystallizing point?

A. After it has been boiled in the vacuum pan to the crystallizing point, it is either taken direct from the vacuum pan, put into the centrifugal machine and thrown out, or it is drained from the hogshead.

Q. Without being put into a cooler?

A. I think without being put into a cooler.

Q. Then you mean to call molasses any liquid derived from cane-juice which has been either put through a hogshead or a centrifugal; I want to know that.

A. Not exactly.

Q. How do you limit that?

A. I would say that after being boiled until it evaporates sufficiently, it is either put into the hogsheads and drained from them, or put into some centrifugal machine, and the molasses taken off from that.

Q. Do you know what quantity or proportion of crystallized cane sugar can be obtained from boiling cane-juice?

A. I do not exactly understand that question.

Q. I want to know if you know what proportion of crystallized sugar can be taken from boiled cane-juice?

A. I don't know; I have read the process of cane sugar.

Q. Mr. Phillips, suppose the dessicated cane-juice, the expressed cane-juice, after its being treated by heat to remove the albumen, treated by lime to remove the acid, suppose that sugar cane-juice is boiled up to the point of dessication, so that the cane-juice will granulate, and that then it is run through a centrifugal, and either run through a cooler or directly into a vacuum pan, so that but a small part of cane sugar would be left in the centrifugal; would you call that residuum that came off from the sugar, merely molasses; or at what degree would you stop?

A. I do not understand.

Q. Suppose the cane-juice is not boiled up to the point of perfect crystallization, and is then run into the centrifugal, so that there is removed but a small part of the crystallized cane sugar, and the residuum of the cane sugar will remain, however rich it runs through the centrifugal. Now, what proportion of cane sugar should be taken from it, according to your ideas, to make that liquid molasses? Is it your idea that any need be taken from it when it goes through the centrifugal, as molasses?

A. I should want at least half.

Q. Half of the cane sugar taken from it?

A. Yes, sir.

Q. You think that if one-half was not removed by crystallization or granulation, if not half was taken from it, the residuum left would not be molasses?

A. I don't think it would.

Q. Suppose, Mr. Phillips, it was boiled up to the point of granulation, and run, as you suggested, directly from the vacuum pan to the centrifugal, before it has had time to cool and granulate, and is run through the centrifugal, so that the liquid or residuum that would come from the centrifugal, would not have taken from it half the quantity of cane sugar; would you call that molasses?

A. No, sir; the residuum not having half passed off.

Q. Then I understand you that molasses, in your idea, is the drainings from sugar, from which the crystallized, granulated sugar has to the extent of one-half been taken?

A. I say at least that amount.

Q. Suppose this cane, then, was boiled in the vacuum pan, either up or not up to the crystallizing point, run into a cooler, and before it is allowed to get perfectly crystallized, pumped with a hose, without being put into the centrifugal, into the hogsheads in which it is shipped, and that not having taken from it half of the crystallized sugar, would you call that molasses?

A. I would not.

[Defendant's counsel objects.]

Q. Mr. Phillips, the old process of extracting sugar from molasses, until the recent invention of extracting by the centrifugal—

A. Do you mean sugar from molasses, or molasses from sugar?

Q. I mean sugar from molasses. The old process was to pour the liquid into the hogsheads?

A. To put it in.

Q. To pour it in, or scoop it in; that is the better word. The hogsheads were then put on their heads with holes at the bottom, to drain; that is one process. There is another by which the sugar is separated from the molasses, or the molasses from the sugar, by putting clay on the tops of inverted cones; that is called clayed sugar. These are the old modes by which sugar was made on the plantations.

A. Formerly, so far as I know.

Redirect Examination.

Mr. Fallon—

Q. Mr. Phillips, you are not a practical manufacturer of sugar, and you have never been?

A. No, sir.

Q. You, of your own knowledge, know nothing about how sugar or molasses is made in the West Indies?

A. No, sir.

Q. Is it in the usual course of your business, to examine the hogsheads, or are samples usually brought to your office?

A. Generally, samples are brought. I see one of them in Court this morning.

Q. You have spoken of melado as being a thick, semi-fluid

substance. Is that the melado of commerce, which is bought and sold by the pound.

A. Yes, sir.

Q. Can you tell us, or have you knowledge of the liquid, melado, what is called *sirop de battrie* in the West Indies?

A. I have no knowledge.

Horace Averill, sworn—Direct examination.

Mr. Fallon—

Q. Mr. Averill, what is your business?

A. I am examiner in the division of which Mr. Phillips is head.

Q. In New York?

A. Yes, sir.

Q. How long have you been in that?

A. Nearly four years.

Q. What was your business before that?

A. Well, I was engaged in the wholesale grocery business for some 30 years.

Q. And bought and sold molasses?

A. Yes, sir.

Q. Is it your business to examine the hogsheads on the wharf, of such cargoes?

A. Yes, sir.

Q. Have you seen those samples before you? if so, just state when and how.

A. I have, sir.

Q. When, first?

A. In the Spring; I think in May.

Q. In whose possession have they been since that time?

A. After Mr. Phillips had them awhile, he placed them in my possession; and they have been in my possession since, under lock and key.

Q. Can you state, sir, what that article is?

A. I should judge it to be molasses.

Q. What is commercially known as molasses?

A. Yes, sir.

Q. Now, sir, you have heard something said about a sediment in the hogshead; is it an unusual thing to have a sediment of crystallized matter like what has been exhibited here? First, I ask you if you have heard the evidence?

A. I have heard the evidence.

Q. As it is your business to examine the hogsheads as they

arrive, you are competent to say whether it is usual to find a sediment of crystals, like that before you, in hogsheads?

A. It is usual in many descriptions of hogsheads, but not generally; some have nothing of the kind in them, and some have a sediment in the bottom of the cask; sometimes it is very large, and the floating crystals are found in a great variety of them. I have seen large masses of them frequently, but never as large as this. I have seen the same crystalline formation precisely.

Q. Have you seen other cargoes of molasses from Manzanillo; I ask you, first, whether molasses from the different points locally do not differ from molasses from other localities, as a common thing?

A. There is a peculiarity to molasses of different localities, and they differ from each other, sometimes more and sometimes less, sometimes distinguishably and sometimes not.

Q. Is this the same molasses that generally comes from Manzanillo?

A. I have examined a great deal of Manzanillo molasses; what I have examined of that resembles this in every respect, in crystals and in flavor.

Q. Now, are you acquainted with the molasses from Nuevitas and Porto Rico?

A. Yes, sir.

Q. Well, sir, how does this resemble those molasses?

A. Nuevitas molasses that comes from there, differs in some respects from this; but a great deal of the molasses that comes from there and other places, I suppose to have undergone a great deal of cleansing, which changes the color.

Q. Is the molasses from Nuevitas as clear, or is it clearer than this; how does it differ in color?

A. The molasses from Nuevitas generally is dark and muddier.

Q. How about the Porto Rico molasses?

A. That is a brighter color, but it is a different shade, more of a yellow.

Q. Now, about that article I hand you in this bottle; you are acquainted with New Orleans molasses, or does that not come within your observation?

A. Yes, sir.

Q. Is New Orleans molasses as light as that, or do you recognize it?

A. I do not believe that I can determine from seeing this; I do not think I can determine from the color where this was made.

Q. That is New Orleans molasses.

Cross-examination.

Mr. Crawford—

Q. You have been an Examiner in New York, you say, for nearly four years.

A. Yes, sir.

Q. For what?

A. Sugar and molasses.

Q. What other classes or substances?

A. Grape sugar and starch, and minerals, come under my department.

Q. What did you say was your experience previously, in general?

A. As a wholesale grocer, dealing in sugar and molasses and wholesale business generally, as it was at that time.

Q. In New York?

A. In Hartford, Connecticut, and other places.

Q. You were a wholesale grocer?

A. Yes, sir; and in my business I visited New York and Philadelphia.

Q. You have never been in the West Indies?

A. I have been in the Island of Barbadoes.

Q. When?

A. In 1826.

Q. You have never been there since?

A. No, sir.

Q. Were you there on a visit?

A. I was there on a visit.

Q. Now, you have spoken about the Porto Rico molasses and the Nuevitas molasses; you say the Nuevitas molasses is darker and muddier?

A. Some of it is; there is a great variety of it. I have seen Nuevitas molasses resembling this, and I have seen it pretty dark.

Q. You say the Porto Rico molasses is lighter in color?

A. The best colored of it is brighter, and more yellow.

Q. Do you mean to say that the lighter the color of molasses, the richer it is in cane sugar?

A. I cannot answer.

Q. You do not know what the lightness in color, and the transparency of the liquid, bears to its proportion of cane sugar, or whether they bear any proportion?

A. I do not know.

Q. Have you ever seen cane-juice, or syrup of sugar-cane?

A. I have, sir; what was imported as such, and named as such.

Q. When and where?

A. I think the first lot I saw was within six months after I was appointed.

Q. You say the first you saw was about six months after you were appointed Examiner?

A. I would not undertake to say it was not longer after my appointment.

Q. And within the last four years?

A. It was within the last four years when I saw it.

Q. What quantity did you see—a cargo?

A. No, sir.

Q. A sample; what did you see it in?

A. I saw them in barrels or hogsheads; it was sent as a present to friends from individuals in the West Indies, or to importers for their personal use.

Q. Was it imported as an article of commerce for sale?

A. No, sir; I have never seen it for sale in the market.

Q. All that you ever saw were these few barrels, imported, or sent for personal use?

A. That is all I ever saw. It was my impression that during the course of my business I had bought it; but it is so long since, that I cannot say. I should doubt whether I ever did.

Q. Was the character of those specimens you saw?

A. It was unlike any molasses I ever saw.

Q. What did you call the thing you saw; what was it?

A. It was boiled cane-juice, I suppose.

Q. Was there any cane sugar taken from it?

A. I do not know anything about that.

Q. And you do not know to what degree it had been boiled?

A. No, sir.

Q. All that you know is, you saw upon that occasion an article which was called syrup of cane?

A. Yes, sir.

Q. What was its appearance?

A. It was not very light in color.

Q. How did it compare with these specimens, and that specimen of cane, as to color?

A. I think it was pretty much the color of that.

Q. You do not know how long it had been made, of course?

A. No, sir.

Q. Had it any other appearance about it that was peculiar?

A. It had a smell that is unlike what I ever saw, a finer and more delicate flavor, a flavor peculiar to that.

Q. A different flavor from melado?

A. A different flavor from melado in this respect, the melado being heavier boiled, and in many cases having a flavor imparted to it by the heat.

Q. I merely want to know by your taste, which you refer to now, what the difference was?

A. It was a richer sweet, of more delicacy and more power.

Q. Is there more fluid in melado, more liquid?

A. I saw no crystals in it, no sugar in the lots.

Q. What quantity of it did you see?

A. Well, I saw in one place two or three barrels.

Q. I want to get at what examination you made of it.

A. I took samples in bottles, similar to these.

Q. You took that out of the bung-holes?

A. I took that out of the bung-holes, with a stick.

Q. Was it about as thick as that sample there?

A. It was rather thicker than that.

Q. A little less fluid than that?

A. Yes, sir.

Q. Did you make any other tests of that?

A. No, sir.

Q. What test did you make of these specimens of this article you examined?

A. The smell and the taste.

Q. Then all that you recognize as its distinctive quality in this cane-juice, or syrup of cane-juice, you say was the taste?

A. Yes, sir.

Q. Have you tasted that in the keg? just taste it.

(Witness tasted sample.)

A. It is very unlike that; the taste of the syrup is very unlike that.

Q. Did you say that article you saw was cane-juice, syrup of cane-juice, or syrup of cane sugar, or did you not distinguish it?

A. I said it was called cane-juice.

Juror—

Q. How about the smell of that in the keg; have you smelled that?

X Q. Can you recognize a difference in the smell, or is there a difference?

A. The smell is different, also, from the syrup I saw.

Q. You say you have seen, and are in the habit of seeing, in hogsheads of molasses, deposits of sugar?

A. Yes, sir.

Q. Are not those deposits, in the first place, generally of smear sugar, or soft sugar?

A. There is a mixture.

Q. Are not those deposits generally of smear or soft sugar?

A. I should say there is a mixture; perhaps an equal portion of each—crystalline and soft.

Q. Now, I am asking you of the molasses generally which has come under your experience; was it from any cane or sugar excess? I am speaking, now, of molasses generally.

A. I am speaking, now, of my experience of molasses; I think there was about an equal proportion of the soft smear sugar and the crystallized sugar at the bottom of the molasses, generally.

Q. Did you ever see, Mr. Averill, in molasses hogsheads, large lumps of crystals like that, weighing 28 or 30 lbs.?

A. I have seen smaller lumps; I never saw a lump anything like that; I have seen small lumps like that.

Q. You never saw lumps like that, as large as 28 or 30 lbs.?

A. No, sir; I have never seen that.

Q. I understand you to say you made no test as to what quantity of sugar those specimens in the keg contained; you do not know, except from guess by your taste?

A. I do not know, and have no means of knowing, except by the tests, and from others.

Q. You do not know of yourself what proportion of cane sugar that contains?

A. No, sir.

Q. Do you know, sir, what proportion of cane sugar, syrup of cane-juice—that is to say, boiled dessicated cane-juice—contains generally before the cane-sugar is extracted from it?

A. No, sir.

Q. What do you call molasses?

A. I call molasses the residuum of crystalline sugar, taking the molasses away from it in any manner that is known to the manufacturers. That applies to the whole range of modes.

Judge Cadwalader—

Q. You apply that phrase whether it is a secondary or primary process of crystallization?

A. Yes, sir.

X Q. Now, sir, you know the processes by which in earlier

times molasses was made in the West Indies, by purging through clay moulds?

A. I have never seen it.

Q. You call molasses, then, the boiled cane-juice up to the point of crystallization, and then the cane sugar taken from it by the process of manufacture, and that residuum which is left you call molasses?

A. Yes, sir.

Q. Now, sir, what quantity or proportion of cane sugar, according to your ideas, should be taken from it, to make it cease to be syrup and become molasses?

Judge Cadwalader—

You wish to know what proportion is *bona fide*?

X Q. Now, I want to know what proportion of sugar should come from the boiled cane-juice, according to your ideas, to constitute the residuum molasses?

A. I should not need to give an idea.

Q. Would you call it molasses, if no cane sugar had been taken from it?

A. I do not think the simple process of running the cane-juice through the centrifugal, without removing the cane-sugar, would change the cane-juice; I do not see how the character is changed. When you speak of taking any quantity from it, I do not know that I can fix any quantity of cane sugar; I do not feel competent to fix when it ought not and when it should be syrup or molasses. Still I have an opinion on the subject.

Q. I am asking what you would call molasses under that condition of things. State, according to your opinion, what you believe would be molasses?

A. I do not know that I can answer it in any better way than Mr. Phillips did when he stated one-half. I do not know any better point to establish than that, if you fix a point.

Juror—

Q. Did you ever notice any apparent difference in saccharine strength between the liquor of this molasses and ordinary molasses?

A. I can only answer that question by test; I cannot answer it in any other way, for that is the only way. If you want an answer from that examination, I can give it; I have no scientific knowledge.

Judge Cadwalader—

Answer the question.

A. It appears to me of no greater saccharine strength than ordinary molasses.

Q. But certainly not less?

A. It is less than a great many varieties, and more than some others; its grade is among all the molasses I have seen. That is my judgment and knowledge.

D Q. Has such an article as this ever been passed through the New York Custom House?

A. Yes, sir.

Q. Has such an article ever been passed through the New York Custom House as molasses?

A. Of Manzanillo molasses there has been a good deal, and of cane molasses similar to this in quality; they have all been passed as molasses.

Q. Now, what is this article in your judgment.

A. It is molasses, beyond any question.

X Q. Mr. Averill, I want to call your attention, now, to this liquid, to this substance which is in the keg, and which contains in the hogsheads large crystals like that, some as large as 28 lbs. Have you ever seen imported into New York an article containing such large crystals as that?

Mr. Blodget, recalled.

Judge Cadwalader—

Q. Mr. Blodget, was that large crystal formed in the original package taken out of the hogshead?

A. Yes, sir.

Q. How many months have elapsed?

A. It was taken out in May.

Mr. Fallon—

The cargo arrived on the 23d of April.

Judge Cadwalader—

And this was taken out in May?

A. Yes, sir.

Mr. Averill, recalled.

Mr. Crawford—

Q. Mr. Averill, have you ever seen imported into New York as molasses, a liquid as rich as that which contained in it crystals as large as that, some of them 28 or 30 lbs.?

A. I said I never saw such crystals as those, so large; that I said. I do not say none such have passed without my seeing it.

Judge Cadwalader—

Q. Have you seen them larger than your own head?

A. I think I have.

Q. Twice as large?

A. I think I did, one.

Juror—

Q. As large as this jar?

A. No, sir; I have seen them more in the form of the plate with the sugar on it. I have seen them in long flat crystals.

Q. How large did you see them?

A. As large as I could get out of the bung-hole; I have never taken them out only through the bung-hole.

Q. In the molasses you have examined, would it be impossible that such a crystal as that should be formed?

A. No, sir.

Q. Have you ever examined the molasses in these casks that did not crystallize, to know whether it was relatively weaker than in this case—the remaining liquor?

A. The remaining liquor would be as much weaker as the amount of saccharine matter used in the formation of crystals; that would be a matter of course.

Q. But was that liquor weaker than in this sample, after the crystals were taken away?

A. I would not say.

X Q. Mr. Averill, do I understand you to say you have seen imported into New York anything, excepting some cargoes which may be of doubtful character, anything of molasses which was so rich in sugar as this article must have been, to deposit such a large crystal as that within it?

A. I have seen molasses from different Islands; I have seen crystals of this character; I have seen Porto Rico and Barbadoes, and what I have seen has been of these crystals, coming up with the molasses when I put the stick into the hogshead; of course I could not bring up every crystal.

Q. My question is, whether of undisputed molasses you have seen in the port of New York any as rich in sugar as this must have been to deposit crystals weighing 28 or 30 lbs?

A. I do not know that I can answer that question, because I do not know whether this molasses would be rich enough to deposit such large crystals, but I find these crystals in all those which contain molasses.

Q. I do not want to know what might have been, but merely what you saw, and I want to know whether you saw any mo-

lasses which was as rich in sugar as this must have been to deposit such crystals?

A. I think I have.

Q. But you never saw such large crystals?

A. I never examined it critically to find out.

Q. You have said as to these specimens you do not know how rich in sugar they are, because you have made no tests except by your taste.

A. No, sir.

Q. Have you any knowledge, except your taste, as to how much cane sugar these other hogsheads contain?

A. Not of my own knowledge; I know these hogsheads have been passed.

Q. I do not want to know from hearsay, but merely from your own knowledge.

A. Not of my own knowledge.

Q. Mr. Averill, suppose the sugar cane-juice boiled in a vacuum pan, and without being allowed to cool into crystals rushed through a centrifugal, so that as small a proportion of cane sugar as could be was left in the centrifugal, would you call the liquor that came out, molasses?

