

Compliments; witness Sharpley Documentary
Exhibit (of the title Page of the second volume of the
German handbook [Arzneimittellehre] and of the
first two paragraphs of the article contained there-
in in Sanscrit, with a translation of the same,
and of the rest of said Article as contained in Re-
spondent's witness Pfeiffer Exhibit).

Daniell C. Coolidge

Special Examiner.

Handbuch
der
gesammten arzneimittellehre
mit besonderer Rücksichtnahme
auf die
Pharmacopoe des Deutschen Reiches
für
Aerzte und Studierende
bearbeitet
von

Dr. med. Theodor Husemann

Professor in Göttingen

In zwei Bänden.

Zweiter Band

Berlin 1875

Verlag von Julius Springer

Moubrijouplatz 3.



Radix Saponariae; Seidenwurzel.

Die officinelle Seidenwurzel stammt von uns bei uns an Rhein und Neckar wachsenden Seidenkraut, *Saponaria officinalis*, sie ist zu der Familie der Caryophyllaceae gehörender Pflanz, welche in allen ihren Theilen, besonders aber in der Wurzel, in durch seine Eigenschaft, mit Wasser eine schäumende Lösung zu geben, ausgezeichnetes Glykosid, das Saponin, enthält.

Die Seidenwurzel besteht gewöhnlich aus der jüngeren, cylindrischen, einfachen Pfahlwurzeln, welche entweder ganz und in Bündel zusammengebunden, oder zur Erleichterung der Trocknung der Längs nach gespalten und lose, im Handel vorkommen und sich leicht durch ihre schön braunroth längsrundliche, mit äusserst kleinen Narben oder Warzelsaum versehene Aussenseite und ihren dichten, glatten Bruch charakterisieren. Auf der Bruchfläche ist die dünne, weisse homogene Rinde durch den bräunlichen Cambiumring von dem homogenen, citrongelben, im Centrum weissen und markartigen Holz getrennt. Die Wurzel ist ohne Geruch, schmeckt anfangs süsslich bitter, später

anhaltend scharf und kratzend und
bewirkt Zusammenlaufen von Speichel
im Munde, weshalb sie auch als Speichel-
wurzel bezeichnet wird. Statt der
Pfahlwurzel kommen in Handel auch
die Theile der gleich dicken und gleich
geächteten aber unartigen Wurzelstöcke vor.
Man unterscheidet die Eisenwurzel als
Radix Saponariae rubrae von der als
Radix Saponariae albae bezichneten
Wurzeltheilen von *Melastomum munda-*
bae Schk. und *M. rubrae* Ehrh. sowie
von der Strohdickwurz oder *Asperula*
officinalis, Rad. Sap. *Saponariae*, die 1/2-
Zoll dick, frischen Wurzeln von
Syringia *officinalis* L.

[For the rest of the foregoing
article, in the original text, see p. —]

Hand-Book
of the
Whole Materia Medica,
with especial regard to the
Pharmacopœia of the German Empire,
for
Physicians and Students;
Edited by
Theodore Museman, M.D.,
Professor at Göttingen.
In two volumes.
Second volume.
Berlin, 1875.
Printed by Julius Springer,
Königsplatz, 3.

Radix Saponaria - Soaproot.

The officinal comes from the soapwort, Saponaria officinalis (L.), growing on the banks and in the hedges near us. It is one of the plants of the order Caryophyllaceæ; of which all the parts, but more particularly the root, have the peculiarity of giving with water a frothing solution.

This arises from a contained Glucoside, saponin.

The Soap root, as found in the market, consists usually of the young, cylindrical, simple tap roots; which are either whole and bound in bundles or, to facilitate the drying, split lengthwise and loose: and such are easily distin-

quished by their beautiful brown red, length-
wise wrinkled, with very small scars, or root-
fiber ~~marked~~ ^{marked} surface, and their close even
fracture.

On the fractured surface, we can see the thin
white homogeneous bark, separated by the
brownish cambium ring from the homo-
geneous citron-yellow; in the centre, white
and pitted wood.

The root is without smell, tastes first sweetish
bitter, but later continuously sharp and scraping;
and produces salivation; whence it is also
called spitroot.