Judge Cadwalader—

He answered that question; he said no.

Redirect Examination.

Mr. Cuyler—

Q. In the hogsheads and casks you have examined since you have been an officer in New York, have you examined them with the head taken off, or through the bung-hole?

A. Through the bung-hole.

Q. Do you recollect any instance where you examined them with the heads taken off?

A. I remember in one instance there were three hogsheads opened.

Q. Where you made these examinations through the bung-hole, you have found, as I understand, crystals like this in character, but unlike this in size. Would these casks contain enough crystals to aggregate into such a size as that there, supposing the casks should have stood long enough?

A. I think it very likely.

Q. You do not mean, by your answer, to say those casks did not contain crystals as large as this, but only that examining them through the bung-hole, you did not detect them?

Mr. Fallon—

Q. What is the weight of molasses in a hogshead?

A. Well, I should think molasses would weigh $10\frac{1}{2}$ to $11\frac{1}{2}$ lbs. to the gallon; was that the question you asked—the weight per gallon?

Q. No, sir; how much is the weight of a hogshead of molasses?

A. Some hogsheads of molasses gauge 150 gallons, and some 110.

Judge Cadwalader—

Q. What is the weight per gallon?

A. We average the weight of this at 11 lbs. to the gallon.

D. Q. With regard to those samples, have you ever seen them in connection with Mr. Blodget?

A. I could not say in regard to that; these samples have been in my possession since they were examined by Mr. Phillips. I have shown them to two or three individuals, and that is why there is less in them, than when Mr. Phillips examined them. I showed them to Mr. Torrence of Boston, and to one or two other gentlemen, and there has been something taken out of them. So far as the contents are concerned, they are precisely the same as when they were brought to New York; those two samples were brought at a different time.

Q. Who brought them?

A. I think Mr. Meredith; I am not positive whether they were brought by a special agent, or one of them by Mr. Blodget himself; I could not say as to that; they are both marked by Mr. Blodget's handwriting.

Q. What is the name of your associate here?

A. Mr. Hartshorne.

Recross-examination.

Mr. Crawford—

Q. You have spoken about seeing these crystals in molasses in the port of New York. In the old-fashioned molasses of 15 years ago, did you ever see anything like these crystals?

A. Yes, sir.

Q. To what extent did you see them in the molasses of 15 years ago, and prior?

A. I could not give a reply to that.

Q. All that you know of those samples coming from this cargo of the Lilla, I understand is that they were given to you by Mr. Meredith.

Judge Cadwalader—

I beg your pardon, but I suppose there is no dispute about this.

Mr. Hartshorne sworn—Direct Examination.

Mr. Fallon—

Q. What is your business?

A. I am in the New York Custom House, Appraisers' Department.

Q. What is the particular branch of your business?

A. Simply to draw samples, and to examine all cargoes of sugar, molasses, honey, melado, etc., that comes in the district I should examine.

Q. How long have you been in that business?

A. Since 1855 or 1856; I am not sure which; I went in under Pierce's administration.

Q. You draw the samples yourself from the hogshead?

A. I do, sir.

Q. Have you examined these samples, sir?

A. I have examined these three, I think.

Q. Well, sir, what is the article?

A. Well, in my opinion, it is molasses—centrifugal molasses.

Q. Does it vary from other Manzanillo molasses that comes to the port of New York?

A. It does, in some respects.

Q. Does it differ more than one cargo of molasses does from another?

A. The difference between these from Manzanillo is, that some of the Manzanillo molasses is secondary, or molasses made from molasses. That is darker in color, and deposits very few, if any crystals, although it deposits something like grape sugar or uncrystallizable saccharine matter. These samples I saw, were the drippings from the first manufactured sugar.

Q. Do they differ from a similar cargo of Manzanillo molasses?

A. Not materially; all molasses differs in some respects. Some is a little lighter, and some darker; some deposits more crystals, and some less.

Q. As regards its value in the sugar or quality, how does it compare with other molasses from Manzanillo or Porto Rico?

A. Speaking of the good qualities of Porto Rico molasses?

Q. Yes, sir.

A. It would bring a better price in the market than this—from 5 to 8, or 10 cents a gallon.

Q. Last spring, what was the highest price of molasses in the market?

A. From 72 to 75 cents, last April.

Q. That was for what?

A. Porto Rico; some New Orleans molasses brought prices still higher.

Q. With regard to deposits in a hogshead of molasses, and with reference to the character of the crystals, is that an unusual character of crystals in that kind of molasses I mean?

A. I should judge not.

Q. With regard to the quantity in a hogshead. I do not ask you how much as to the cargo together, for I consider that of no importance; but with regard to the quantity in one hogshead, is 40 or 50 lbs., or 100 lbs., unusual for a hogshead?

A. I should judge I have seen in some as much as 150 lbs. maximum; in others, not more than 10 or 12, or 15.

Q. As regards their aggregation, were the whole 150 lbs. in one lump, or in more than one; state what that depends upon?

A. Well, I have seen crystals in hogsheads not connected with the bottoms or sides; probably half-way down, I have come across large masses of it. In one or two instances, I have had the casks opened by the coopers, for my own information, to see what it was; and I have found, eighteen inches from the surface, irregular masses formed. In my opinion, it comes by fermentation of the molasses, by cooling, settling and rolling the hogshead, winding the molasses up so that the crystals gather on all sides, and these masses of froth, of grape sugar, contain, I should say, enough mass to keep it in a floating state.

Q. As an expert, or Custom House Examiner, would you consider the finding of molasses of that kind would throw any doubt on the molasses, as to whether it was commercial molasses?

Judge Cadwalader—

Your question is, whether it is *bona fide* residuum, for the purposes of this indictment.

D Q. Mr. Hartshorne, would you, from your experience as a Custom House officer for fifteen years, consider that such lumps as that would indicate that a hogshead of molasses, such as the sample, contained any fraudulent excess?

Judge Cadwalader—

Unusual excess, is the question.

D Q. Is it a usual or unusual quantity; is it a larger quantity

than is frequently found in Porto Rico and Manzanillo molasses of that character?

A. Porto Rico, or Manzanillo?

Q. Or other molasses?

A. Before answering that question, I would like to make a statement of why I make certain inferences. In the manufacture of molasses—as I understand it from the information I have received through the personal examination of molasses, and as I have understood from the manufacturers, as I have conversed with a great many, and with a great many dealers and experts, for my own benefit—all molasses manufactured from sugar-cane, is subject to the quantity of sugar it contains to the sugar-cane it is manufactured from. Some cane will produce a greater amount of sugar to the quantity of gallons of syrup manufactured; others will produce a less quantity of sugar and a greater amount of molasses. There is some species of cane which produces no sugar at all, or rather no crystallizable matter; it is a certain kind of cane called sorghum, I think. It will produce a saccharine matter which is known in this market as molasses. Now, in some places in the Island of Porto Rico they produce a great deal of sugar to the amount of molasses; and one lot may be richer than another, because they put it in the casks in a boiling state.

X Q. Are you speaking from hearsay?

A. I am speaking from the experience I have had in examining molasses, and in conversing with men who manufactured it. I am speaking, now, not as evidence in this case, but as a prelude as to why I say it does or does not contain any more sugar, whichever I may state, than ordinary molasses. I only give a reason why this should contain more or less sugar than is contained in ordinary molasses; that is my idea.

Judge Cadwalader—

Go on.

A. If the sugar or molasses is manufactured from a strong cane, and passed off into coolers in too warm a state, the natural purging of the sugar will carry off more molasses than in a cooler state; consequently, that molasses will be richer in cane sugar than sugar which has been turned off or drained until it is chilled. It is the same with the centrifugal. Centrifugal molasses generally contains more large crystals, that is the first essential in sugar, than most other molasses; simply because it is drained off in a warm state, and it is not boiled in so high a temperature. It is boiled in a vacuum pan, and it is not equally

crystallizable. The ordinary syrups are boiled in open pans, and more of the crystalline matter is turned into grape sugar; consequently, that carries off more of the grape sugar and less of the crystallizable matter. That is the reason why they have been using vacuum pans in preference to open pans, because the open pan by stirring destroys the grain of the sugar.

Judge Cadwalader—

Q. By this time the vacuum pan is being introduced almost everywhere; is it not?

A. Yes, sir; in a great many instances it is. In the Barbadoes, and Cuba, and Trinidad, it is being introduced very extensively.

Q. Now, answer the question.

A. I say this molasses contains more of this crystallizable sugar than is generally contained in ordinary molasses.

Q. More of saccharine matter, do you mean?

A. More formation of crystals; Porto Rico molasses forms crystals similar to that; Barbadoes forms crystals similar to that; Nuevitas molasses forms crystals similar to that.

Mr. Cuyler—

Q. You say there is more crystalline matter here than is contained in general molasses?

A. Taking the whole importations of molasses there is more molasses comes of inferior grades than this.

Q. But while it is superior to the average, is it uncommon or superior in its character?

A. No, sir; not at all.

Q. The question of the amount of deposit in a cask, is that in any degree dependent on how long the cask stands in a quiet state?

A. I should think it was

Q. A cask remaining for a long time undisturbed, would deposit a larger amount?

A. Yes, sir.

Q. Its connection being mechanical and not chemical, with the liquid?

A. Yes, sir.

Q. Have you frequently seen in the New York Custom House, molasses of the character of this in question?

A. I have.

Q. How was it passed; on what did it pay duty in the New York Custom House?

A. As molasses. Until this case came up, there never was any dispute in the minds of the merchants of New York, or in the minds of the examiners; but from the notification we got from

the Department, that such an article was imported into Philadelphia, and was likely to be forfeited, we were instructed to make a more critical examination than we had, of all that was imported.

Q. After that critical examination, was any of that article passed in New York?

[Plaintiff's counsel objects].

Q. Did you still believe it to be molasses after your attention had been specially called to it?

A. I did.

Q. And you still do so?

A. I do.

Juror—

Q. You are familiar with the richness and character of that molasses?

A. Well, I am from the taste and looks of it, and the deposits of crystals.

Q. Does *that* molasses contain more saccharine matter than other molasses from Manzanillo?

A. I think not; I never analyzed it myself, but I have had it passed through the process of polarization for my own individual benefit.

Q. There are different grades as to the richness of molasses in saccharine matter.

A. Yes, sir.

Q. I want to know whether this article contains more richness of saccharine matter, than that class of articles ought to contain?

A. I think not.

Mr. Fallon—

Q. You said you had a sample polarized?

A. I did.

Q. Who polarized it, or tested it by the polariscope?

A. This is a portion of the sample I polarized.

Q. What percentage of cane-sugar did it show, sir?

A. I never took any notes of it; but my opinion was, to the best of my belief, 56½ of cane sugar. It was polarized by an employé in the firm of Williamson, Griffiths & Co., sugar refiners. I also had another sugar refiner try it, intending to see how well they polarized together. One of them had from the top of the sample, the other had some of *this* sample. There was half per cent. difference in the two tests.

- Q. The other was how much?
 A. Fifty-six.
 Q. And the first one was how much?
 A. Fifty-six and a half.

Cross-examination.

Mr. Crawford—

Q. Mr. Hartshorne, you say you have been a sampler in New York, since 1855 or 1856?

A. Yes, sir.

Q. A sampler of sugar and molasses?

A. Yes, sir.

Q. Had you any previous experience in sugar and molasses?

A. I had not.

Q. You said the two analyses of the polariscope were 56 and 56½. Now, sir, you said you thought this was centrifugal molasses?

A. I do.

Q. Why do you say centrifugal?

A. Because it produces more of the crystalline form and less of the uncrystallizable.

Q. It is richer in sugar?

A. Not exactly richer in sugar, but richer in crystallizable matter.

Q. Is not that sugar?

A. That is sugar, certainly; but there is other molasses just as rich as that in sugar, which does not contain as rich saccharine matter.

Q. I am speaking of what is made in the vacuum pan.

A. I will state for your benefit, that there is the first drainings of centrifugal sugar.

Q. The question I ask you, is whether the same molasses which has been boiled in a vacuum pan, whether the centrifugal molasses is not richer in cane-sugar and crystallizing sugar?

A. The first drainings from centrifugal sugar, such molasses I consider this is, is stronger in crystallizable matter than molasses made from this sample, for this has been reboiled. They are both centrifugal molasses.

Q. The question I want to know is, whether the molasses that has first run through the centrifugal, and which has been made in the vacuum pan, and this molasses which has been made in the vacuum pan and then has drained from the hogsheads; whether the centrifugal is not better in the cane-sugar than the Muscovado?

A. The centrifugal is richer in crystallizable matter than any other.

Q. Where they are both boiled in the vacuum pan?

A. The grain might be destroyed by passing through a slow process of draining; but it would not be destroyed in this.

Q. Do you say that the residuum which comes from the centrifugal, is very different from what comes from the Muscovado?

A. It certainly is.

Q. Then I understand you to say that, in your opinion, the centrifugal molasses treated in the same way as the Muscovado, in the vacuum pan, is richer in cane-sugar than the Muscovado?

A. I certainly do.

Q. You spoke about these crystals being formed in hogsheads. Do I understand you to say, there was a fermentation and then crystallization?

A. You understood me to say after fermentation had commenced, by the molasses being exposed to a change of heat, that if the hogshead had been rolled over, it would bring the crystals to the surface, and that on that occurring, the crystals would collect. By rolling that hogshead over and over, they become saturated with the solution and sink down, and I have seen them in masses, twelve or fourteen, and probably eighteen inches from the surface; I could not say exactly the size. Anything would keep them floating, a stick or a chip; it is from the size of the end of your finger to a bunch of the dimensions of twelve or fourteen inches.

Q. Do I understand you to say that this matter of crystallization depends on fermentation.

A. Oh, no. The froth was dependent upon fermentation, which forms a base for the crystallization. If there was nothing attached, they would crystallize, and the crystal itself would float on top.

Q. Do I understand you to say, that the movement of the hogshead assisted in forming crystals?

A. I said nothing of the kind.

Q. Would not certain movements of the hogsheads in importation, being carried into the vessel, being carried out here and rolled out, retard very much the making of crystals.

A. I could not say; I never assisted in the rolling of the molasses, neither have I assisted in carrying a cargo of it. Everything that I have ever seen or heard of, would lead me to infer that if it stood perfectly still it would crystallize faster than it would in a state of motion.

Q. I understand you to say you have made no examination of the richness of the cane-sugar in these specimens, but by your guess.

A. Personally, I have not, only by looking and feeling, and finding out whether it was smeary or sticky.

Q. Do you mean you can, by simply testing it in that way, tell whether any particular quantity of cane-sugar has been taken from it?

A. I believe I can; I believe in my mind I can. Any man that has a particular theory which he carries out, so believes.

Q. Now, without speaking of cargoes of this article, which may have been brought into New York, have you ever seen any molasses which was as rich in cane-sugar as this article must have been to contain as large crystals as that, and with the liquor as rich as that?

A. I never examined molasses other than what I have examined in the port of New York.

Q. Just taste *that* molasses, and tell us how it compares. Have you seen cane-juice, or syrup of cane sugar?

A. I have seen what was invoiced as cane-juice.

Q. When?

A. I think there were a number of hogsheads of it that came into the port of New York last spring, or the latter part of last winter; I am not certain as to the time; I know the weather was cold; whether it was last winter or the winter of the previous year, I would not like to swear.

Q. What did you see of it?

A. I went to see it for my own information; I know it was invoiced as syrup or syrup of cane, or something of that kind.

Q. How much did you see of it?

A. I saw every cask of it; I looked at it for my own benefit.

Q. Have you ever seen melado?

A. I have, in many instances; I have examined casks of melado hundreds of times.

Q. What did you find peculiar about the specimens of the cane-juice you examined?

A. Very acid, very sour, no deposit of crystals.

Q. That was the only article of cane-juice you had ever seen?

A. Yes, sir; that was the only lot, except those not of any amount—not enough to give one any idea.

Q. Now, sir, what is your idea of molasses; what do you call molasses?

A. The natural draining from sugar, and the mechanical

draining from sugar; that which is forced from sugar, is mechanical; that which naturally drips, is natural.

Q. Do you mean, then, the drainage or liquor, from which the sugar is taken?

A. The natural or mechanical purging.

Q. What is your idea of what proportion of sugar should be taken from the syrup, to make it molasses?

A. That is a very broad question; I should not like to set myself up as a standard.

Q. I want to know your idea.

A. Well, sometimes, with some cane juice, I should say if one-tenth was taken away, it would leave molasses. In other cases, I should say you could take one-fourth of it, and very rich canes would produce one-half sugar; and still richer cane would produce 65, 70, and maybe 80 per cent. of sugar. That I should think would depend entirely upon the cane.

Q. And it is your idea, that some cane has only one-tenth per cent. of sugar?

A. I should think so.

Q. Suppose, sir, when dessicated cane-juice is boiled in a vacuum pan, before being crystallized it is run through a centrifugal, what would you call the result—molasses?

A. I should rather think the matter had undergone so little change, that it would not be changed.

Q. I want to know what proportion of cane crystallizable sugar that is in the solution, should be taken from it to leave a residuum of molasses?

A. I should take all I could get from it.

Q. I want to know what, in your idea, would change it from sugar to syrup. I want to know simply what, in your own mind, is that standard.

Judge Cadwalader—

Provided you have one.

A. My idea is simply, that all manufacturers of sugar will take all the sugar their machinery will allow, because sugar is more valuable than this article is.

Q. Suppose the article was boiled in a vacuum pan, run into the cooler and run out into the hogsheads for exportation, without running into the centrifugal and before the sugar had crystallized, would you call that molasses? If the whole material had been pumped off into hogsheads, without allowing the material to crystallize, which might have been crystallized by the old processes?

A. I should call that, what is commercially known by every one, as unpurged sugar.

Q. I said passing in, without leaving that quantity of sugar to crystallize out of it, which could have been done by the old processes.

A. I should certainly call it molasses; I do not know what else I could call it.

Q. I want to know what you call molasses; I want to know whether you would call that molasses which had not taken from it all the sugar which might be taken from it by the old processes?

A. Be kind enough to state to me the quantity of sugar which could have been taken out of it by the old processes, and I would be able to answer that.

Q. Don't you know?

A. I cannot; I am endeavoring to state the whole truth, so far as I know it; I cannot allow myself, while I am on the stand, to have words put into my mouth by the counsel on the other side.

Juror—

Q. From the examination of the sample you have tasted there, can you tell me what amount of sugar was extracted to the gallon?

A. I should think that at least sixty per cent. had been extracted from a gallon, and had been left in the cylinder; I should judge from 50 to 60 per cent.

Q. From this specimen?

A. Judging from this specimen.

X Q. State the means of forming such a judgment.