Instead of the Kap roots, there are also found
in commerce some of the like thick and like
colored but gnarled root-stocks. We distinguish
the soap roots, as radix saponaria rubra, from
radix saponaria alba (which consists of the
roots of Malandrinum sylvestriæ Röhl and
M. pratense Röhl), as well as from Spanish or
Levan's soap root (Radix saponaria levantica -
the $\frac{1}{2}$ - 2 in^{ches} thick, foot-long roots of the Gyps-
ophila Strathium, L.).

Saponin, which is found in a great num-
ber of plants of the Caryophyllaceæ, as for ex-
ample in the Corn Cockle (Agrostema siliquæ), also
in the Senega root, in the Monesia and in the
so called Panama bark, has the formula
 $C_{32} H_{54} O_{18}$; and is a white amorphous neutral

powder; which has at first a sweetish and afterwards a persistent sharp and scratching taste, and when placed on the membrane of the nose gives rise to violent sneezing. It dissolves with difficulty in cold spirits of wine, not at all in ether, easily in water. The aqueous solution, containing only the $\frac{1}{1000}$ part, still foams, on shaking, like soap water.

On standing exposed to the air, white flocks are precipitated, and it disengages carbonic acid gas. Dilute acids split saponin into sapogenin and glucose. By treating for a shorter time, intermediate products are produced. (Rocheux).

Soap root is not used according to the physiological action of the saponin; on the contrary its use, like that of sassaaparilla, is purely empirical.

Saponin acts sharply as a local irritant; and moreover paralyzes the various parts of the nervous system and muscles. It varies in the intensity of its poisonous action, according to the source from which it is derived. That from the corn-cockle is stronger than that from the Panama bark; the latter is stronger than the glucoside from the Senega root (Pelikan).

The man, doses of from 1 to 2 ^{decigrammes} ~~grains~~, cause a tendency to cough and a secretion of mucus, for several hours. (Schnoff.) Upon wounds or mucus membranes, it causes sharp pains; and, after some hours, a plastic exudation.

The observations of Pelikan on the various kinds of saponin are of interest; showing the benumbing influence upon the spot of application, combined with the diminution of the electric irritability of the nerves and muscles.

Ligature of the vessels and cutting the nerves retard this local anaesthesia.

Unfortunately the inflammatory action of the saponin on the place of application does not permit its therapeutical use in man.

✓ Saponin, taken up in the blood, has a paralyzing action on the muscles and nerves; and affects in a peculiar manner the nerves of the heart, ^{not only} paralyzing the terminations of the vagus and the inhibitory centres, but also the nerves of acceleration originating from the sympathetics; and finally causes the heart to stand still.

Digitalis causes, in cases of poisoning by saponin, acceleration of the strongly retarded action of the heart, and strengthens the systole of the same; at the same time, it removes the lessening of ^{the} blood pressure which is such a striking characteristic of the

action of saponin.

Before paralysis of the heart takes place, the muscular coats of the intestines are also paralyzed.

Further, saponin works quickly upon the vasomotor centre; to specialize, exciting at first, and then quickly paralyzing: ~~disorganizing~~ the centre of respiration; which is paralyzed suddenly by large doses, and gradually by small.

Frequency of respiration and temperature fall considerably, in poisoning by saponin.

Clonic and tonic spasms observed in such cases seemed to be caused by disturbances of the functions of the heart and respiration.

Yet the application of saponin to the spinal cord of the frog creates, at first, tetanus; afterwards paralysis, passing from the centre towards the periphery. The state of the pupil is inconstant; but, after large doses of saponin, it invariably appears inert and disinclined to dilate.

In the intestines and stomach, saponin produces inflammatory redness. Ptyalism and an increase of other secretions are not produced by it.

These physiological effects, shown by experiments made by H. Köhler, seem to point to the employment of saponin as an

antipyretic, but thus far it has not been used as such.

Dr. Ange says he used it with success in uterine hemorrhages, in doses of 0.15 grammes.