A. I should judge it from other molasses I have seen; I should judge it from the amount it would turn out of crystallizable matter; the quantity that it would produce from the cane has been reduced considerably; it leaves a smeary matter in this, which is not crystallizable matter.

Q. Don't you know, sir, that, that liquid which contained the quantity of crystallizable matter in it—as shown by the crystals, in some cases 28 lbs.—must have been simply a saturated solution of cane sugar, this mass, as a liquor, having contained all the sugar it could take up?

A. It would depend on the temperature at the time it was first put into the hogsheads, how much it would take up.

Q. Did not the liquid in those hogsheads, that deposited that sugar, contain more cane-juice sugar than the liquor would hold at the temperature it came?

A. That is the case of all molasses. Molasses is put up in a state of probably 60, 70, or 80 degrees of heat, and coming from a very warm climate here, it naturally deposits crystals.

Redirect Examination.

Mr. Fallon—

Q. The words “old process” and “new process” have been used; I think that may, perhaps, cause a wrong impression. How old are the centrifugal process and the vacuum process?

Judge Cadwalader—

They are both old; they are both thirty years old.

A. I think I have seen these in use in Mr. Stuart's establishment fifteen years ago. Ever since I have been engaged in the examination of sugar and molasses by samples, I have been familiar with centrifugal molasses. I have seen these three classes—natural purged, centrifugal or mechanical, and purged by clay.

Defendant's counsel offers in evidence, Report to the Government from Professor Bache. Senate Document, 28th Congress, 2d Session. (Reference to page 124, as containing a series of thirty-five analyses of molasses from Cuba.)

(Offered for the purpose of showing a number of analyses, giving the amount of cane sugar in various samples.)

Oscar B. Stillman, sworn—Direct Examination.

Mr. Fallon—

Q. Mr. Stillman, what is your business?

A. Sugar refiner.

Q. What has been your peculiar branch of business for the last two years—in what employ?

A. General sugar refiners.

Q. Have you been in the habit of taking analyses of cargoes of molasses for your business—for sugar refiners?

A. Yes, sir.

Q. For the purpose of purchasing by it?

A. Yes, sir.

Q. Just state what proportion of cargoes of sugar in Philadelphia and New York you have examined and analyzed in the last year.

A. Previously, I did not examine many, but all last year I did, a great deal; I suppose I examined one thousand different lots.

Q. By examining, do you mean analyzing?

A. Yes, sir.

Q. Did you examine the cargo of the Lilla on its arrival at Philadelphia?

A. I did.

Q. At whose instance?

A. I was employed by Harrison, Havemeyer & Co., at the time. Mr. Harrison told me about this molasses, and desired me to take a sample of it. I was shown the molasses, which was lying at the foot of Almond street, I believe, and I examined quite a number of hogsheads, and took samples myself from the two lots, one of which was about 17 or 18 hogsheads.

Q. And the other was how much?

A. Of the other, I do not remember the exact number.

Q. It was the balance of the cargo?

A. Yes, sir.

Q. How did you distinguish these two lots?

A. One was a much darker color than the other.

Q. Were they marked in any way?

A. One, I think, had a red mark, this was the only way I distinguished the hogsheads from the outside.

Q. Now, did you analyze—not the 18 hogsheads, but the mass of the cargo—did you analyze it particularly?

A. I did.

Q. Give us the analysis.

A. I found it contained 57 per cent. of cane sugar, and 7 per cent. of uncrystallizable sugar.

Q. That is grape sugar?

A. Uncrystallizable sugar.

Q. What was its specific gravity?

A. It was 1.33, I believe.

Q. Did you examine the deposits in the hogsheads, as to quantum?

A. I did.

Q. Is it your ordinary business to do so—judging of the value of the molasses for manufacturing purposes?

A. Yes, sir.

Q. That is one of the elements?

A. Yes, sir.

Q. You examined all the parts in this case?

A. I did.

Q. Can you now state what the article was—whether it was or was not a *bona fide* article of commerce.

A. It was, I considered, decidedly molasses.

Q. Can you be mistaken in that opinion? Is it a matter about which you could be mistaken?

A. I do not think I could be, or those who are accustomed to this.

Q. With what instruments did you analyze it?

A. I analyzed it for cane sugar with a polariscope.

Q. And for grape sugar, with what?

A. With a solution of sugar, called *Fehling's solution*.

Q. Had it a larger quantum of deposits than fair molasses from the same regions generally have?

A. No, sir; the amount of the deposit was not unusual.

Q. As regards the aggregation of deposits in small or large masses—what does that depend upon?

A. It depends upon the density of the syrup.

Q. As regards the time during which it will deposit, is that governed by the density of the syrup?

A. Unquestionably.

Q. That is, light syrups will deposit more rapidly?

A. That is, syrups of molasses boiled heavy and cooled rapidly, will deposit more crystals; but for finer and smaller crystals we take the molasses which is boiled thinner and lighter.

Q. This particular molasses, is it an article to have deposited at an early stage, or would it take a long time to deposit?

A. This molasses will take a considerable time to deposit; but from the state of this molasses, I would judge that it would deposit very little more, if any; it had already deposited about all it was going to.

Q. What was the value of this molasses as compared with other molasses in the market?

A. I am hardly able to state that, but it was better than the common molasses. I have seen molasses, though, that sold for less money, probably, than that did that was just as good, that would contain as much sugar.

Q. Was it as good as superior Porto Rico molasses?

A. It was about as good; I have seen some Porto Rico molasses that would contain more sugar, and some that would contain less.

Q. How does it differ, if at all, from the usual Manzanillo molasses?

A. I considered that it did not differ at all.

Q. Have you examined many cargoes of Manzanillo molasses?

A. I have; a considerable number.

Q. This does not differ from the usual Manzanillo molasses?

A. No, sir.

Q. Can you tell, with your experience, how it was treated in the manufactory?

A. I should judge, from the appearance of the settlings, that it had been boiled and worked off in a centrifugal; that it had been run directly from the pans into the centrifugal machines, and not only the syrup run off, but water put in, to give the syrup a lighter color, and then the syrup or molasses put into the hogsheads.

Q. Can you, or not, form an opinion as to whether sulphurous gas had been used?

A. I think so; sulphurate of hydrogen.

Q. What is the effect of that?

A. The effect is to make the color better.

Q. Has it no other power?

A. It is a matter of dispute what the other effect is.

Q. You have said you examined last year probably as much as one thousand different samples of cargoes; did that comprehend nearly all that was imported in the City of New York?

A. I imagine it does.

Cross-examination.

Q. Mr. Stillman, you said you had experience in sugar and molasses?

A. Yes, sir.

Q. What did you say your experience was?

A. For eleven years.

Q. In what occupation?

A. As a sugar refiner.

Q. Here, or in New York?

A. Both here and in New York.

Q. More recently in New York?

A. More recently here.

Q. In that occupation you examined many samples of molasses and sugar, for the purposes of refiners?

A. Yes, sir.

Q. Have you ever been in the West Indies?

A. I have.

Q. Have you seen sugar manufactured in these machines?

A. When I went there I did not go particularly on that account; I merely looked at it incidentally.

Q. On more than one occasion?

A. Only once.

Q. How recently?

A. Before the war.

Q. Have you ever seen cane-juice, or samples of cane-juice?

A. I have.

Q. Where?

A. In New York.

Q. On more than one occasion?

A. On several occasions; I have seen different samples of cane-juice.

Q. What you saw was samples; did you see it in casks?

A. I saw it in samples, in casks.

Q. About how long ago, at first?

A. Well, three weeks ago I saw some that I knew positively to be cane-juice; but I have seen what was considered to be cane juice, and was named cane-juice, at different periods, for five or six years.

Q. In what way does it differ from what you call molasses?

A. Very little. There was some cane-juice that was poor in quality, and some that was poorer than that, and some better (referring to samples).

Q. What is the distinction, in your ideas, between syrup of cane, cane-juice, and molasses?

A. One has had sugar extracted from it, and one has not.

Q. Some cane-juice was considerably poorer in quality than some molasses?

A. Yes, sir.

Q. Can you always tell whether syrup is cane-juice or molasses?

A. I can tell whether it is molasses or not; but I cannot tell whether it is cane juice. I can tell whether this sample which I have examined is molasses; but I cannot tell whether it is cane-juice. I cannot tell whether the cane-juice is molasses or cane-juice. I can tell one, but I cannot tell the other.

Q. You say you define molasses to be that residuum from which cane sugar has been taken?

A. Yes, sir.

Q. In what proportions or quantities of cane sugar, according to your ideas, should sugar be taken from the syrup to leave molasses?

A. That depends entirely on the skill of the manufacturer. If he is not able to take out more than 10 per cent. it is molasses.

Q. Do you mean to say, supposing from the syrup there has never been taken such cane sugar as could have been extracted by the ordinary old processes, would you call the residuum molasses? Supposing there is a boiled dessicated syrup, and you have not taken out of it the quantity of sugar which could have been taken from it, would you call that molasses?

A. Yes, sir.

Q. Are the vacuum pans, and centrifugals, improvements for the purpose of obtaining sugar from the cane?

A. Not for the purpose of extracting it more purely, but for the purpose of extracting it more hastily. In fact, in extracting we find it does not extract as much as if dripping naturally.

Q. I am speaking of both the vacuum pans and the centrifugal.

A. I am speaking of the centrifugal. If we boil a lot of syrup, and part is put in moulds and part in the centrifugal machines, we find the moulds will give more sugar, but take longer time than the centrifugals.

Q. Suppose the dessicated juice is boiled in vacuum pans and run through the centrifugal before it is allowed to cool and crystallize, what would you call the liquid that goes through the centrifugal?

A. Good cane-juice, boiled high or low.

Q. What do you mean by high?

A. We mean high temperature, 140°.

Q. Do not you know that cane syrup can be boiled through vacuum pans, so as not to crystallize?

A. Decidedly.

Q. And, now, without saying 140°, suppose it is boiled up to the point at which it crystallizes in the vacuum pans, and is run into the centrifugal from that, so that there would not be extracted as much cane sugar as would come in the ordinary processes, what would you call that residuum,—molasses?

A. Yes, sir; if there had been any sugar extracted from it at all.

Judge Cadwalader—

That is, of course, he means for business purposes, not for mere sham.

A. Yes, sir.

X Q. Do not you know that many Cuban estates have not centrifugal apparatus enough to purge their sugar?

A. I know a great many have not machinery enough to purge it properly; but I do not know many have not machinery enough to purge it all.

Q. Don't you know that sometimes the liquid is pumped into hogsheads without being put into the coolers?

A. Yes, sir; and drained off in the hogsheads.

Q. I do not mean drained afterwards from the hogsheads, but shipped in that way.

A. No, sir; I do not.

Q. Mr. Stillman, have you looked at that liquid in that glass?

A. No, sir.

Q. Will you please look at it; is that like the specimen that you examined?

A. It is a little tarter; it is very similar in appearance.

Q. You say you examined these specimens with a polariscope, by the proper tests?

A. I did.

Q. Have you seen these large crystals?

A. I have, sir.

Q. Can you tell by examining them whether any, and if so, what quantities of cane sugar had been taken from the article which you examined, and which contains such large crystals?

A. No, sir; I could not. It would depend entirely on the quality of the cane-juice. If the cane-juice was perfectly free and good, certainly they could take out more than if they had waited until it had soured.

Q. You think, then, from the taste it was impossible to tell whether any, or what, quantity had been taken from it.

A. I said it was impossible to tell what quantity.

Q. Or any considerable quantity?

A. Or any considerable quantity.

Q. How much sugar can be made from a gallon of the best molasses?

A. $4\frac{1}{2}$; and I have taken over 5 lbs.

Q. That was a considerable yield?

A. Yes, sir.

Q. It averages from 5 to how low?

A. I have seen them take out $1\frac{1}{2}$ lbs.

Q. In the best molasses it runs from something over 5 to about what?

A. $3\frac{1}{2}$ to 4 lbs.

Juror—

Q. Could this sugar produce 5 lbs. from that molasses by refining?

A. It would not be refined.

Q. Could that lump of sugar in that crystal be refined?

A. It could be refined.

Q. Do you mean to say without these 5 lbs. that you take out of your estimate, that no portion of that could be refined?

A. It could be refined?

Mr. Cuyler—

Q. What quantity of refined sugar could you get from that best quality of molasses?

A. A little less. If we take out 5 lbs., boil it raw and operate to refine it, heating it up to a high temperature and filtering it, we won't get more than $4\frac{1}{2}$; but that sugar would be of better quality than you get by boiling it raw.

Q. Still that refined sugar you get, what would that be?

A. It would be a mixture of cane and grape sugar.

Q. What proportion cane?

A. 70 to 75 cane.

Q. And the rest grape?

A. And the rest grape.

Q. Would those crystals be found in cane sugar?

A. A certain percentage we find in cane sugar.

Q. Hogsheads containing this liquor, would not they produce much more sugar than any molasses you have seen?

A. This molasses here produces more sugar; yes, sir.

Mr. Crawford—

Q. The liquid which you have there in the glass, and which contains crystals of that kind in the box, I want to know whether that would not produce more sugar to the gallon than the best molasses you have spoken of?

A. Yes, sir.

Q. Would not that produce 7 or $7\frac{1}{2}$ lbs. to the gallon?

A. I did not try.

Q. Don't you think it would produce that?

A. I think it ought to produce that; I am talking merely of the sugar, now.

Q. That is not my question. You say of the best molasses you extract a little over 5 lbs.?

A. Yes, sir.

Q. That was the molasses that came in the hogsheads with everything in it?

A. Yes, sir; everything melted down.

Q. Now, take the contents of one of the hogsheads having in it lumps of sugar of that kind, some as large as 28 lbs., in a single conglomeration, taking these whole contents, and treating them in the same way, how much would you get— $7\frac{1}{2}$?

A. No, sir; we could not get over $5\frac{1}{2}$.

Q. Have you tried it?

A. Not this, but I have tried it.

Q. Had the liquid which you analyzed a specimen of the sugar mixed up in it.

A. It had a specimen of the sugar mixed up in it.

Q. Where did you get the samples?

A. I got them from the hogsheads themselves.

Q. In what did you take them out; in boxes?

A. In a can.

Q. A half-gallon measure?

A. It held about a quart.

Q. Did you take the liquid out only?

A. I put some of the sugar in.

Q. You did not estimate what quantity of sugar to the gallon that would make?

A. I judged from the amount of crystallized sugar that it showed in the polariscope, what amount of sugar I could extract from it in the manufacturing it.

Q. Now, you say that your analysis contains 57 parts of cane sugar to 7 parts of grape sugar. What number of pounds to the gallon of cane sugar did that produce?

A. Of cane sugar? You mean manufactured sugar.

Q. I am speaking now of the polariscope?

A. It would produce $5\frac{1}{2}$ lbs. of sugar, 68° cane sugar.

D Q. Or the sugar of commerce?

X Q. You say that the syrup by the polariscope gives 57 of cane and 7 of grape. Would not that give $6\frac{1}{2}$ lbs. of cane sugar to the gallon?

A. No, sir.

Q. Have you ever tried that?

A. I have.

Q. Will you explain fully the question of the juror in regard to the difference between sugar made by refining this article and the sugar made by refining the best molasses?

A. Yes, sir. Molasses by being boiled in a vacuum-pan and

worked off in a centrifugal, would give 5 to 5½ lbs. of sugar, which in commerce we would call yellow sugar.

Q. What are its constituents?

A. About 70 per cent. of crystallizable.

Q. And the rest grape sugar?

A. And the rest a mixture of grape sugar and coloring matter.

Q. You say the result with these crystals would be different?

A. Yes, sir; the crystals alone would produce more?

Q. How much more?

A. I think they ought to produce 75 per cent.

Q. What kind of sugar?

A. Not all pure crystallizable sugar. From 40 to 45 per cent. of pure crystallizable sugar, and the remainder would be sugar that would have in it from 60 to 75 per cent. of crystallizable sugar and the balance made up of coloring matter, syrup that adheres to the sides of the vessel, and water.

Q. How long did you say your experience had been in sugar refining?

A. About eleven years.

Q. Did I understand you to say you have seen large amounts of crystallized sugar of that kind?

A. Yes, sir.

Q. You have not known the character of molasses previous to that period of eleven years?

A. No, sir; only I have heard men say it was better. The general complaint in the trade, now, is that molasses is not so good as it used to be.

Juror—

Q. You say you have examined about 1,000 lots in New York, in 1867. How many lots out of that do you suppose is about the same quality as that in question?

A. Well, about 50 or 60.

Q. Well now, will you give us your average analyses of those 50 or 60 lots?

A. About 52, or 52 to 56,—I cannot say exactly; I did not analyze as much of this as of poorer qualities—the grocers get this; about 53 is the average.

Q. In the polariscope, did you see the proportions of these crystals?

A. Yes, sir.

Mr. Cuyler—

Q. Did you say this was taken by the grocers rather more than by the sugar refiners?

A. Yes, sir.

Q. Why?

A. Because it is a lighter article, more refined, and they can afford to pay a better price than the sugar refiners.

Juror—

Q. Is it your opinion that this molasses in question is adapted to the grocery trade?

A. Yes, sir.

X Q. In your examination in the polariscope, did you take the crystals?

A. Yes, sir; the process of infusion is only a proof, and it does not tell the amount.

Q. When you say it is better adapted to the grocers than to the refiners, do you mean to say it is adapted in the condition in which it is imported?

A. Yes, sir; in the same condition as molasses.

Q. And it is your belief that, that would be the market for which this is properly adapted?

A. It usually is; grocers usually take it and put it in barrels.

Q. How do the grocers buy it?

A. They buy it at so many barrels.

Q. In what quantity do they buy it?

A. They buy it in the original hogsheads, and rebarrel it, and sell it to the retail grocers.

Q. What do they do with the crystals?

A. They sell them to the sugar refiners.

Juror—

Q. Have you any idea of what became of the 50 or 60 lots in New York, last year?

A. I have not.

Mr. Cuyler—

Q. Were any of them bought by parties for whom you made the analyses?

A. Yes, sir.

Q. Which parties were they, sugar refiners or grocers?

A. Sugar refiners.

Juror—

Q. How do those 50 or 60 compare with this individual lot?

A. I should judge this would be about the average. There is this drawback to it—it has a little tart taste, which the grocers would not like.

Mr. Cuyler—

Q. May not that be owing to its having stood exposed to the air?

A. Yes, sir.

Q. But compared with the 50 or 60 lots, this is about the average?

Juror—

Q. Did you taste it at the time you first examined it?

A. Yes, sir; it was a little tart then.

Mr. Cuyler—

Q. Does that indicate fermentation?

A. Yes, sir.

Q. Would the deposit of crystals be apt, then, to be more or less active?

A. The process of crystallization ceases at the moment the liquid runs out. This is molasses; and the way I tell it is molasses is, in the examining of the hogsheads there were a great many very fine crystals which could only be produced by boiling cane-juice at a high state, that is a degree sufficient for it to granulate in the mass; that had been worked through a centrifugal, and the after-smear had gone from the machines of the centrifugals into the molasses. Now, if that had been cane-juice, there would not have been this matter.