Radii saponaria is mostly used in connection with other vegetable antidiuretics, inwardly, in decoction of 1 to 10 or 1 to 20, in doses of 10 to 15 grammes per day; and is generally ordered in the form of the root.

Formerly it was also used as an ingredient in Kanpf's visceral injections.



Circuit Court of the United States,

District of Mass., *May* Term, 1878

IN EQUITY.

Horace L. Bowker Complainant
Gustavus D. Dowd Defendant

DECREE

FOR PERPETUAL INJUNCTION AND FOR REFERENCE TO A MASTER.

This cause came on to be heard at this *May* Term, *1878* upon the pleadings and proofs, and was argued by counsel for the respective parties:

Aud non

upon consideration thereof, to wit: *Oct. 9, 1878*, It is ORDERED, ADJUDGED AND DECREED, as follows, viz., that the Letters Patent referred to in the complainant's bill, being Letters Patent of the United States, granted unto *Horace L. Bowker of Boston Massachusetts for Improvement in Syrops and Mineral Waters numbered 193,476 and* dated *July 24, 1877* is a good and valid patent; and that the said *Horace L. Bowker* was the original and first inventor of the improvement described and claimed therein; and that the said defendant *has* infringed the said patent, and upon the exclusive rights of the complainant under the same.

And it is further ORDERED, ADJUDGED AND DECREED, that the complainant recover of the defendant the profits which he *has* received or made, or which have accrued to him from said infringement by the manufacture, use or sale of the improvement described, and secured by said Letters Patent at any and all times since the *said July 24 1877* and, in addition thereto, the damages which the complainant *has* sustained thereby.

And it is further ORDERED, ADJUDGED AND DECREED that it be referred to *Henry L. Hallett Esq.* a master of this Court, to take and report to the Court an account of the profits which the said defendant *has* received, or which have arisen or accrued to him from the infringement of the patented invention by unlawfully making, using or vending the same as alleged in the bill, and to ascertain and report the damages, if any, in addition to the profits, which the complainant *has* sustained thereby since the *24th* day of *July* A. D. 187*7*

And it is further ORDERED, ADJUDGED AND DECREED, that a perpetual injunction be issued against the defendant according to the prayer of the bill.

And it is further ORDERED, ADJUDGED AND DECREED, that the complainant recover of the defendant his costs of suit.

By the Court, *John G. Sibley* Clerk.

919
Grace F. Washburn

William D. Hunt

Stevens
Oct 9, 1848

United States Circuit Court,
District of Massachusetts.

Horace L. Gowker }
vs. } In Equity.
Gustavus D. Dows }

Whereas, in the above entitled cause, an interlocutory decree was entered on the ninth day of October, 1878, whereby it was ordered, adjudged and decreed, among other things, that it be referred to a master of this Court to take and report to the Court an account of the profits which the said defendant has received, or which have arisen or accrued to him, from the infringement of the patented invention, by unlawfully making, using or vending the same, as alleged in the bill, and to ascertain and report the damages, if any, in addition to the profits, which the plaintiff has sustained thereby, since the twenty-fourth day of July, 1877:—

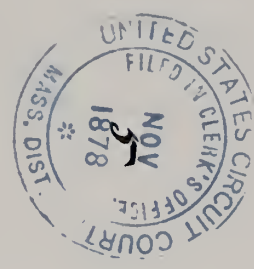
Now, therefore, it is hereby stipulated and agreed as follows, to wit:

That, to save the necessity of taking said account and ascertaining and reporting, as aforesaid, the defendant

1919. Manipulation.

Parker

Trust.



Attorney for ()
George J. Parker

Whitcomb J. Robinson,

herby admits that said damages and profits amount to the total sum of four hundred dollars, and hereby con- cedes that a final decree may be entered for said amount, exclusive of the expenditures made in this suit. And the fulfillment hereby concedes to accept such a decree as a final and satisfactory deter- mination of the amount of his claim for said profits and damages.

John B. Rose
Attorney for
Whitcomb J. Rose

A. D. 1809. --- No 3232

Soda ^{& other} Mineral Waters, Liqueurs &c.