Q. Would the sulphurous gas assist in the fermentation of it at all?

A. No, sir.

Judge Cadwalader—

Q. You cannot be mistaken about this article?

A. No, sir.

Mr. Cuyler—

Q. As to its being a *bona fide* article, you have no doubt?

A. No, sir.

Juror—

Q. Suppose some portion of that molasses was exposed in an open pan over a gas lamp, and thus boiled; how much sugar would you get from it?

A. You would get a mass of dirty stuff that some persons would call sugar.

Q. Do you say you could get a proportion of 5 lbs.?

A. Probably you could get more, but it would not be near the quality.

Mr. Fallon—

Q. Arising from the mixing of impurities, what is that stuff? (showing a sample.)

A. That is Molasses Sugar.

Q. Can you tell whether that sugar is made from molasses, or from cane?

A. It is made from molasses. It would be a lighter color if made from cane-juice.

Q. (Another sample shown). Are these two sugars identical?

Juror—

That first sample was made by one of the witnesses in an open pan, over a gas lamp.

A. This is a little better grain than the other. It is a difficult matter to tell when sugar is so dry. They are both of them molasses sugar.

D Q. You were not in the Court-room when the testimony relative to these things were given?

A. No, sir.

Q. Could you get seven pounds of that kind of sugar from molasses in an open pan?

A. No, sir. It depends entirely upon how wet it was; it is dry now.

X Q. That article on the plate, supposing it was made simply in an open vessel, would it be what you call molasses sugar, to a certain extent?

A. They would both be molasses sugar, one no more molasses sugar than the other; one might have more molasses in it.

Q. Are you able to tell what proportion of cane sugar there is in the article?

A. I should judge about 65 per cent. of cane sugar.

Q. As distinguished from molasses sugar?

Mr. Cuyler—

The distinction is not between cane sugar and molasses sugar.

X Q. You say that article on the plate has about 65 per cent. of cane sugar?

A. I should judge so.

Q. And the rest is what you would call grape or molasses sugar?

A. Grape or molasses sugar.

Q. Is that about the quantity that would be made from this article, by that process in an open pan?

A. We do not use an open pan.

Q. Suppose that was simply, as an experiment, made in an open pan, over a gas-jet, in a rough way?

A. It must be done very carefully.

Juror—

Q. You say those samples are both molasses sugar?

A. Yes sir.

Q. Which of those two do you consider the best?

A. This (referring to a sample in a paper).

Mr. Fallon—

Q. The word molasses sugar has been used by you, if I rightly understand, in two different senses; Mr. Crawford asked about grape or molasses sugar.

A. They are not synonymous. I mean the sugar produced from molasses.

Q. The words are sometimes synonymous?

A. Sometimes.

X Q. Is the sugar from Muscovado syrup, before it is refined, called muscovado sugar?

A. There are some qualities made directly from the cane-juice, those we call Muscovado. There are other qualities which are made from the syrup that has been purged from the first product, which we call molasses syrup.

Q. I understand this sample in the plate to be this article simply evaporated. I want to know whether Muscovado sugar was similarly put through such a process, and not carried through charcoal or molasses, whether that would be molasses sugar?

A. No sir; cane sugar; it would be lighter. Cane sugar produced from cane-juice boiled in an open pan, has averaged in the polariscope from 87 to 92 per cent. of pure cane sugar.

Court adjourned at 3½ until quarter of 5.

Samuel Field, sworn.—Direct Examination.

Mr. Fallon—

Q. You are of the firm of Field & Keehmlé?

A. Yes sir.

Q. Your business is that of merchandise brokers?

A. Yes sir.

Q. What proportion of sugar and molasses have you sold, or has passed through your hands, in the last fifteen years?

A. One-half, perhaps, of all that has been received in Philadelphia.

Q. Did you sample this cargo?

A. This cargo of molasses by the Lilla was sampled in the regular way, by the samplers of our firm.

Q. If you can, give us the date or the time that the first intimation was given of any proceeding on this subject. Was it immediately on the arrival of the vessel?

A. No sir, it was after the sale was made; that is the first I had of any intimation.

Q. Well sir, what did you do with the samples; did you exhibit them to the trade?

A. The samples were placed on our table, as usual, and the attention of all the trade was called to them.

Q. Did you sell it for the best price it would bring, for the best profits?

A. We valued the cargo of molasses when we first saw it, at 65 cents. The first offer we got from one refiner was 62; subsequently an offer of 63 was made by another refiner. In the meantime we tried to sell the cargo of molasses, to break it up among the grocers; but the body of it was rather lighter than they needed. Then we turned our attention again to the refiners; and finally we sold it at 64 cents to a refiner.

Q. That was, you think, before any proceedings were instituted?

A. As far as I recollect, before anything was said.

Q. This was sold at four months, on the usual credit?

A. Yes, sir.

Judge Cadwalader—

Q. When was that sale made?

A. The sale was made on the 2d of May.

D Q. In your opinion, what is this article?

A. In my opinion, it is molasses.

Q. Is there any doubt about that subject?

A. There is not any doubt on my mind.

Judge Cadwalader—

Q. What is the highest offer the grocers made to you?

A. I do not think there was any offer made, as far as this lot is concerned, by the grocers.

D Q. Is this cargo similar to the general character of Manzanillo molasses?

A. To the great bulk of Manzanillo molasses that has been received at this port.

Q. Has that Manzanillo molasses, as a general thing, been sold to grocers or to refiners?

A. The grocers have bought it; but it has generally been sold to the refiners.

Q. Is that so with regard to the other kinds of molasses?

A. Of all kinds of molasses, the grocers take a small proportion, but a very small proportion, of all the molasses imported.

Q. You said you got 64 cents; what was the value, then, of the best quality of molasses?

A. Porto Rico molasses was worth, at that time, about from 70 to 72 cents. The best grades of Cuba molasses were worth about 65; some barrels of molasses containing a fine quality of molasses, had been sold as high as 75.

Q. Was this the full price, do you consider, sir; 64 cents, at that time?

A. We valued the cargo when it was first examined at 65, and endeavored to get that price for it, and offered it at that price to all the parties to whom it was shown.

Juror—

Q. Who bought it?

A. It was bought by Rogers & Mitchell.

Judge Cadwalader—

Q. Philadelphia refiners?

A. Philadelphia refiners.

Cross-examination.

Q. How long have you been in the sugar and molasses trade?

A. Twenty odd years.

Q. Have you ever been in the West Indies?

A. Never, sir.

Q. Have you ever seen syrup of sugar cane, or syrup from the cane?

A. I have seen small samples of it, in small sample bottles. I have never seen it in any quantities, either in keg, barrel or hogshead.

Q. Did you sell any of that?

A. I never sold any.

Q. In what way did you sell this article?

A. By sample. The sample was brought and put on my table, in the usual way.

Q. And then in what way do you judge of the quality?

A. By the color, flavor, and general appearance.

Q. You made no other tests?

A. I subsequently, after the cargo of molasses was seized by the government, made an examination of it on the wharf.

Q. In any other way than by these tests?

A. No, sir.

Q. Did you notice in those hogsheads the large number of crystals that has been spoken of?

A. I did, in very few; perhaps, not more than six or eight, maybe ten hogsheads all through.

Judge Cadwalader—

Q. What did you say you examined it as to?

A. I examined it after the seizure by the government, while on the wharf. Six, eight, or ten hogsheads at the outside, were all that I saw that had that crystalline appearance in the casks.

X Q. Do you mean to say that of those you saw, not more than six, eight, or ten contained those crystals?

A. So far as I saw.

Q. And the rest had not any at all?

A. There were very few crystals. Some hogsheads had crystals, but very few had large crystals.

Q. What was your mode of examination?

A. By means of a stick.

Q. You did not open the hogshead?

A. No, sir; I did not open the hogshead.

Q. Had you ever seen in molasses such a large conglomeration of matter crystallized as shown in that large sample?

A. I do not think I have seen in any molasses such a large conglomeration of crystals.

Juror—

Q. I want to know if he examined all the hogsheads?

X Q. How many of the hogsheads did you examine?

A. I suppose more than three-fourths of the hogsheads.

Q. Of the whole 448 hogsheads?

A. I say more than three-fourths of it.

Juror—

Q. If these large ones had been in those hogsheads, would you have discovered them with the stick?

A. Yes, sir.

Q. You say your examination of all these hogsheads was sufficient to show what they contained?

A. In the ordinary way; not very critically, but closely. My attention would naturally have been directed to the fact, if they had contained a large quantity of such crystals.

Q. Did you see these hogsheads broken at the refiners?

A. I did not.

Q. You do not know what were the results there?

A. I do not.

Q. Have you ever seen molasses as rich in sugar as is contained in that sample? (Referring to the keg.)

A. I have not.

Q. Having examined that no farther than by look, and taste, and smell, can you say how much cane-juice it contains?

A. I cannot.

Mr. Fallon—

Q. You have had a sample of this in your office ever since, until lately; have you not?

A. Yes, sir.

Q. Has it deposited any crystals?

A. Very little crystals; it has deposited what molasses generally deposits, sugar without grain.

Juror—

Q. Be kind enough to tell the jury why the molasses brought this price, if it is richer in sugar than you ever saw?

A. It was richer in six, eight, or ten hogsheads than I ever saw; that is the question I was asked.

X Q. You examined, you say, over one-half?

A. Yes, sir; over one-half of the cargo, probably three-fourths.

Q. And you examined it in the way spoken of, with a stick?

A. Yes, sir.

Q. And you discovered those six, eight, or ten hogsheads were the best out of all of them?

A. Yes, sir; those were the best of all.

Q. Were the others very inferior, or medium?

A. The others were like "B" on the samples here; there was very little deposit of sugar in them.

Q. The juror was asking the question, was not this liquid containing so much sugar worth for the purposes of refining, more than the best molasses?

A. It was worth up to the best molasses taken by the refiners; but it was worth less money than other lots of molasses taken by grocers.

Juror—

Q. Does molasses generally come in this manner, with six, eight, or ten hogsheads different?

A. It is very seldom a cargo of molasses containing four hundred packages will run alike; it will have two, three, or four classes. Those classes are always represented by us in the samples; if we find a difference, we take a sample.

Q. Was it a very remarkable discovery to find this quantity of sugar in those hogsheads?

A. It did not strike us as very extraordinary. Very often when any molasses has a large quantity of sugar in it, it is so represented to us, and we represent it to the buyers. Ordinary cargoes of molasses coming early in the season, will have 8, 10, 12 inches; I have known it to be 2 feet thick, at the bottom, that is, of ordinary soft sugar. It has not *that* appearance. This appearance we know to be caused by the centrifugals in *that* molasses, which always has a larger grain of sugar than the Clayed or Muscovado molasses. Sometimes the grocers in consequence of there being more sugar in it, will give a little more for it.

Q. Then, for the uses of the grocers, the value of the article does not depend so much upon the quantity of sugar as upon its appearance?

A. Not so much as upon its color, flavor, appearance and brightness.

Q. But for the purposes of the sugar refiner, what contains the most sugar is the most valuable?

A. Not always; because the grocers frequently buy it for baking purposes, and then they seek for this molasses which has sugar in it.

Q. But my question is, the more sugar the molasses contains, the more valuable it is to the sugar refiners?

A. Yes, sir.

D Q. You examined it by the stick. Is that the usual way?

A. Yes, sir; the usual way.

Edward C. Knight, affirmed.—Direct Examination.

Mr. Fallon—

Q. Mr. Knight, you were one of the gentlemen appointed by the Court to appraise this cargo; were you?

A. Yes, sir.

Q. And you did so?

A. Yes, sir,

Q. What is your business, just state it, if you please; I have no doubt the jury know it?

A. My business, at present, is simply importing sugars and molasses as relates to refining.

Q. You have been in that business and the accompanying one of sugar refining form any years?

A. I have been in the wholesale grocery business over thirty years.

Q. Did you examine this cargo particularly—you and your companions?

A. I did very carefully.

Q. What did you value it at?

A. I think about 62, or 63, or 64 cents; I think we agreed on 64.

Q. What was the article?

A. My opinion was, it was a cargo of molasses.

Cross-examination.

Mr. Crawford—

Q. You say your experience has been in the wholesale grocery business, and also as a refiner?

A. Yes, sir; for over thirty years.

Q. How long have you been refining?

A. We have been refining sugar for seven or eight years.

Q. Have you ever been in the West Indies?

A. No, sir.

Q. Did you ever see any syrup from sugar cane?

A. I think I may have seen some small samples; but I have no distinct recollection of the time, just now.

Q. You have no distinct recollection of that?

A. No, sir.

Q. What examination did you make of this article; you saw the sample?

A. We went on the wharf at Arch street—the main street, or about there—that held the molasses. The bungs were knocked out, and we examined it carefully, as you would generally examine a cargo of molasses.

Q. Did you examine the whole cargo?

A. I think I examined three-fourths of it.

Q. Did you find in any of them large quantities of crystals of that kind?

A. Well, in some few of the casks we struck lumps of sugar something like that, though, perhaps, not many of them quite so large.

Q. Did you examine it merely by looking at it and tasting it?

A. That is the only way to examine it, by the stick, and tasting and smelling it.

Q. Have you ever seen molasses as rich in sugar as that?

A. You mean the cargo of molasses?

Q. I mean, have you seen any molasses as rich in sugar as that?

A. Well, I think I have?

Q. Where?

A. Well, in the Port of Philadelphia. I think I have dealt in molasses, Porto Rico, Santa Cruz and Clayed, as rich as the best of that, in sugar.

Q. You have no means as to judging whether any and what quantity, of cane sugar can have been taken from that before it was put into the hogsheads?

A. No, sir.

Juror—

Q. Mr. Knight, did you find a difference in these hogsheads that you examined, as to the quality?

A. A very great difference. Some did not seem to contain a particle of sugar, but was as smooth as oil; others had a small part of sugar in them; others had a granulated substance on the body of the cask; some of them had small, floating bodies; and some few of them had large particles floating, which seemed as if they had granulated.

Q. Is it usual to find so much difference in the quality of a cargo of molasses?

A. It is not usual to find so much difference in a cargo of molasses as this; molasses coming from the West Indies, is usually more regular in quality.

Redirect Examination.

Mr. Cuyler—

Q. In the examination you made of those casks, would you consider a crystal like that produced, a fair specimen of the usual run of the cargo?

A. No, sir; I would not. I think that is a larger sample.

Q. How many of the hogsheads had anything in of that kind, at all?

A. Well, I think the cargo seemed to have more or less floating sugar in it; but I do not think I met with any that had lumps of that kind in it, that I could discover.

Q. When was it, Mr. Knight, that you made this examination?

A. I cannot think of the precise date; it was sometime in May.

Mr. Fallon—

It was the 15th of May.

Mr. Cuyler—

Q. It was still on the wharf?

A. Yes, sir; the whole cargo was still on the wharf.

Q. I understood you to say, Mr. Knight, that about one-third of the casks you examined had floating sugar?

A. Yes, sir; some of the others had, but not to any appreciable extent.

Alfred Kunsenburg, sworn.—Direct Examination.

Mr. Fallon—

Q. What is your business?

A. Sugar refiner.

Q. Were you appointed appraiser by the Court?

A. I was, sir.

Q. Did you examine this cargo critically?

A. I did, sir.

Q. What did you find it to be—molasses?

A. I found it to be molasses.

Q. Is there any doubt upon that subject?

A. There was not on my mind when I examined the cargo.

Q. How many of the hogsheads did you examine?

A. I examined at least two-thirds, or three-fourths?

Q. As regards the deposits in the hogsheads, state what you found?

A. There were many hogsheads that had no deposits of any consequence. There were some hogsheads which had some deposits of sugar, but not to any unusual extent. I suppose there was in no hogsheads more than about three inches.

X Q. Did none of the hogsheads run more than three inches?

A. Yes, sir; in fact I found no difficulty in running the stick to the bottom.

Q. Did you find any lumps as large as that?

A. I did not.

Q. If there had been in the hogsheads you examined, would you have found them?

A. As far as my examination went, poking the stick through the bung-hole, I found I could reach the bottom without difficulty. If there had been such a solid piece in the hogshead at the time, of course I would not have reached the bottom without breaking it to pieces.

Q. And what did you value the cargo at?

A. Sixty-four cents.

Q. What was the value of the best molasses at that time?

A. I don't know what the best molasses is worth; because in my business we do not buy but the refining molasses, which is not the highest priced molasses.

Q. Look at that lump and say, whether, from your examination, that is a fair average specimen of the lumps of sugar floating in any of these hogsheads?

A. I do not think that I came across any lump of that size. The lump may have formed afterwards; there may have been lumps of that size. I have seen hogsheads that had more sugar than that.

Q. Will you examine that keg, and say if that contains a fair sample of the molasses that you examined?

A. No, sir; that is not a fair sample.

Juror—

Q. You spoke of refiners' molasses. Do you understand that there are two kinds of molasses in the market?

A. Certainly, there are certain kinds of molasses in the market which are worth accordingly to the grocers or refiners.

Q. And that is refiners' molasses?

A. That is a question; this is, certainly, very fine molasses.

D Q. What constitutes the difference between refiners' and grocers' molasses?

A. For instance, Porto Rico is a molasses which tastes well and looks well, and is bright in color; but the refiners do not like it. They wish a molasses good in boiling qualities.

Q. Do you in the trade, distinguish between molasses, under the name of grocers' or refiners' molasses?

A. They do it practically.

Q. That distinction then is, if I understand you, the refiners do not buy the best color?

A. For their purposes, they will certainly buy the best quality; provided, the price warrants.

Q. But do they buy the best quality of molasses?

A. Not to my knowledge.

Q. The highest priced, then, is bought by the grocers, and the lower by the refiners.

A. Yes, sir.

Juror—

Q. Could the molasses in that keg have deposited the amount of sugar that is there?

A. I think not? I think that is impossible.

Cross-examination.

Mr. Crawford—

Q. You said you were a molasses refiner?

A. Sugar and molasses.

Q. And have been how long?

A. Some eighteen years.

Q. Have you ever been in Cuba?

A. Yes, sir.

Q. Have you seen them manufacturing?

A. Yes, sir; I resided there seven years.

Q. How long ago?

A. From 1852 to 1859.

Q. Whereabouts?

A. Well, I was in the eastern part of the Island, thirteen miles from the capital.

Q. In Cuba?

A. Yes, sir.

Q. You have seen, then, syrup of cane and cane-juice, and know what they are?

A. Yes, sir.

Q. You said you examined three-fourths of the cargo of the brig Lilla, by the stick. You put your stick into the bottom of the hogsheads, and found not more than two or three inches of sugar?