Hamilton's Specification

To all to whom these presents shall come
I, William ^{Francis} Hamilton, of Lower Mount
Street, in the City of Dublin, ^{Gentleman,} do send
greeting.

Whereas His most Excellent Majesty King
George the Third by His Letters Patent
under the Great Seal of the United Kingdom
of Great Britain and Ireland, bearing
date at Westminster, the fourth day of
May ^{now} last past, did give and grant unto
me, the said William ^{Francis} Hamilton my
^{executor,} ^{His special licence, full power, sole privilege and authority, that I, the said William}
^{Francis Hamilton, my executors, administrators, and assigns,} should and
lawfully might make, use, exercise and
vend, within England, Wales, and Town of
Berwick-upon-Tweed, my Invention of "A
New Mode of Preparing Soda and other
Mineral Waters, Spirituous, Acetous,
Saccharine, and Aromatic Liqueurs,
and sundry Improvements Relative thereto";
In which said Letters Patent there is contained

a proviso, obliging me, the said William
Francis Hamilton, under my hand
and seal, to cause a particular descrip-
tion of the nature of my said In-
vention, and in what manner the same
is to be performed, to be enrolled in His
Majesty's High Court of Chancery within
six calendar months next and immedi-
ately after the date of the said in part
recited Letter Patent, as in and by the
same, relation be thereunto had, may
more fully and at large appear.

Now know Ye, that in compliance with
the said proviso, I, the said William
Francis Hamilton, do hereby declare
that my said Invention is fully des-
cribed and ascertained in manner
following, that is to say:
I use various solutions of alkalis,
salts &c, and combinations of ardent
spirits, vegetable acids, aromatic
oils, sugars, milk, mucilage &c, for

saturation and supersaturation,
with carbonic acid. - I obtain my
gas from the decomposition of whiting
with dilute sulphuric acid, applying
the whiting in a liquid state, to
admit of its introduction to the labor-
atory, in which the carbonic acid is
disengaged with facility and clear-
ness; the gypseous residuum I let off
also liquid. I expose the solution &c,
in a strong well-tinned copper vessel,
under more or less pressure, for the
absorption of fixed air, which may
be effected (by its suffering considerable
agitation in a cold bath suspended
by pendulous tubes) without interrup-
tion to the injection of solution, &c. from
a condensing syringe or discharge of
aerated liquor from a decanting stop-
cock, so that the bottling can exist
continually. I use a piston solid
and cylindrical, fitted with a thin
collar of leathers, at the lower extremity

of the pump; it forces upwards causing
the proportionate supply of liquid matter
which is injected by it at the same
time with the Carbonic acid, to ~~form~~
serve as a lute to the collar of leathers
already nearly air tight. This principle
of liquid luting I apply in every possible
instance. The valves I sometimes place
in the plugs of the acting stop-cock,
so that if they get out of order they
can be easily ground air tight again
by withdrawing the plugs, in which
case the charge may ^{still} be preserved in
the vessel by means of another set of
stop-cocks, placed near to it and
used only on such occasions, or when
it is necessary to anoint the acting
ones with a composition of oleaginous
soap, Tallow &c. - I generally use a glass
or earthen bottle or jar of a long oval
orate form, for several reasons viz^t
not having a square bottom to stand

upon, it can only lie on its side, of course, no leakage of air can take place, the liquid ^{matter} being always in contact with the stopper. It permits its contents to be poured out more easily, and consequently with less loss of fixed air. It can be much stronger than a bottle or jar of equal weight made in the usual form, and is therefore better adapted for packing, carriage, &c. The neck of the bottle, ^{and mouth} are sometimes so formed that it may serve instead of a drinking glass if necessary. I commonly stop with cork, which, from the excessive pressure, generally existing within the bottle, flies out on the detaining strings being cut; but sometimes I use glass or earthen stoppers, fitted conically in the usual way, or ground in across the neck. I also occasionally use stoppers of various ligneous matter, closing the pores.