A. Yes, sir.

Q. By that you mean smear sugar, at the bottom of the hogshead?

A. The sugar was harder than I find in most molasses.

Q. You are speaking, now, of the sugar at the bottom?

A. I am.

Q. Do I understand you to say, you did not find floating about in the molasses, with your stick, above the bottom or at the top, large crystals like that?

A. I did not.

Q. To what extent did you move the stick?

A. All around the circumference of the cask, to find if any large crystals adhered to the sides.

Q. I understand you to say you did not discover any large crystals floating like that?

A. No, sir.

Q. Or in any part?

A. The heads were not taken out; we could only examine the hogsheads by the bungs.

Q. You do not say that in some of the hogsheads there were not large lumps like that?

A. That is more than I can tell.

Q. You say you have seen sugar-cane and cane-syrup; in what respect does it differ from molasses?

A. Now, you speak of syrup of cane. Boiled cane after being desiccated to a certain quantity, is called syrup. In my opinion, if cane-syrup had been thickened up to the density of this cargo, it would have been nothing but *bona fide* melado; that is the way melado is made.

Q. Melado is made by boiling up from a lower temperature?

A. No, sir; the temperature has nothing to do with the temperature of melado. The melado is thickened at 35° Beaumé.

Q. How?

A. Over a fire, by exposing to evaporation.

Q. Suppose this was made in a vacuum pan; what is the difference between the making of melado and the making of the cane-syrup, boiled for the purpose of having the cane-sugar evaporated from it?

A. I have no personal knowledge of melado being made in the vacuum pan.

Q. It could be made in the vacuum pan?

A. It could be made in the vacuum pan; and in such case the concentration would be less than the concentration of sugar. The temperature would not have anything to do with it.

Q. What is the difference to the eye, taste and touch, between syrup of sugar cane, that is to say, desiccated cane-juice, that boils before the sugar is taken from it, and after it comes out molasses?

A. You speak of syrup of cane, as though sugar was taken out of syrup of cane; it is not. The syrup of cane is put over the fire before the sugar is taken out; so that the difference between syrup of cane and molasses is density. Syrup of cane is considerably lighter than molasses; that is, before it has been concentrated. It has been concentrated from 8 or 9 to 30, and molasses is 37 to 40; therefore, it is one-third, or to a greater extent, thicker. Then the taste is different.

Q. The cane-juice can be boiled in the vacuum pan, up to a certain extent, until it does not crystallize, and then taken out?

A. Yes, sir.

Q. So that it holds all of the crystalline matter yet uncrystallized?

A. Yes, sir.

Q. What then is the difference?

A. The taste is entirely different; it has a fresh caney taste; it is not as strong as molasses.

Q. Now, I understand you to say, in your opinion, this is molasses. Have you any doubt about that?

A. No, sir.

Q. Have you never expressed a doubt as to whether it was molasses?

A. I did express a doubt.

Q. Did you never say it was cane-juice?

A. No, sir; I think not.

Q. Don't you remember saying it was cane-juice, after looking at it?

A. I think—

Q. Don't you remember saying to Mr. Flake, it was cane-juice, after looking at it?

A. No, sir; I don't think that I went that far.

Q. How far did you go?

A. I will tell you, exactly. In the month of April, I think, Mr. Flake came to me and showed me a bottle, and asked me what I thought of it; he asked me if I wanted to see the article, and I said yes. I said, I could not express an opinion about it. Mr. Flake asked would there be reason to doubt; I said there might be.

Q. Did you not go further, and say it was cane-juice?

A. I think not.

Q. Did you not give your opinion to Mr. Flake that it was cane-juice?

A. I don't think I went that far.

Q. You say you have been on the estates in Cuba; is it not the fact there, sir, that the plantations have not the machinery sufficient to purge the sugar they make?

A. Well, in the part of Cuba where I was, that was not the case; it was a part long settled, and if the people were not so rich, they could get through with their crop.

Q. You do not know whether that is the case in other parts of Cuba?

A. No, sir.

Q. Don't you know that sometimes it is the habit there to pour cane-juice from the cooler, without running through the centrifugal or any other process, into the hogsheads?

A. I do not; unless they want to make melado.

Q. You state you never knew of that being done.

A. No, sir.

Redirect Examination.

Mr. Cuyler—

Q. This prior examination, when this vial was submitted to you, was before you made the examination, when you were appointed by the Court?

A. Yes, sir.

Q. And it was not a general examination, but only of one or two casks.

A. Yes, sir.

Q. How complete was that examination?

A. It struck me as a remarkable case; because there was a light froth, and I saw crystals which were remarkably large. I looked at two casks.

Q. Who picked out those two casks that you examined?

A. I suppose I put the stick into those casks which were opened.

Q. And those were the two casks?

A. Yes, sir.

Q. Who led you to those two particular casks?

A. I went there at the request of Mr. Flake.

Q. And all you said to him, when he pressed you as to whether there was not room for doubt, was, "Yes; there might be room for doubt."

A. That was the exact expression I used. Mr. Flake asked me, "Was there not room for doubt?" I said, "Yes; there may be room for doubt."

Q. After you were appointed by the Government, and went there and examined two-thirds to three-fourths of the casks, had you any doubt then?

A. No, sir.

Q. Then you considered it molasses?

A. Yes, sir.

John Mason, sworn—Direct examination.

Mr. Fallon—

Q. What is your business?

A. Importer of sugar and molasses.

Q. You have been a great many years in that business, dealing with the West Indies?

A. Yes, sir.

Q. Were you appointed by the Court as one of the Appraisers in this case?

A. Yes, sir.

Q. And you examined the cargo critically?

A. Yes, sir.

Q. What proportion of the hogsheads did you examine?

A. I suppose two-thirds to three-fourths.

Q. What did you find the article to be?

A. I had no doubt it was molasses.

Q. Is it molasses of the best quality; or how near?

A. It was the best of that kind of molasses; it is not equal to Porto Rico molasses.

Q. Is that a fair sample of the molasses such as you found, sir?

A. I should say not, by any means.

Q. Had it more of crystals in it than is usually in molasses of that character, in centrifugal molasses?

A. Very little; there were some floating crystals like that. It was all centrifugal molasses.

Q. But you noticed then, you say, very little?

A. Very little.

Q. There was not, then, more than you would expect in molasses of that kind?

A. No, sir.

Mr. Cuyler—

Q. And you went through two-thirds or three-fourths of these casks?

A. Yes, sir.

Q. In how many casks did you find floating lumps of sugar?

A. Not more than ten or fifteen out of the whole number.

Q. And in a large proportion of the casks, you found no such floating masses?

A. No, sir.

Q. Looking at that large crystal there, would you say that is a fair specimen of the cargo?

A. No, sir.

Q. Did you see any mass like that?

A. I saw nothing like that; I saw something like that (exhibiting a small crystal).

Q. You say that is not a fair specimen?

A. No, sir; not by any means.

Cross-examination.

Mr. Crawford—

Q. I understand that in your examination of these hogsheads you did not discover in any of them any crystals like that, and only in ten or fifteen any large crystals?

A. Yes, sir.

Juror—

Q. You spoke of that keg not being a fair sample. Is that any richer than the rest?

A. I very much doubt if there were five hogsheads in the whole cargo that had as much sugar as that keg had.

Q. The highest priced molasses depends on the color, and chiefly it goes to the grocers?

A. Yes, sir.

Q. And the richness of sugar is another quality, which does not command the highest price?

A. It is generally the case that in every cargo, with the same mark, some will contain no sugar at all, and a few hogsheads will contain the sugar.

X Q. Did you ever find in any such cargo such crystals as that, weighing 20 or 25 lbs.?

A. I have seen in many hogsheads of molasses from the West Indies, not such as that, but I have often seen such crystals adhering to the sides of the hogsheads. I have seen these more than 20 years ago.

Q. Did you ever see crystallized sugar in such masses as that; I do not refer to smear sugar?

A. It is more than twenty years since I have seen such.

Q. Have you ever seen any molasses in this market that contained crystallized sugar like that, weighing more than 25 lbs.?

A. I should not suppose that was crystallized; it was floating about on the surface.

Q. Do you mean to say you never examined the molasses for the purpose of ascertaining whether the floating mass was crystallized or smear sugar. Have you ever been in the West Indies?

A. I lived there 18 years.

Q. How long ago?

A. I went out to the West Indies in 1822, and lived there until 1841.

Juror—

Q. What change has that crystal undergone since it left the hogshead?

A. Only a drying process; it has hardened, I suppose.

Q. Is it made up of cane sugar entirely, or grape sugar?

A. I suppose it was Muscovado sugar.

Mr. Cuyler—

Q. You do not understand that is all cane sugar?

Mr. Crawford—

No, sir.

X Q. Did you ever see molasses fifteen years ago, or more, as rich in sugar as this liquid would be, containing such masses in it?

A. I have seen molasses' hogsheads containing one-fourth sugar.

Q. That was the smear sugar, was it not?

A. I did not examine it. I should not have supposed *that* crystal was a substance taken out of any of those hogsheads.

Q. Was that a soft mass in the hogshead, in your opinion?

A. I have seen such masses in hogsheads, floating about.

Juror—

Q. If it had been hard, would your stick have gone through it in the hogshead?

A. No, sir.

X Q. If your stick had struck it, would it not have gone through, like through the smear sugar?

A. I think not.

Captain Young, sworn—Direct Examination.

Mr. Fallon—

Q. Captain Young, you were, I think, the last of the Appraisers appointed by the Court to examine this cargo?

A. Yes, sir.

Q. You are a sea captain and have had experience for many years, have you not?

A. Yes, sir.

Q. Will you please mention about how many years?

A. I suppose I have been in the West India Islands for 75 or 100 voyages.

Q. Carrying molasses?

A. Carrying molasses; I never sold any; I was only captain of a ship.

Q. Did you examine this molasses?

A. Yes, sir.

Q. Have you any doubt about the article?

A. No, sir; we did not mention it at the time, as the Court

cautioned us not to give it a name. Some of the hogsheads I tried, had no sediment in the bottom at all, others had.

Q. Had any of them any more than you would expect in a cargo of *bona fide* molasses?

A. No, sir.

Q. I would ask you, is that a fair, *bona fide* sample of what was in the cargo?

A. I think not; it has too much sugar in it. In the West Indies, we fill the hogsheads with a hose; and when the hogsheads are emptied, we find the liquid having in it large crystals.

Q. Is it not a fact that in filling with the hose, the hogsheads near the last get the dregs of the molasses?

A. Yes, sir.

Mr. Cuyler—

Q. You have looked at that keg, and say that molasses is not a fair sample?

A. No, sir, it is not.

Cross-examination.

Mr. Crawford—

Q. How many years ago were you familiar with molasses?

A. Before you were born, forty years ago, in 1827.

Q. To what extent did you examine the cargo?

A. I suppose I examined three-fourths of them.

Q. Did you notice in any of them crystals of sugar?

A. Yes, sir, floating on the surface; but I should think none of them larger than *that* sample.

Q. Did you see any as large as *that* large one?

A. No, sir; not one-fourth as large.

Q. Could there not have been?

A. Yes, sir; there might have been. But the stick was five feet long, and reached from one end to the other; and there was no difficulty in putting the stick down.

Q. You examined it by the taste and color?

A. Yes, sir.

Q. You are acquainted, therefore, with the molasses of old times?

A. Yes, sir.

Q. To what extent did you observe the richness of the molasses in some of these hogsheads; to a very great extent?

A. No, sir; not to any unusual extent, in fact, I should not say the best of it would be superior to Porto Rico molasses. It

is not so rich in sugar as some molasses of the English Island of Barbadoes.

Q. You have seen cane-juice and syrup of sugar?

A. Yes, sir; I have seen cane-juice on some of the plantations.

Q. Do you know anything of the habit of putting the liquor pure into the hogsheads?

A. I do not; I am entirely ignorant of the scientific process of manufacturing sugar.

Q. Captain, you have no means of judging whether any, or what, quantity of cane-sugar has been taken from this liquid?

A. No, sir.

Q. But you judge it to be the residuum of *bona fide* sugar?

A. Yes, sir; as I understand, molasses is the settlings of the sugar after all the crystallized sugar has been removed. But the molasses of commerce, I understand, can be another article; that is, it is full of sugar as compared with the old molasses that used to be used in old times.

Juror—

Q. You say you understand cane-juice. Is there a possibility of mistaking this for cane-juice?

A. No, sir; I think not.

X Q. Suppose the cane-juice boiled in a vacuum pan, and shipped before it has crystallized?

A. Although I have been on the plantations during the process, my attention has not been directed particularly to the manufacture. The cane-syrup would be of a greenish white.

Samuel B. Rogers, affirmed.—Direct Examination.

Mr. Fallon—

Q. You are Mr. Rogers, of the firm of Rogers & Mitchell?

A. I am.

Q. You own the "Columbia Steam Sugar Refinery?"

A. Yes, sir.

Q. Did you buy this cargo?

A. We did.

Q. Did you analyze it, or take particular notice of it in the process of working?

A. We polarized it.

Q. Just state how you polarized it; that is, you made some ten separate drafts of it?

A. (Referring to memorandum.) Yes, sir.

Q. I see that is in ten parts. Just state how you got at the result?

A. We took from every hogshead a cup full, a fair sample of the molasses, and put it into a barrel; then we took samples from that barrel and polarized them.

No.	1, June 15th, 58hds and 4 tierces, pol'd 50, spec. gra. 1.340, therm. 60°.	
"	2, " 16th, 36 " 8 " 47, " 1.285, " 60°.	
"	3, " 17th, 56 " 4 " 53, " 1.333, " 67°.	
"	4, " 18th, 12 " 9 " 53, " 1.329, " 65°.	
"	5, " 19th, 37 " " 52, " 1.333, " 60°.	
"	6, " 20th, 38 " 4 " 52, " 1.325, " 61°.	
"	7, " 22d, 40 " " 56, " 1.334, " 60°.	
"	8, " 23d, 50 " " 52, " 1.321, " 60°.	
"	9, " 24th, 40 " 2 " 53, " 1.326, " 61°.	
"	10, " 25th, 18 and 3 " 49, " 1.331, " 62°.	

Q. What is the average of the whole?

A. 52 it is marked here, and 18 hogsheads of No. 10 lot were passed as molasses. The average with that is 52, without it 53.

Q. Mr. Rogers, did you get as much sugar as you could from that cargo?

A. I think we did.

Q. Your apparatus is all perfect, and the best improved?

A. I think so.

Q. How much sugar did you get from it?

A. We got from about $5\frac{1}{4}$ to $5\frac{1}{2}$ lbs.

Q. Did you work it twice?

A. We did.

Q. Is not that more than is customary?

A. We have not done so before.

Q. If you had worked it in the ordinary way, how much would you have got?

A. That I can hardly tell; but I suppose something less than 5 pounds.

Q. Can you pronounce with judgment as to what that article was you worked?

A. I pronounced it molasses.

Q. Is it the residuum from the *bona fide* manufacture of sugar?

A. Yes, sir.

Q. What is the value in the market of such molasses?

A. At the time we bought it, we hesitated a good deal before we purchased it; I think we hesitated for a couple of weeks, before we decided to pay that price, for we considered it the full price. The price was 64 cents.

Q. You, of course, upset every hogshead into your vats?

A. Every hogshead.

Q. Did you find any unusual amount of crystallized sugar in your hogsheads?

A. In some of them we found some sugar; in a large proportion we found none.

Q. What proportion of sugar was there in that cargo?

A. Well, I should suppose that probably one-third, or possibly one-half, had more or less.

Q. Had it an unusual quantity?

A. No unusual quantity.

Mr. Cuyler—

Q. How many of them had sugar that resembled that large crystal?

A. The large crystal? I saw but one large lump in it.

Q. And how many hogsheads did you buy altogether?

A. 440 hogheads and some tierces.

Q. The whole cargo? Is that keg a fair sample of the article?

A. No, sir; I think not,

Q. You found none such?

A. I should have been very glad to have bought it if it had been like that.

Cross-examination.

Mr. Crawford—

Q. You have been in business how long?

A. I have been in this particular business only two years.

Q. You have been acquainted with sugar and molasses how long?

A. Ten or eleven years.

Q. Have you ever been in the West Indies?

A. I have.

Q. Have you seen them manufacturing sugar?

A. Yes, sir; to no great extent.

Q. Were you there simply on business?

A. Yes, sir.

Q. How long ago?

A. Three years.

Q. In what part of the West Indies?

A. North side.

Q. Cuba?

A. Yes, sir.

Mr. Fallon—

Manzanillo is on the south side?

X Q. You said you took a cupful of liquid from each hogshead, put it in a barrel, and then polarized from that?

A. Yes, sir.

Q. Did you take those cupfuls from the hogsheads as they came?

A. Yes, sir; from the hogsheads.

Q. Then in those analyses you made, you did not take the sugar—the crystals?

A. Our boiler drew those samples; and he was told to take the best samples out of the hogsheads.

Q. Who was your boiler?

A. Mr. Smith.

Q. Is he here?

A. He was here; he will be here.

Q. Did you see the samples?

A. Not every one; but I saw a large portion.

Q. How did you say the sugar that was crystallized was put into your samples?

A. Well, you could only guess at the probable proportion put in taking the samples.

Q. Did you see any put in?

A. I did.

Q. Did he put it in the cup, or in the barrel?

A. I told the man that whenever he should find a hogshead that had any crystals to any extent in it, he might take the molasses and let the hogshead rest, and call Mr. Mitchell or myself to look at it.

Q. Was not the appearance of the crystals in these hogsheads a matter of extraordinary remark in your establishment?

A. No. Whatever we buy we say in the presence of our workmen, it is a very superior article, and we want them to do the best they can. But this was nothing more than anything else.

Q. But were not these crystals the subject of extraordinary remark in your establishment?

A. No, sir; not at all, except from the fact that it had been seized, which was generally known.

Q. You say you produced from 5½ to 5½ pounds?

A. Yes, sir.

Q. That was including all the hogsheads, the eighteen also?

A. Yes, sir.

Q. Have you ever obtained more sugar than that from any molasses you have bought?

A. We have not.

Q. How long have you been in the refining of molasses?

A. Only two years; not quite two years.

Q. Did you ever get as much from any cargo you bought?

A. I never bought as fine a cargo before.

Q. How much is the most you got?

A. About $4\frac{1}{2}$ pounds, of ordinary molasses.

Q. Did you ever get better than $4\frac{1}{2}$ from any cargo you ever bought?

A. No, sir; that is the most we ever got.

Q. If you had taken one-half of these hogsheads, the best half, and not taken the eighteen hogsheads; if you had taken one-half of the best, what proportion of sugar would you have got?

A. It would have made very little difference, no perceptible difference.

Q. Did I understand you to say, the cargo of sugar from those hogsheads was not variable as regards the eighteen hogsheads?

A. I say there were a large number of the hogsheads of the cargo that was seized as cane-juice, that were no better than the eighteen.

Q. I want to know whether there was not a very great difference in those hogsheads?

A. There was.

Q. Do you know how many pounds of sugar could be got from ordinary cane-juice from which the sugar had not been extracted. I mean the desiccated cane-juice which had been boiled in Cuba, in a vacuum pan, then taken out and put through the centrifugal process before crystallizing, and then put in hogsheads and brought here. What proportion of sugar could you have found in such an article; or, have you no means of judging?

A. I have no means of judging.

Q. Do you know what desiccated cane-juice would yield to the gallon?

A. I do not know.

Mr. Cuyler—

Q. This result of 5 or $5\frac{1}{2}$ pounds, you said you obtained by two boilings?

A. Yes, sir.

Q. Did you ever put any other cargo to two boilings?

A. No, sir.

Mr. Brewster—

Q. Why did you put this to two boilings?

A. Mr. Madeira requested us to be particular about it, and to put it by itself. The molasses cost us a high price; and being lighter in color, we were enabled to make a better color.

Q. Had you any knowledge of the cargo previous to that?

A. I had not.

Juror—

Q. At what temperature did you polarize it?

A. It ranged from 60 to 67.

Q. Had it been heated from the temperature it was taken from the cask until it was polarized?

A. Yes, sir.

Q. Then the crystals did not enter into the process of polarization?

A. Some of the crystals were taken out and melted, and put into it.

Mr. Cuyler—

Q. I think you said that by a single boiling you would have got somewhat less than 5 pounds?

A. Certainly not over 5 pounds.

Mr. Crawford—

Q. I understand you to say, before you bought this you polarized a sample?

A. Yes, sir.

Juror—

Q. Did you buy any other hogsheads about this time?

A. I buy molasses all through the season.

Q. You say this is the finest molasses you bought?

A. Yes, sir. We usually buy Muscovado molasses, and we hesitated a good deal before buying this, on account of the price. I do not remember, now, what was the highest we have paid.

Mr. Crawford—

Q. What was the appearance of the $5\frac{1}{2}$ lbs. of sugar you made?

A. Some of it was light. It was better for the fact that it was boiled free, and then washed, and then the residuum re-boiled.

Q. Was it not whiter than when made from ordinary molasses?

A. No, sir; we have washed ordinary molasses.

Q. But the more you washed, the more you lost?

A. Unless we reboil, and then we get it all back. We did not get $5\frac{1}{2}$ or $5\frac{1}{4}$ lbs. of any one quality, but we got that altogether. A large proportion of the second boiling was grape sugar. I considered this all molasses sugar.

Judge Cadwalader—

Q. Was the whole of it molasses sugar?

A. Yes, sir.

Mr. Cuyler—

Q. Can you give us the price of the sugar?

A. I think it sold for less money than sugar made by some other refiners here; certainly for no more.

Q. The best of it?

A. The best of it.

B. H. Bartol, sworn.—Direct Examination.

Mr. Fallon—

Q. Mr. Bartol, you are a sugar refiner, or boiler, are you not?

A. Yes, sir.

Q. What is the name of your firm?

A. It is myself.

Q. How long have you been in it?

A. Nine years.

Q. Did you examine this molasses?

A. I only saw the sample at the brokers', by which I was told it had been sold. I never saw the original packages.

Q. Did you analyze or polarize it?

A. Yes, sir; I took a sample bottle down to my place.

Q. Well, sir, what did it polarize?

A. That which I had, gave 58; but tested by other polarizers, it would show between 52 and 53. The reason I say that is, I use different proportions of the mixtures; but I use the same instrument. Mine shows ten per cent. more.

Q. What percentage of cane sugar as given by polarization, can you obtain by boiling?

A. The syrup that runs from our boilers contains 38 or 40.

Q. Then you can only get the difference?

A. Yes, sir; about 60. Our syrup shows 39 per cent. of cane sugar.

Q. I need scarcely ask you if you could get 7 lbs. out of this?

A. I would not have given over 54 or 55 cents for it; I was surprised when told it was sold at 64.

Q. You think that is its real value?

A. Boilers do not buy the highest priced molasses; it is sold to grocers.

Q. Have you any doubt as to what this article was?

A. No, sir; it is molasses.

Cross-examination.

Mr. Crawford—

Q. How long have you been acquainted with sugar and molasses?

A. I have been acquainted with sugar and molasses for years, and have been engaged in the business eight or nine years; previous to that, I was a professional engineer connected with making machinery.

Q. Have you ever been in Cuba?

A. I was in Cuba three or four times; the first time in 1838 or 1839.

Q. In what part of Cuba were you?

A. In 1838-9, I was back of Matanzas.

Q. Were you ever on the other side?

A. No, sir.

Q. Were you ever at Manzanillo?

A. No, sir.

Q. You say there was 58 per cent. of cane sugar?

A. Yes, sir.

Q. Who made your polariscope?

A. It was bought in Paris. All the polariscopes are the same, but I use a stronger mixture; I do not dilute it so much.

Q. Does the solution or mixture cause the difference in polarizing?

A. Yes, sir. There are two sets of rules, and there is a difference of 10; that is, if one reads 60, the other will be 54.

Q. Then both cannot be correct?

A. Yes, sir; both are correct. I mean to say that we—that is my son generally, and myself—make a test and follow a certain rule given by the book, and our's will show 58; whereas, if another person takes the same molasses, and uses different proportions, he will show 52. Both are correct. I do not say both will get the same, but like rates; and we know the rates. If I know Mr. Mitchell makes a test and gets 52; I should immediately add on 7 per cent.

Q. I understand you have to go according to a table the manufacturer prescribed?

A. We do not follow the table of the manufacturer, but a table which my son obtained in Paris under a chemist, and which he followed. The result which you get is analogous; one polariscope shows 58, and the other 52. But if you test it in a German instrument, you can probably show 68. Some refiners have brought over two, and they show 68.

Juror—

Q. Is your method practised generally?

A. No, sir; they generally follow the other. They generally follow the rule given by Mr. De Bosque, the manufacturer.

Q. Following Mr. De Bosque's method, what would that give you?

A. 52½.

X Q. And do you mean to say the difference is caused by the solutions?

A. Yes, sir.

Redirect Examination.

Q. What is the largest amount of sugar you can produce from molasses?

A. I have obtained large amounts.

Q. More than once?

A. Yes, sir. I have had a cargo which gave an average of nearly 5 lbs.; that is better than the average.

Q. Was that with one boiling, or two?

A. I never give it more than one boiling.

Mr. Stillman, recalled—Redirect Examination.

Mr. Fallon—

Q. Can you describe the difference in the applications of the polariscope?

A. I think I can.

Q. Then state the rule philosophically.

A. There were unfortunately two sets of rules given, one right and one wrong; but a great many who purchased it bought the wrong rule with the right instrument. So I took the trouble one time to test a quantity of cane sugar in solution in the two given ways—one by Mr. Bartol's and the other by Mr. Mitchell's; and I found Mr. Bartol's method to be the right one. There was simply a mistake of the publisher of the books, and gentlemen on this side of the Atlantic have been using it.

Chas. M. Hurley, sworn—Direct Examination.

Mr. Fallon—

Q. Mr. Hurley, what is your business?

A. United States Appraiser, or Mercantile Appraiser, Port of Philadelphia.

Q. Did you get any written instructions from Mr. Blodget, on the subject of this cargo, before its arrival, or before you saw it? If so, have you got the letter, sir?

A. There is nothing in the shape of instructions.

Q. Or letter on the subject?

A. Yes, sir; I received a letter.

Q. Have you got it now?

A. Yes, sir.

Q. Will you be good enough to produce it?

A. No, sir; unless I am so ordered by the Court.

(At the direction of the Court, two letters were produced.)

Juror—

Q. When were these received?

A. One, May 1st; the other, May 5th.

The letters were read, as follow:

“OFFICE OF GENERAL APPRAISER, CUSTOM HOUSE,
PHILADELPHIA, May 1st, 1868.

DEAR SIR:—The cargo of 448 hogsheads and 33 tierces molasses, per brig Lilla, now landing, and consigned on the invoice to Madeira & Cabada, is one remarkable for its apparent identity with the concentrated molasses usually shipped from the south side of Cuba; it is certainly largely mixed with concentrated, if not all of that grade. I propose to ascertain the question whether this is concentrated, by submitting a sample to the best judges accessible.

Very truly yours,

LORIN BLODGET.”

CHARLES M. HURLEY, Esq., U. S. Appraiser.

[Marked, “Private.”]

“OFFICE OF GENERAL APPRAISER, CUSTOM HOUSE,
PHILADELPHIA, May 5th, 1868.

DEAR SIR:—The cargo of the Lilla is declared by everybody to be cane-juice. I have examined it thoroughly this morning. I know its character to be as they represent. Have you sent up the appraisement?

Very truly yours,

LORIN BLODGET.”

CHARLES M. HURLEY, Esq., U. S. Appraiser.

Mr. Fallon—

Q. Was this first letter received before the cargo was examined?

Mr. Crawford—

Examined by whom?

Mr. Fallon—

By anybody

Judge Cadwalader—

What is your object, gentlemen?

Mr. Fallon—

Our object is two-fold. First, we think it affects the question of motive; secondly, Mr. Blodget testifies he never gave any directions or instructions with reference to this cargo.

D Q. Was this before the cargo was examined, sir?

A. No, sir; I had the cargo examined, I think, in the latter part of April, Mr. Flake was my examiner.

Q. What did you consider the cargo; what did you believe the cargo to be, sir?

Q. Well, Mr. Flake first called my attention to it, as I said before, in the latter part of April; I think the 28th or 29th of April; and he said there were several casks containing a great deal of sugar. I took samples of this cargo to several merchants, sugar refiners and wholesale grocers—that is customary wherever there is doubt about the quality—and requested—

Q. I asked you what your opinion was.

A. Well, my opinion is, that it is molasses, sir; that it is commercially known as molasses.

Cross-examination.

Mr. Crawford—

Q. Did you pronounce this cane-juice?

A. I stated that I thought it was different. I did not know what cane-juice was, and I don't know now.

Q. Did you not, at one time, pronounce it to be cane-juice?

A. I don't know that I did; I thought it was different from molasses, at first.

Q. Did you not make a different return to the Collector?

A. No, sir. I have a copy of my letter to the Collector, here, sir. I don't think I used the words "cane-juice;" I don't think I did.

(Witness refers to letter). Yes, I did.

Mr. Brewster—

Q. That is dated May 5th, 1868?

A. I have no objection to have the letter read. It is customary for an Appraiser to reconsider his letter at any time.

Q. You sent this letter, and officially reported this as cane-juice; did you not?

A. I did; and I would have reconsidered it if I had had the opportunity.

August Smith, sworn.—Direct Examination.

Mr. Fallon—

Q. Mr. Smith, you are the boiler of Rogers & Mitchell?

A. Yes, sir.

Q. Did you take samples of the molasses by the Lilla, as you were working it; and if so, state how?

A. If you mean that cargo, I took the ordinary samples out of every hogshead, and put them in a barrel by themselves.

Q. Did you take a fair sample of the contents?

A. I took it from the top just as it came out.

Q. Have you been in the business any length of time;

A. About 20 years.

Q. Can you tell the difference between molasses and any other product of the sugar cane?

A. I never worked sugar cane, but I did molasses.

Q. You can tell what is molasses; can you?

A. I think I can.

Q. Was this molasses?

A. I can tell in the pan.

Q. Did this work as molasses?

A. I did not consider it anything else but good molasses; I have boiled better molasses.

John F. Meridith, sworn.—Direct Examination.

Mr. Fallon—

Q. What is your business?

A. General Appraiser, Fourth District.

Q. In Baltimore?

A. Yes, sir.

Q. Have you been consulted, or samples of this molasses sent to you by Mr. Blodget?

A. I have received samples from Mr. Hurley.

Q. Is that the sample?

A. I think it is.

Q. Of course it is your business to be acquainted with the article, and to know what the article is. What do you pronounce that to be?

A. I suppose it to be molasses, sir.

Q. Did you so inform Mr. Blodget?

A. I think not, sir.

Q. And took the sample to New York; did you, sir?

A. Yes, sir.

Q. And consulted with Mr. Phillips on the subject?

A. Yes, sir.

Cross-examination.

Mr. Crawford—

Q. Where did you get your sample?

A. From Mr. Hurley.

Evidence closes.—Court adjourns.

CHARGE OF JUDGE CADWALADER, December 17, 1868.

GENTLEMEN:

This has been a lengthy case, and I find of my notes sixty-eight pages. On one of these pages I find this memorandum, "These jurors appear to know something of the subject." And the case has been so much assisted by the very proper attention, on the one hand, and on the other hand by the intelligent questioning of the jurors, that it takes away from the counsel and the Court a great part of the responsibility and difficulty that is usually encountered in a case of importance. But important cases from their very magnitude, are often the simplest cases to decide; because they receive a thorough and exact preparation on both sides, which elicits the truth of the facts and the propositions which are given in evidence. The most troublesome cases I have, are of small amounts, where it is most difficult to get at the evidence and the truth of the case, and where they are perplexed very much, which is very seldom the case where large amounts are involved.

In this case, the prosecution depends upon the enactment, which is very short, imposing a duty, &c.

(His Honor read the third clause first section of the Act of 1864):

ACT OF JUNE 30, 1864—An Act to increase duties on imports, and for other purposes.

Article Third.—On molasses from sugar-cane, eight cents per gallon. On syrup of sugar-cane juice, melado, concentrated melado, or concentrated molasses, two cents and a half per pound; *Provided*, That all syrups of sugar or sugar-cane, cane-juice, concentrated molasses, or concentrated melado, entered under the name of molasses, or any other name than syrup of sugar, or of sugar-cane, cane juice, concentrated molasses, or concentrated melado, shall be liable to forfeiture to the United States, and the same shall be forfeited.

It is alleged on the part of the prosecution, that the article in question is Syrup of Sugar, at least so I understand, and that it should be forfeited.

Now, in the very system of duties which are specific as contradistinguished from *ad valorem* duties, there is, from the infirmities of language and the essential difficulties of the subject, what has been found an impossibility in carrying out, or confusion in defining, the motives of the legislator. It is difficult to define them from confusion, and where they are defined it is very difficult to carry them out; because not only is human language inefficient sometimes for the expression of the purposes of those who use it, but the human mind cannot with respect to legislation carry out everything that is in the mind. Still, the difficulty of the present subject is enhanced, perhaps, from the character of the subject matter. This is the production of the foreign, former colonies of those European Governments which formally restricted the trade of their colonies to make it subsidiary to some arbitrarily defined stage of home manufacture. So that instead of leaving the industry of the colonies to their fair and regular development, the industrial processes were turned into what may be called abnormal directions; and it would be a man's interest on account of some countervailing or extraordinary duty of the mother-country, to export from the colonies an article in the condition in which, were it not for that restricted system, he would not have done it. But that cause, combined with the derangement of labor in the West India Islands, has made the specific duties upon the colonial products of the West Indies more perplexed, I presume (at the same time I do not know much about it), has probably made it more complex than the legislation which you are more familiar with—some of us, at least are, if you are not—as to the products of European manufactures, woolens, silks, &c., where, at least, you have a standard which can be nominally defined or nominally applied.

Well, there is a rule which nobody disputes, that where there is a doubt in the application of the language relative to the importation law, the commercial standard of the denomination of the article in question is the standard which Congress is to be supposed to have adopted; but that is not an arbitrary rule. It is a rule which is only adopted so far as it conforms to the apparent intent of Congress; and it appears to me, under correction, that this law manifests the purpose of Congress to change somewhat the application of that. The Act of Congress

appears to foresee that an article might have been interpreted under the name of molasses, and yet commercially the designation of molasses may be marked, without being distinguishable from the subject matter of higher duty. Congress appears to have made—if I understand rightly the meaning of the legislation—an effort here to accomplish what, taking the state of the manufactures in the West Indies, was a very difficult result to obtain, that is to say, supposing a sort of standard as woolens or mixtures of woolens, silks, or other subjects of specific duty, had been adopted by which importers were obliged to invoice the goods according to the glossary of the Act of Congress, and to depart from what would otherwise have been the glossary of the commercial exchange.

With these prefatory remarks, I will state what I believe to be the local meaning of this statute, as you are to apply it. I think the meaning of it is, that if this was made according to the fair processes of manufacture in the West Indies, so far as it was included with other sugar produce, it comes, if according to a fair standard—that is, in or after the year 1842, including especially the years 1862 to 1864, and going back if necessary to the year 1842, or even earlier—to enter into the question fairly, if this article was that which, according to the fair course of sugar making in the West Indies or elsewhere, was a residuum, then it pays the tax for molasses and is not forfeited.

But I do not state that altogether as a matter of law; but I state it as the result of the law from the evidence, as I understand it, and as you probably understand it. But if the article was not a fair residuum, but a product as contradistinguished from the residuum, contrived for the purpose of evading; or without any such contrivance, which resulted in the evasion of the spirit of this act; or more, even though it might be fairly so called among merchants, that would not, in my opinion, exempt it from forfeiture.

I suppose in laying down the law in that form I meet, probably, the purpose for which this prosecution was instituted. I prefer, therefore, stating the law as I suppose the counsel of the United States—though I have received no written request from them, and have not heard any argument, yet I suppose I have stated it as they would have asked it.

(Mr. Brewster: Certainly, sir.)

Well, then, if there is a bill of exceptions made up, they may almost write it out in their own way, and I may adopt it and turn it into my own language. You will take the law of the United States, therefore, gentlemen, as I have laid it down.

Then we approach the merits of the question with the necessity of saying a few words to meet and determine the question in some respects in which it differs from ordinary litigation. In ordinary litigation, the party who is called the actor, or the party who institutes the proceeding, or who has the affirmative of the question, has to make out the whole case. But in revenue prosecutions, in all these prosecutions I believe: certainly in England, from whose institutions we derive ours in such matters, it has been thought reasonable that the burden of proof should be upon the claimants, and the reasons are sufficiently obvious. They have been discussed by Chief Justice Marshall and Judge Story; and these eminent judges have approved of this departure from the ordinary rules of the administration of justice. If they have done so, it is no business of yours or mine to quarrel with the legislation of Congress, which is founded on such rules. Thus, in England, and in some cases in the United States, the burden of proof is on the importer or claimant, to show a conformity to the law; because he knows all about his own business, and it is supposed there is no hardship in requiring him to prove what others have no evidence about. But the Congress of the United States have, I think wisely, mitigated partially the hardships of that mode of procedure; and in most cases require before the burden of proof shall be thrown on the claimants, there shall be shown probable cause for the prosecution. Therefore, gentlemen, the first inquiry in a case of this kind is, whether probable cause for the prosecution has been shown.