with coatings of insoluble compounds
I generally saturate under a pressure
of 120 lbs. $\frac{1}{2}$ square inch, which is
somewhat reduced on the liquors
being bottled. The decantation is
effected by stopping the mouth of the
bottle or jar with a perforated flat
cork, leather, &c., through which passes
the decanting tube, so that on opening
the ~~the~~ cock the aerated liquor rushes
into the bottle or jar, till resisted by
the condensation of the atmospheric
air it originally contained, and a
portion of carbonic acid gas extracted
during the effort. The decantation
is continued by suffering this conden-
sed air to escape, and when full the
bottle or jar may be withdrawn and
stopped easily with care by letting off
slowly a small portion of the fixed
air contained before its removal.
Sometimes I construct the decanting cock

so as to allow the stopper to pass
into the bottle a jar previous to its
removal from the flat air-tight fitting,
by which means the entire pressure, how
great soever, may be altogether retained.

In witness whereof, I, the said William
Francis Hamilton, have hereunto set my
hand and seal, this twenty eighth day of
October, one thousand eight hundred and nine.

W. F. Hamilton [L.S.]

And he it remembered, that on the twenty
eighth day of October, in the ^{fiftieth} year of the reign
of His Majesty King George the Third, the said
William Francis Hamilton came before our
said Lord the King, in His Chancery in
Ireland, and acknowledged the instrument
aforesaid, and all and singular therein contained
and specified, in full above written. And also
the instrument aforesaid was stamped according
to the tenor of the Statute made in the forty
eighth year of His said Majesty's reign -
Enrolled the second day of November, one
thousand eight hundred and nine.

Respondents documentary Exhibit Hamilton
Patent No 1. Dand H-Booleys Special Examined.

~~Patent~~ No 3232

Pat 296,1809.

Pat. No 2,1809

W. B. Hamilton

Specification

for

Selfing Patent

Supreme Court of the United States,
 Wash. D.C.

No 919 Equity

Grace L. Brothers Gustavus & Sons.

Costs in Complamant.

Entry		409
Service of Subp ^a		262
Travel 3 Rules & 2 Terms 5 x 33 =	165	
Att ^r do do 5 x 33 =	165	
May 1878 Tr. 33 Att ^r 330	<u>363</u>	6.93
2 ^d Schulman as Paid Clerk directly need 180 ff @ 18		<u>32.40</u>
Costs per disposition of Cause,		
Filings 300 D.C. & Civ. 330 Comd R. 90 } Deem 100 S.F. 300 Rec 900 }		<u>29.20</u>
Attorney Fee in Cause	20.	
on 13 dispositions @ 2.50	<u>32.50</u>	52.50
Add witness fees - \$1.50 per each day's Att ^r		
5 cts each way per re. travel	119.25	<u>119.25</u>
" Examination fees - but actually paid examiners		
" Printing need but actually paid		
" and paid of anything for necessary copies		
" Surjardun		<u>1.00</u>
Total costs		

Boston 9/19
Dear

Cards for
Barnett

BOWKER'S GUM.

This liquid gum is entirely a new, original and wonderful preparation. Nothing like it has ever before been offered to the public. It works like magic in all liquid preparations where it is desirable to have a sparkling, frothy foam, or "head," as it is called, especially for soda and mineral waters. Where soda or ginger ale is drawn, it fills the glass with a beautiful cream-like foam, which remains for a long time. It is excellent in small beer, for champagne cider, and in all preparations where carbonic acid gas exists, either fermented or charged. Dead ale or Lager Beer that is to be pumped or agitated is greatly improved by using this gum. One or two ounces added to any kind of syrup, for soda fountain use, makes it draw light, frothy and beautiful. In all cases where it is used it will save more than one hundred times its cost by increasing the bulk of the liquid drawn, to say nothing of its greatly improved appearance.

DIRECTIONS—For use in bottling ginger ale, mineral waters, beer of all kinds that are charged, where syrups are used, mix thoroughly one or two ounces of the gum to every gallon of syrup, according to the amount of foam you wish. For Soda Fountain use—one ounce to a gallon of syrup is sufficient. For beer that is to be fermented use one or two ounces of gum to every 6 pounds of sugar used in making the beer, or two ounces to every gallon of molasses. For champagne cider use 10 ounces of the gum to 40 gallons of cider; the same for dead ale or lager beer.