Now, probable cause does not mean that the cause is to be decided in favor of the party who has instituted it. That would be nothing; the case would then stand where it was before. It means that there must be such reasonable ground of suspicion or doubt, as to warrant the investigation in question; and it does not mean that the officer who made the seizure was right or wrong. I have succeeded, I suppose, by this time, in getting those skirmishing views out of the case, at least for the present jury. The question is not whether Mr. Blodget in one city, or Mr. Phillips in another city, was right, or what their motives were, or whether they knew anything about it, or whether they

knew more or less than others, or whether they (if you please, gentlemen), although I see no ground for the remark here, had wrong motives. That is not the question. The question is, whether the evidence adduced at the trial shows now that there was probable cause for the prosecution, whether they knew it at the time of the seizure or not. You are to transport all these questions from the wharf, the Custom House, the Coffee-house, and the Exchange into the tribunals of justice.

You are to inquire whether, upon the evidence adduced here, there was probable cause for the prosecution; not on the grounds the officers alleged it, when they made the seizure, but on the grounds alleged by the United States now. For instance, suppose the officers of the Government had seized these goods for a wrong reason, that would be scouted out of court, but that the law officer of the Government had seen a better reason, and understanding his duty had libelled it for a reason that the officers who seized it never thought of: that would be a good prosecution if the ground was sustained, and if probable cause at the trial was shown for the prosecution on the ground then alleged. Then the burden of proof would be thrown on the claimants; because the question is not what Mr. Phillips, or Mr. Blodget, or Col. Cake, or any one else thought, or whether they were right or wrong, but whether the goods were forfeited, not for their reasons, but for the reasons which are before you and upon which you alone are to decide.

The question connected with the decision as to whether there be probable cause or not, is wholly for the Court, and the jury have nothing to do with it; and that is the part of the case which I take on my own responsibility, therefore, having thus prefaced it, having, on the one hand, no desire to usurp what does not properly belong to the Court, and on the other hand no unwillingness to assume responsibility where it is imposed under the law. I say, with this preface, I have no doubt whatever that there was probable cause for this prosecution; and I incline to think that it was a prosecution which under the peculiarities of this law, the peculiarities of the subject-matter and the probable results of what is intended to be the purposes of legislation, it was eminently proper to institute and to have investigated by the court and jury.

I therefore decide that there was probable cause for the prosecution, and will so certify, subject to the right of the claimants, if so advised, to move to have that certificate stricken off

as to the record, but not to alter it for the purpose of presenting to a jury.) I will state my reasons very briefly.

Here is an article as to which, as a matter of common-sense, a revenue-officer looking at that law would be entitled to say that if there was in the article called molasses more than one-half of the article which it was intended to assess a higher duty upon, it at least required serious investigation. Now, that is enough for me. If I am wrong, gentlemen, the responsibility is not upon you. I think that that alone, without going farther, is probable cause for the prosecution, and that if it were otherwise the consequences would be most disastrous. Meritorious officers willing to take the responsibility and to encounter the odium as to conflicting statutes, would be hunted down, and prosecutions would never be instituted if there was not this fair and liberal view of the subject. To come down to small analogies, the most malicious prosecution that ever was instituted to blast a man's character, to impute to him the stealing of a watch or any small piece of meanness, with all the malice that could prompt an enemy, will be nevertheless excused if there be probable cause. But I will not go further than familiar analogy.

Well, now, when we come to the administration of a system like this, where all the officers of revenue collection cannot see or know what is three thousand miles, perhaps, or twelve thousand miles, or, as in this case, one thousand miles, from the local seat of investigation, they know nothing except from results, they take their information necessarily from prejudiced quarters; they cannot otherwise get it; or more probably, perhaps, the doors of investigation are, in a great measure, closed upon them just where they ought to find the most light. If any other rule were applicable, the system could not be enforced at all.

Now, the burden of proof being on the claimants, have they relieved themselves of that?

Gentlemen of the jury, you evidently understand the whole of this evidence. The testimony on the part of the claimants has been abridged. It went very far. The number of witnesses, the weight of their opinions, various, but some of them entitled to weight, to say nothing of some conflict in the views, perhaps, of the evidence for the prosecution; the evidence had gone so far that I took upon myself the responsibility, which I do not think was out of place, in suggesting that accumulative evidence,

mere corroborative evidence might, perhaps, be dispensed with. I would not have suggested that, if I had not thought that the weight of evidence was, unless met by countervailing evidence of the United States, such as could not be overcome. In other words, upon the question whether the claimants have relieved themselves of the burden of proof, so far as there is any matter of law involved—the matter of fact is for you—I should say they had; meaning, however, that if you take the same view of the evidence that I do, they have entirely relieved themselves of the burden of proof.

There were two ways in which they could have done this. One, and the most satisfactory, perhaps, was to have proved exactly what they did in Cuba. Well, I cannot say they have not; that is a matter for you, not for me. But I do say, that if they had done nothing more than they have proved by the witness who saw the work at their plantation, I should have thought that the jury would have expected something more. But then I may be mistaken, because I have not so critically gone over that evidence, which is in writing, as I would have done if the cause had turned upon it. All I can now say is, that it may be that that evidence which, if entirely sufficient, would put an end to the case, was not so sufficient but that they have had to add proofs from New York and Philadelphia as to the market character of the commodity. That is all I mean. I will repeat, perhaps, and if there is repetition you will excuse it; for I wish it distinctly understood I do not mean to cast an imputation that there is anything kept back. All I mean is this: if they had proved that this was, in fact, the absolute residuum of the sugar cane syrup, after they had extracted from it fairly the quantity of sugar in the ordinary processes which they used, then I think there would have been on that evidence an end of the case to the prosecution, if the jury believes the manufacturer acted in good faith. But that would require very distinct proof; not, according to my judgment, the evidence of the captain of the vessel who paid his occasional visit to the plantation and who thus saw it, nor the clerks—if I rightly understand the evidence; but perhaps, I do not—who was a mere passer between the counting-house in the city and the plantation in the country; but the parties who were eye-witnesses, who had actually seen the sugar plantations and knew all about how the processes were conducted, in analytical detail.

But supposing that evidence not quite sufficient, all that results from it is that they must give further data as they have done, taking the other alternative of satisfying you as to the character

of the commodity. Well, if the weight of the evidence depends upon the number of the witnesses, which it does not, of course the case of the claimants is made out; but that is not the way to estimate evidence. It is a matter in which opinions are to be weighed; and there might be one man whose judgment would be so vastly superior to the more trivial testimony of the twenty or the hundred, that you would take the testimony of the one against the testimony of the twenty or the hundred. But this does not appear to me at all to be the character of the evidence adduced by the claimants. They have, it seems to me, adduced evidence from every source whence it could be reasonably expected, the grocer, the refiner, the chemist, the artisan; in short I know not where to complete my analysis without knowing more than I do of the subject. It seems to me, however, so far as I know—you know a great deal more than I do—they have gone into every branch of detail; and what is the result? why, that this is a residuum of the process under which there has been crystallization carried to the extent which would place this article within the meaning of the law.

If you believe that, there is an end to the prosecution, and your verdict should be for the claimants.

This is all I have to say about the case, except that I invite from you a verdict against my charge, if you think my charge tends to any conclusion, according to your own independent judgments, if you have a judgment that is contrary to mine; because I believe that this is a case in which nine if not twelve of the Jurors know a great deal more about it than the Judge or Counsel can know, and perhaps many of you as much as any of the witnesses.

After the charge of Judge Cadwalader, the jury retired, but subsequently came into Court, when the foreman asked the judge to read the Act of Congress, which Judge Cadwalader then did, and stated that the weight of the evidence was clearly with the claimants. So much so that if a verdict was rendered for the United States he would feel called upon to set it aside. The jury after a few moments consultation, without retiring, rendered a verdict for the claimants.

M. L. SIMONS,
Phonographer.

After the trial was concluded, we were furnished with the following certificates:

Charles Ottens, residing at No. 246 North Eighth street, being duly sworn, doth depose and say, that I am now engaged in the manufacturing of candy from sugar and molasses. From my occupation and experience I have a perfect knowledge of molasses and the different qualities of this article. For five years I was in the employ of George L. Broom, who was at that time doing business in Bread street, boiling molasses and making sugar from same.

During the month of May last, George L. Broom called several times at my store, and asked me to go with him to the wharf and look at a cargo of molasses then on the dock. Went with him to Arch street wharf and looked at a number of casks which were shown to me by Broom. This cargo, as I was informed, was a part of the cargo of the brig "Lilla." I was asked by Broom if I considered the article to be molasses, and I replied that I did. Was also taken by Broom to the vaults under the Custom House and shown a lump of sugar, and thence to the Appraiser's office, and shown there samples of molasses, the same, I should think, as were exhibited in the Court-room by Blodget and Broom.

When on the wharf I examined some twenty or more hogsheads; did not see anything unusual in the appearance of the molasses. In a few casks found more or less sugar, but not so much as I have frequently seen in molasses of good quality. Broom was particular in showing the hogsheads containing the largest amount of deposits of sugar.

Mr. Blodget was present when I went to the Appraisers' office in the Custom House, and he asked me to say what the article was that had been shown to me. He told me that Mr. Davis could make eight pounds of sugar from each gallon—that Mr. Davis had tried it.

I told Broom and Blodget that I was not worth much, but I would bet them all that I was worth and my neck also, that Mr. Davis could not make eight pounds of sugar from each gallon of this molasses.

From the examination which I made, I was fully satisfied that the article was nothing but molasses, and not syrup of sugar, nor concentrated cane-juice.

I was not subpoenaed as a witness for the government.

CHARLES OTTENS.

Sworn and subscribed before me, this Thirtieth day of December, A. D. 1868.

PETER HAY,
Alderman.

STATE OF NEW YORK,

City and County of New York.

} ss :

Edward M. Mundy, being duly sworn, deposes and says, that he is in the employ of Williamson, Griffiths & Co., sugar refiners, at 268 and 269 West street, and has been in said employ some seventeen years. That it is the special duty of this deponent to analyze all samples of sugar and molasses purchased by said firm. That such analysis is made by this deponent by Soleil's polarizing instrument. That on or about the 12th day of May, 1868, a Mr. W. L. Hartshorne, employed in the office of the United States Appraisers at this port, brought to this deponent a certain sample of an article which he desired this deponent to test, representing said sample to be a sample of a cargo then at Philadelphia, upon which a dispute had arisen between the importer and Collector and appraisers at said port, as to what the article really was; said Hartshorne desired this deponent to test and certify what the article was in the judgment of this deponent. This deponent further swears, that he carefully tested and analyzed said sample by said process, and the result was as follows, to wit: Density by Beaumé Sac: 37 per cent., and showed 56½ per cent. of saccharine matter, and in the judgment of this deponent it was what is known in trade and commerce as molasses of a good quality, but not equal to the best quality of Porto Rico molasses.

EDWARD M. MUNDY.

Sworn to before me this 5th day of February, 1869.

A. R. CULVER,
Notary Public.

Note.—Charles Ottens and E. M. Mundy, were subpoenaed as witnesses, but were not called.

The conclusion of the trial did not place us in the possession of the excess of duties which we had paid, nor of the cargo *ex* "Central America."

It was our intention to have contested the granting of the certificate of probable cause to the Collector, but finding that this would necessitate another suit, with the probability of having the excess of duties locked up in the Treasury, and also detaining the cargo of the "Central America," until the suit was decided; we concluded that it was not desirable to contest this question, and it was therefore abandoned. Judge Cadwalader granted the certificate of probable cause, which, if ever, should have been withheld in this case.

We addressed the following notes to the Collector :

PHILADELPHIA, *December 23, 1868.*

JOSEPH W. CAKE, Esq.,
Collector of Customs,
Port of Philadelphia.

SIR:—In view of the result of the trial respecting the cargo of the "Lilla," we beg to know,

First.—Are you prepared to refund to us the difference between the duty of 2½ cents per lb., paid to you under protest on the thirtieth day of May last, and the duty on molasses of eight cents per gallon, with interest and costs?

Second.—Will you now allow us to enter the cargo per "Central America," as molasses, paying duty accordingly?

Third.—It having been clearly shown on the trial, not only that the article was *bona fide* molasses, but that the information on which you acted in seizing it, as well as the testimony on which the seizure was attempted to be justified in Court, were false. Will you or the Treasury Department pay us the expenses and compensate us for the damages sustained incident to the seizure?

Yours, sincerely,

MADEIRA & CABADA.

PHILADELPHIA, December 23, 1868.

JOSEPH W. CAKE, Esq.,

Collector of Customs,

Port of Philadelphia.

SIR:—Will you please furnish us with a copy of the Hon. H. McCulloch's letter to you, dated June 8th, 1868, relating to form of entry for cargo of *ex* schooner "Central America."

Your attention to the above will oblige

Sincerely yours,

MADEIRA & CABADA,

To which he replied:

CUSTOM HOUSE, PHILADELPHIA,

Collector's Office, December 24, 1868.

SIRS:—In reply to your letter of the 23d inst., I desire you to furnish me with the entry, proposed by the broker, in the case of the schooner "Central America," as it is desirable to have all the papers together in this case.

Very respectfully,

J. W. CAKE,

Collector of Customs.

Messrs. MADEIRA & CABADA,

Merchants, Philadelphia.

To this we returned the following answer:

PHILADELPHIA, December 26, 1868.

JOSEPH W. CAKE, Esq.,

Collector of Customs,

Port of Philadelphia.

SIR:—In acknowledging receipt of yours of 24th inst., we would respectfully inform you that we have no form of entry to propose for the cargo molasses *ex* "Central America," until we have had your reply to our communication.

Awaiting your early attention to same,

We are, yours sincerely,

MADEIRA & CABADA.

On the 1st of February, 1869, we presented the following to the Secretary of the Treasury:

PHILADELPHIA, January 30, 1869.

HON. H. McCULLOCH,

Secretary of Treasury,

Washington.

SIR:—On the 31st of March, 1868, Messrs. Venecia, Rodriguez & Co., of Manzanillo, Cuba, shipped to our consignment, per brig "Lilla," — Day, Master, a cargo consisting of 448 hhds. 83 tierces of molasses. The vessel arrived at this port on the 21st of April, and discharged cargo. On the 23d day of said month of April, we made an entry of said molasses at the Custom House for warehouse; a copy of the entry is submitted herewith, marked Exhibit A. The sale of this molasses was placed in the charge of Messrs. Field & Keehmlé, merchandise brokers, who took samples from the cargo, exposed the same openly for sale, inviting the attention of the buyers to the cargo; and after some days brought us an offer for the invoice, of sixty-four (64) cents per gallon at four months' credit. We closed the sale on the 2d of May, to Messrs. Rogers & Mitchell, on the above terms, and this before we had an intimation that the officers of the Customs had raised any question as to the cargo being different from what it was represented in the invoice. The price obtained for this molasses was not remarkable, as good Porto Rico was selling at the same time, for from seventy (70) to seventy-five (75) cents per gallon.

On the sixth of May, we received a letter from Jos. W. Cake, Collector, "stating that the cargo by the brig 'Lilla' had been 'appraised by the Public Appraisers of the District, in accordance with law. It is declared by them to be 'concentrated cane-juice,' the duty on which is two and one-half cents per pound. If you appeal from the action of the Appraisers, it 'will be necessary to do so within twenty-four hours.'"

We had several interviews with the Collector, without arriving at any satisfactory conclusion, and we endeavored in the meantime to withdraw said molasses from warehouse and pay the duties on the same as molasses, but were prevented from so doing.

On the 9th of May we received a notice from the U. S. Marshal, that the cargo was in his possession. The District Attorney libelled the cargo, but did not call it "concentrated cane-

juice," as this is a *non-enumerated article*, and not *liable to seizure or forfeiture*, but named same in libel as "syrops of sugar, and of sugar-cane and cane-juice."

After some days of delay and detention, the Court appointed six appraisers to value the cargo; the Judge of the Court directing them not to designate the article by any name, but only to return its value. These appraisers, in obedience to the writ, made a return to the Court, valuing the cargo at sixty-four (64) cents per gallon, excepting 18 hhds., which the Collector of the Port gave the Appraisers to understand were not to be included in the estimate. Subsequently, four (4) of these Appraisers furnished us with a certificate, affirmed to before U. S. Commissioner Aubrey H. Smith, that they "considered the 'Lilla's' cargo to be molasses, but not of the best quality." The other two appraisers, upon the trial in Court, testified to the same effect. In addition to this, we have the certificates of a number of the principal merchants of this city, stating that in their opinion, from examinations, the cargo was molasses. We also had a careful analysis made of the molasses by a practical and competent person, who confirmed the above opinion. Copies of these documents herewith.

On or about the 30th of May, we gave bonds in Court for the appraised value of the cargo, amounting to near \$40,000; paying on that date the extra duty imposed of two and one-half ($2\frac{1}{2}$) cents per pound under protest, taking possession of our cargo and delivering the same to the purchasers. The excess of duties amounted to \$11,232 38, gold. From the long exposure on the wharf, rolling the hhds. over in reweighing, regauging, &c., the loss in gauge when delivered to the purchasers, was equal to near two gallons on each hhd; in addition to this, we had to pay a heavy bill of expenses for Marshal's charges, watching, wharfage and recoopering. At the time, we made formal protests to the Collector against the whole proceedings, forms of entry, &c., with appeals to the Treasury Department.

The case was down for trial on the 6th of July; but owing to the absence of a material witness we were compelled to ask for a postponement. On this occasion the District Attorney amended his libel, calling the 430 hhds. and 33 tierces, as "containing syrops of sugar, and of sugar-cane and cane-juice, concentrated molasses and concentrated melado." The trial was then to have been called on the 13th of August, but the District Attorney postponed it until the 23d of November; for which time we prepared ourselves at considerable expense, by bringing witnesses here from other cities, but the District Attorney

procured another postponement until December the 14th, when the case came finally to trial. Upon the trial it was so conclusively proven by the evidence of importers, Appraisers of the Customs at New York, Philadelphia and Baltimore, and by chemical analysis, that the article under seizure was clearly molasses in every sense of the term, that the case was submitted to the jury without argument by counsel, and thereupon a verdict was rendered in our favor. Some of the witnesses subpoenaed by the Collector, unhesitatingly pronounced the cargo to be molasses.

At the suggestion of Judge Cadwalader, on the ground that we had proved our case fully, and any additional evidence would be merely cumulative, we closed our testimony, while we had additional and very important evidence which we wished to have introduced. We would refer you to the accompanying documents for further and more particular information in relation to the above statements.