CAUTION.

In order to protect ourselves and customers all labels will have this, our autograph signature.

H. L. Bowker

MANUFACTURED IN THIS COUNTRY ONLY BY

DR. H. L. BOWKER & CO.,
132 MILK STREET, BOSTON.

Patented in the United States Sept. 12th, 1871, and July 24th, 1877, and in the Dominion of Canada, Aug. 15th, 1877.

*Compliments witness Claims
Exhibit B' Davis H. Colburn
Specie Sammie*

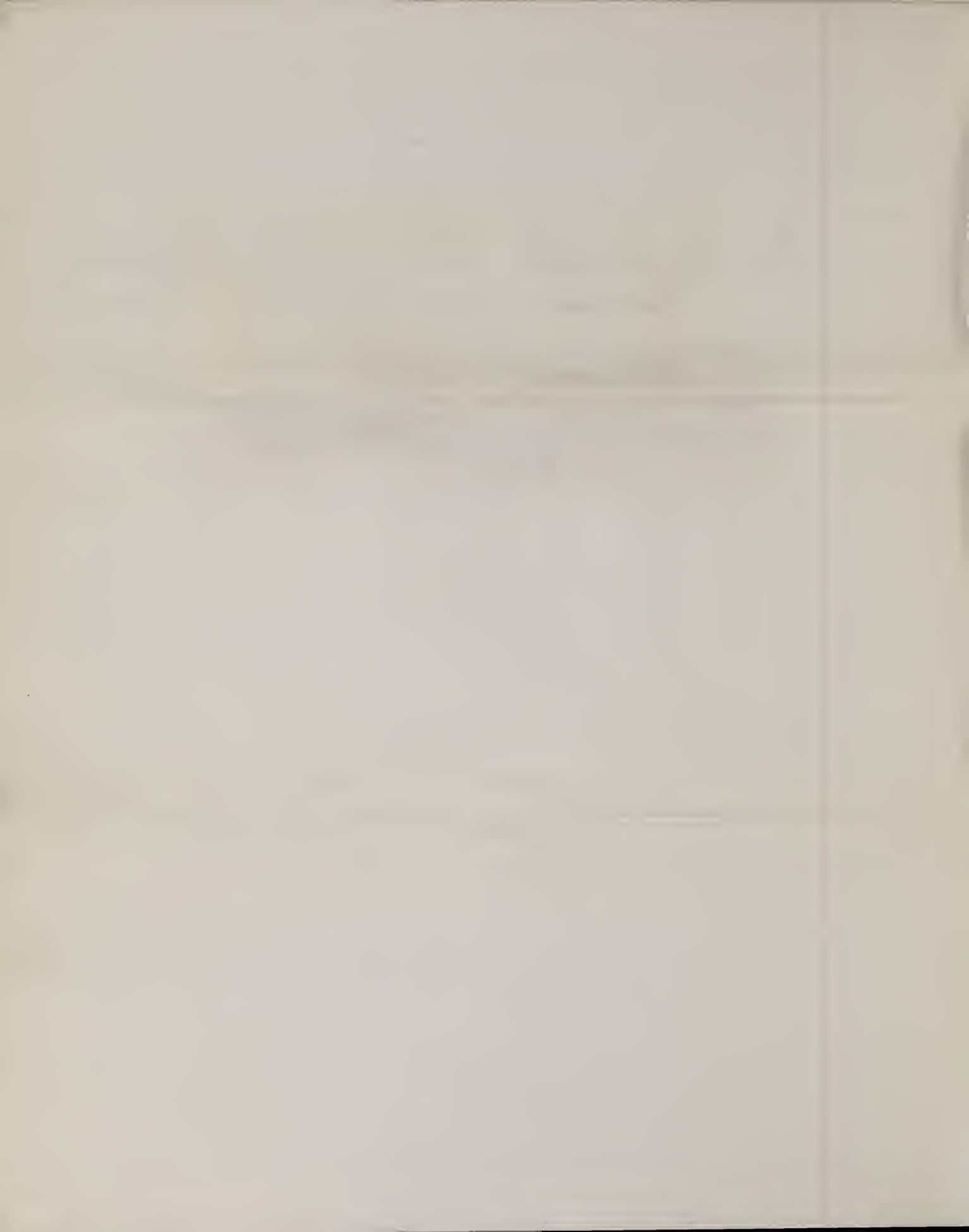


Compliments of Vincent Hathaway
David H. Bowler, Special Examiner.