In addition to the cargo *ex* "Lilla," we received another cargo of molasses from Manzanillo, by the schr. "Central America," part of the cargo shipped by Messrs. Venecia, Rodriguez & Co., and part by Messrs. Ramirez & Oro, both respectable mercantile houses doing business in Manzanillo, Cuba. This cargo arrived here on or about the second of June last; but in consideration of the difficulties we were then experiencing with the cargo *ex* "Lilla," it was not deemed prudent that we should risk the seizure of the "Central America's" cargo. We therefore offered two forms of entry to the Collector, together with the gold for duties at the rate of eight (8) cents per gallon; and also made an offer of paying a duty of two and one-half ($2\frac{1}{2}$) cents per pound under protest, so as to get possession of the molasses, and save our correspondents from loss. These entries were refused; also the proposition to pay a duty of two and one-half ($2\frac{1}{2}$) cents per pound, under protest. At or about the same time, we made a copy of a letter received by the Collector, said to have been signed by you, in which it is stated "that we 'were to be permitted to make an entry of the 'Central America's' cargo as 'cane-syrup,' 'under protest,' and 'that by making such protest the rights of the parties in the 'premises are not to be in any manner prejudiced thereby.'" We have made a personal, and sent a written application to the Collector for a certified copy of this letter, but he has not furnished the same to us, although the application was made sometime since. Not being willing to make a false oath under protest, and believing the article shipped by the "Central America"

to be molasses, the same article as was shipped by the "Lilla," we had no alternative left us but to allow the Collector to keep the cargo, thereby losing an opportunity for disposing of the same to advantage. This cargo was left on the wharf in charge of the officers of the Customs an unusually long time, exposed to the hot sun, causing an injury to the molasses, depreciating it in value, and incurring very heavy expenses for wharfage, cooperage, storage, portorage, &c., and also a great loss in gauge. In addition to all this, the molasses when landed could have been sold from the wharf at (62) sixty-two cents per gallon; now, if offered for sale, possibly not over (50) to (52) fifty to fifty-two cents per gallon could be obtained for it.

Upon the conclusion of the trial before mentioned, we objected to the granting by the Court, of a certificate of probable cause. We have since given our consent that such a certificate should be granted. Under these circumstances we most respectfully request that directions may be given to cause our suit for the excess of duties paid on the cargo of the "Lilla," to be discontinued upon payment of said excess of duties, with interest and actual costs and disbursements. And also that we be permitted to make entry and pay the duty upon the cargo *ex* "Central America" as molasses, upon its actual gauge.

Very respectfully,

MADEIRA & CABADA.

Collector Cake furnished us with the following copies of letters, addressed to him by Mr. McCulloch:

TREASURY DEPARTMENT,

February 4th, 1869.

SIR:—A communication has been received from Messrs. Madeira & Cabada, dated the 30th ult., proposing to discontinue their suit for the recovery of an excess of duties exacted and paid upon an importation of molasses per the "Lilla," entered at Philadelphia, April 23, 1868, on the Department's refunding said excess of duties, with interest, etc.; and also, requesting that they may be permitted to enter as molasses, the cargo of the "Central America," now in your possession, under general order, and concerning which, an action of trover is now pending in the Circuit Court.

In regard to the former proposition, as the District Attorney states, that the merits of the question involved in the suit are covered by the verdict and the Judge's certificate of probable cause in *U. S. vs. 448 hogsheads and 33 tierces of cane-syrup*, you will please, upon the plaintiffs filing with you a proper certificate of discontinuance, forward the same to this Department, together with the usual certified statement for refund.

Concerning the cargo per the "Central America," you will please inform me whether the cargo and the question involved in its entry, are similar in all respects to the cargo per the "Lilla," and the question raised upon *its* entry.

I am, very respectfully,

H. McCULLOCH,
Secretary of the Treasury.

JOSEPH W. CAKE,
Collector of Customs,
Philadelphia, Pa.

TREASURY DEPARTMENT,

February 17th, 1869.

SIR:—Referring to my letter of the 4th instant, to your answer of the 13th instant, and also to a communication received from U. S. Attorney O'Neill, dated the 4th instant, I hereby authorize and direct you to allow to be entered as *molasses*, the cargo of the vessel "Central America," now in your possession, under general orders, and concerning which, a suit of trover, number 3, October Session of 1868, is now pending in the Circuit Court, Eastern District of Pennsylvania; upon the plaintiffs in said suit, Messrs. Madeira & Cabada, filing with you a certificate of discontinuance thereof, to be forwarded to this Department; and upon their waving in due form, all rights of action against any officers of the Government, which may have in any manner accrued to them on account of the detention of the above mentioned cargo, or any other account connected with the molasses or the importation of the same.

I am, very respectfully,

H. McCULLOCH,
Secretary of the Treasury.

To the Collector of Customs
at Philadelphia, Pa.

CUSTOM HOUSE, PHILADELPHIA,

Collector's Office, February 18, 1869.

Official copy respectfully furnished Messrs. Madeira & Cabada,
for their information and guidance.

J. W. CAKE,
Collector.

On the 22d of February, we wrote the Secretary of the
Treasury as follows:

Philadelphia, February 22, 1869.

HON. H. McCULLOCH,
Secretary of Treasury.

SIR:—Herewith please find enclosed a certified statement for
a refund of duties upon the importation of molasses made by us
per brig "Lilla," which has been sent to us by the Collector of
Customs, to be verified. We observe that no interest has been
allowed upon the statement, which we understand should be
allowed as is usual in such cases, and which is authorized by
you in your letter to the Collector, under date of February 4th.

We respectfully ask that the statement may be amended
accordingly. In our petition we asked for a refund of excess
of duties, with interest, &c.

In regard to the cargo of molasses, *ex* "Central America,"
we respectfully ask that we may be allowed to enter the cargo
upon its actual gauge.

Very respectfully,
MADEIRA & CABADA.

In reply to the above we received the following:

TREASURY DEPARTMENT,

February 24, 1869.

GENTLEMEN:—Your letter of the 22d inst., has been received,
complaining of the omission of interest from the certified state-
ment, prepared by the Collector, for a refund of excess of

duties exacted on molasses belonging to you, imported per
"Lilla," and asking to enter the cargo of the "Central
America," by actual gauge. The enclosure transmitted there-
with has been sent to the Collector, with instructions to insert
the date of payment, from which interest will be allowed on
settlement here.

In respect to the cargo of the "Central America," it is under-
stood to have been hitherto in public store as unclaimed; such
being the case, the duty, being specific, will be assessed only upon
the quantity ascertained by actual gauge at the time of making
entry; though the entry should conform to the particulars indi-
cated in the invoices accompanying it.

I am, gentlemen,

Very respectfully,

J. F. HARTLEY,

Acting Secretary of Treasury.

Messrs. MADEIRA & CABADA,

Philadelphia.

On Saturday the 27th March, we received the following:

TREASURY DEPARTMENT,

Office of Commissioner of Customs,

March 26, 1869.

SIRS:—In due course of business a draft will be transmitted
to the Collector of the Customs at Philadelphia, Pa., for the
payment of your claim for the return of the excess of duty by
you paid at that port, May 30th, 1868, on molasses, with
interest, until date of repayment.

Very respectfully,

N. SARGENT,

Commissioner.

Messrs. MADEIRA & CABADA,

Philadelphia, Pa.

We then called at the Custom House, when the following copy of a letter was furnished to us:

TREASURY DEPARTMENT,
OFFICE OF COMMISSIONER OF CUSTOMS,
March 23, 1869.

SIR:—On receipt of a draft for \$11,232 38 coin, and \$564 98 in U. S. Treasury notes, you are directed with it to satisfy the claims of Messrs. Madeira & Cabada, for the return of excess of duty by them paid at your suit, May 30, 1868, on molasses, with interest until date of repayment.

Very respectfully,

N. SARGENT,
Commissioner.

J. W. CAKE,
Collector of Customs.

On the 27th March we received \$11,232 38 coin, and \$564 98 currency, for interest.

The \$11,232 38 coin, cost May 30, 1868—gold	
at 139 $\frac{1}{8}$,	- \$15,711 29
Interest on above from May 30, 1868, to March	
27, 1869,	788 18
	\$16,499 47

The \$11,232 38 received March 27,	
1869—gold at 131 $\frac{1}{4}$, produced	- \$14,742 50
Interest received,	- 564 98
	15,307 48

Showing a loss on the excess of duties demanded	
from us, of	- \$1,191 99

CONCLUSION.

The conclusion from all the facts of this case, as disclosed in the evidence, is, that merchants may be seriously injured in their business and reputation by revenue and other officers of the Government without any redress whatever. Upon the bare suspicion of an ignorant, or it might be a corrupt or malicious officer, any of our importers may be charged with attempting to defraud the Government; have their property seized and libelled; be subjected to the odium, losses, and vexations of a suit for forfeiture. and finally, after a successful defence, be denied any suitable satisfaction.

The report of the trial shows that we were not only denied any proper reparation of the damages which we suffered in consequence of a groundless and abortive prosecution, but that we were even compelled to relinquish all right of action for such damages against any officer of the Government, in order to obtain a return of the excess of duties paid by us under protest, on a cargo of molasses which had been appraised as "Concentrated Cane juice," and attached as "Syrups of Sugar or of Sugar cane and Cane-juice." The verdict in our favor should at once have placed us in possession of our property, including the "Central America's" cargo, the excess of duties paid on that of the "Lilla," and the costs and damages incurred in the suit.

The expenses of defending and preparing the case for trial, with storage, insurance, interest, and other charges, amount to a very large sum; besides the outlay by our consignors for fees and other extraordinary expenses; to say nothing of the trouble to which we were put in defending their interests, and the discontinuance of consignments to us, because of the difficulties with which we were then contending. Nor is this all the mischief that was occasioned, in prosecuting a suit which would never have been instituted but for the super-serviceable zeal of an official who affirmed that a cargo of molasses was a cargo of "concentrated

cane-juice," while totally unqualified, as the result proved, to distinguish either of the said articles from the other. The Government is saddled with the fees of two extra counsel, called in to aid the District Attorney in the case, in addition to the services of Mr. Towle, the special attorney from the Treasury Department, with the sums the National Treasury has paid, or will yet have to pay, for Special Agents employed by Collector Cake and General Appraiser Blodget, to hunt up evidence of frauds which existed only in their imaginations. Besides the actual losses of all parties to the action, who can measure the injury done by this proceeding to our credit, as well as that of our foreign correspondents and friends, and to the commerce of this port, whose revenue officers are allowed to seize and libel cargoes for forfeiture, without any knowledge as to their real nature, and without any legal responsibility, personally or otherwise, for the injury inflicted upon entirely innocent parties.

If, as was declared from the Bench, the motive for such a prosecution is not to be regarded, and the doubt of an inexperienced officer of the revenue, as to the character of a cargo, though unsupported by evidence or by the intelligent opinion of more experienced judges, is sufficient protection to the Collector, entitling him to a "certificate of probable cause," which under the Act of Congress protects him from liability for costs or damages, and leaves the injured parties without redress; then, indeed, is the commerce of the country practically subjected to the discretion of incompetent men, who may, whenever they please, disturb and annoy it in the name of the Government. Collector Cake confessed that the proceedings against the cargo of the "Lilla" was initiated and would be pressed, because the Treasury Department had complained that the officers of the Customs here "had made no seizures!" A seizure, therefore, whether right or wrong, was needed to show that Cake, Blodget, and others, were duly vigilant and active in their respective offices, and the "Lilla's" cargo was victimized accordingly. Service of this kind, if persisted in by officials, and protected by the Government, would in time, leave our port without a single foreign ship or cargo to be so outraged.

The case was not finally tried until eight months after the original seizure; and during all this time, Collector Cake, General Appraiser Blodget and his assistants were manipulating the samples of the "Lilla's" cargo, and preparing evidence to vindicate a flagrant abuse of authority, and verify a false appraisement. At their instigation the Treasury Department wrote to the Consular Agent at Manzanillo, to furnish evidence in the case. The

State Department was also called in to aid, and the Consular Agent was requested to be here and give in his evidence at the trial. The testimony of Mr. Manuel R. Ecay, Consular Agent at Manzanillo, would in fact have been very favorable to us, as may be seen by reference to the certificate signed by Messrs. Caragol, Ecay & Co. (p. 16), of which commercial firm Mr. Ecay is a member. That Mr. Ecay did not come on at the summons from the State and Treasury Departments, was owing to the political disturbances then in progress in that part of Cuba, which made it impracticable for him to leave. Though it is unquestionably a fact that Mr. Ecay's testimony would have been favorable to us, and though letters were exhibited in Court that should have satisfied Mr. Blodget on this point, yet we are credibly informed that representations have been made to the Treasury Department since the trial, by him, that with Mr. Ecay's presence and testimony a verdict would have been rendered for the Government, and the two cargoes would have been forfeited.

The Mercantile Appraiser at this port, and the Examiner of Customs, returned the "Lilla's" cargo as "concentrated cane juice," though the latter afterwards swore on the trial that to the best of his knowledge and belief, at the time he first examined it, the cargo was molasses, and the former stated on the witness stand that he also believed the cargo to be molasses, though he had returned it as "concentrated cane-juice," and would have reconsidered and amended that return, if he had had the opportunity.

On the trial, the structure based on these false returns was attempted to be sustained by the exhibition of samples of the cargo which, that *is the samples*, contained sugar in masses and proportions larger than is found in molasses. And the same revenue officers who had these samples prepared and exhibited them to the Court and jury, in the name of the Government, as fair samples of the cargo, testified to the absurdity, that they obtained at the rate of seven pounds of good Muscovado sugar from a gallon of the molasses in question, by evaporating it in an open pan over a gas-light, and as professed experts they further testified that molasses only contained from 10 to 40 per cent. of cane sugar.

On the other hand, the appraisers appointed by the Court, men of the highest respectability and competency, who carefully examined the whole cargo, Messrs. John Mason, Edward C. Knight, Alfred Kusenberg, and John H. Young, testified that the samples produced in Court on behalf of the Government were fraudulent, the hogsheads of molasses containing no

such masses of sugar. To the same effect was the testimony of several witnesses, including that of all persons who had examined the cargo, other than the Government officers above referred to. While the appraisers appointed by the Court, importing merchants, sugar refiners, and molasses boilers, without a disputing voice, testified that the cargo was unquestionably molasses, and in answer to the absurd assertion that three and one-half pounds of Muscovado sugar had been obtained from a half gallon of this molasses, evaporated in an open pan, Messrs. Rogers & Mitchell testified that they had boiled the whole cargo in the most approved manner, had obtained all the sugar they could from it, after working it over twice, and the product was from $5\frac{1}{4}$ to $5\frac{1}{2}$ lbs. per gallon, and other experts corroborated these gentlemen's testimony, to the effect that such product does not exceed what it is well-known can be obtained from the best molasses.

Nor is there any *bona fide* difference of opinion between the revenue officers on the one hand and the commercial community on the other, as to what constitutes molasses within the meaning of the revenue laws, which would account for, and to some extent excuse the seizure of the cargoes in question. Not only did the testimony in the case fail to develop any such difference, but it was proved by Mr. Isaac Phillips, Appraiser in the New York Custom House for over twenty years, whose special department is sugar and molasses, that Mr. Blodget, whose principal duty as appraiser at large is to see that the revenue laws are interpreted and enforced uniformly, so that the tariff of one port shall not *practically* differ from that collected in others, did, in fact, consult him in regard to the Lilla's cargo, and was told it was nothing but molasses. Samples were also sent to the Baltimore Custom House, and the same answer received. The original samples which were so sent by Blodget to the New York, and by Mr. Hurley to the Baltimore Custom Houses immediately after the arrival of the Lilla, were produced in Court, and the Custom House officers from both said ports testified that it unquestionably was molasses; that Blodget had been so informed when the samples were received; and that at the port of New York many cargoes of the same article had since that date been passed and paid duty as molasses.

Nor is it possible for any revenue officer not grossly ignorant of matters which it is his duty to know, without knowing which, he would be grossly incompetent, and which the Government has therefore made readily accessible to him, to have *bona fide* mistaken the cargo in question, and pronounced it other than

molasses, for the reasons given in justification of the seizure of this cargo. These reasons, as testified by Blodget, were—

1st. That its color was too light.

2d. That its specific gravity being too low.

3d. That its proportion of cane sugar, 56 to 58 per cent., was too great.

4th. The unusual amount of crystallized sugar it was alleged to contain.

As to the color, it is well-known to all persons in the business, that by improvements in the manufacture of molasses, treating it with sulphurous gas and in other ways, the color can be lightened to almost any extent desired; the cargo in question had been so treated, and in fact was not lighter in color than most of the molasses that comes from the south side of the Island of Cuba.

As to the specific gravity and the proportion of cane sugar in the solution—during the administration of President Polk, the late Professor Bache was appointed to examine and report on the subject of the various forms of products of the sugar cane, their relative values and distinguishing characteristics, for the use of the revenue department. This resulted in reports which with the subsidiary reports and statistical information collected by Professor McCulloh, assisted by Professors Booth, Boyé, Mr. Reynolds, and others, comprise an exhaustive treatise on the subject to which they refer. In the tables of analyses of molasses contained in these reports, there are many samples whose specific gravity is lower than what Blodget claimed that the Lilla's cargo was, and instead of the maximum limit of cane sugar in molasses being 40 per cent., as testified by him, there are many samples reported to contain over 60 per cent. And while it clearly appears from this report, that molasses that contained but 40 per cent. of cane sugar would be valueless for boiling purposes, there are no samples of molasses given that contain so low a proportion of cane sugar. Indeed, the lowest to which the hard sugar refiners can reduce the syrups with which they deal, is to about 36 per cent.; after working over the same syrup many times, they sell it, containing still 36 per cent. of cane sugar, in combination with grape sugar, which, however, they have no means of extracting. The Custom House experts are consequently chargeable with absolute knowledge of the fact, that the practical *minimum* of cane sugar in molasses is equal to the amount at which the exigencies of their case required them to fix the possible *maximum*, in order to make out a *prima facie* case of forfeiture.

And as to the alleged unusual amount of floating crystallized sugar, beyond the fraudulent samples which in fact contained it, and the testimony of those by whom these were prepared, there was not a particle of testimony in support of the allegation. Professor McCulloh, in his said report, points out the manner by which the revenue officers can always find with certainty whether the molasses contains an improper excess of floating crystals, by comparing the aggregate weight of the whole cargo with the specific gravity of the liquid, and it is scarcely necessary to add, that the result of such comparison in this case, corroborated the testimony of the other witnesses to the effect that there was no such excess. And yet, on a *prima facie* case being thus made out, the Court interprets the law to be, that the Collector is entitled to a certificate of probable cause, which shields him from costs or responsibility, and leaves us without remedy.

We have reason to suppose that we might have compromised this suit for very much less than it cost us in money, in time, and in mental anxiety and labor. But it was on the intrinsic truth of our case that we relied, and though the odds against it in the contest were fearfully formidable, it yet prevailed.

MADEIRA & CABADA.

PHILADELPHIA, May, 1869.