Office of Vincent, Hathaway & Co., 109, 111, & 113 Broad Street, }
BOSTON, June 7, 1876.

We are now using Dr. Bowker's Gum, and wish to say that the same is superior to any-
thing of the kind which has come to our notice.

Vincent Hathaway & Co



Office of Moses Fairbanks & Co., Howard Street, }
BOSTON, June 8, 1876. }

DR. H. L. BOWKER & Co.

Gentlemen:—We are using large quantities of your liquid Gum in our soda and mineral water preparations. For creating a sparkling, frothy foam and body we think it is superior to anything that has ever been in use.

Respectfully yours,

Moses Fairbanks & Co.

Respondents, Litner, Neale & Whit.
Dan H. Coolidge
Special Examiner.



~~# C₃₂H₅₄O₁₈ *carponis* ✓~~
~~32 Äquivalent of Carbon~~
~~54 " " " of Hydrogen~~
~~18 " " " of Oxygen~~
~~—————~~
~~100~~

Das Saponin, welches sich
 noch in einer größeren Anzahl
 von Angehörigen der Familie
 der Caryophyllaceen z. B. in der
 Kornrade, *Cyrostemma Githago* L.,
 ausserdem in der *Panycocoryx*
 in der Monesca und in der sog. Panama-
 rinde findet, hat die Formel
 $C_{32}H_{54}O_{18}$ und bildet ein weisses,
 amorphes, neutrales Pulver,
 welches von anfangs süßlichem,
 hinterher anhaltend scharfem und
 kratzendem Geschmacke ist und,
 auf die Nasenschleimhaut gebracht,
 zu heftigem Niesen reizt. Es
 löst sich schwierig in ^{Kaltem} Weingeist,
 nicht in Aether, leicht in Wasser.
 Die wässrige Lösung schäumt erst
 bei $\frac{1}{1000}$ Gehalt, beim Schütteln wie
 Seifenwasser; beim Kochen an der

Luft scheidet sie unter
 Kohlensäureentwicklung weiß-
 flocken ab. Verdünnte Säuren
 spalten Saponin in Sapogenin
 und Glykose; bei nicht lange genug
 fortgesetztem Kochen entstehen
 auch intermediäre Spaltungs-
 produkte (Kochleder)

Eine aus der physiologischen
 Wirkung des Saponins sich
 ergebende Anwendung der
 Seifenbougeel findet nicht statt,
 vielmehr wird dieselbe rein
 empirisch nach Art der Passa-
 parille gebraucht.

Das Saponin ist ein örtlich/schmerz
 und außerdem auf die verschiedensten
 Partien des Nervensystems und
 die Muskeln lähmend wirkendes
 Stoff, welches in der Intensität

seiner giftigen Wirkung
 nach dem zu seiner Darstellung
 benutzten Material verschieden
 ist; das aus Korrwaden dar-
 gestellte wirkt stärker als
 aus der Panamasinde gewonnen,
 letzteres kräftiger als das (Plykain
 aus der Senegawurzel (Pelikan)).
 Bei Menschen bedingt Saponin
 in der Dosis von 1 bis 2 Dgm.
 Hustenreiz und mehrstündige
 Absonderung von Schleim ^(Schleim)
 auf Wunden oder Schleimhäuten
 lebhaften Schmerz, und nach
 einigen Stunden Absonderung
 plastischen Exsudats. Interessant
 ist die bei verschiedenen Arten
 Saponin von Pelikan constatirte
 vernichtende Wirkung auf die
 Sensibilität an der Applications-
 stelle, gleichzeitig mit Abnahme
 der electrischen Reizbarkeit.

der Nerven und der Muskeln
 Ligatur der Gefäße und
 Durchschneidung der Nerven
 wirken auf das Zustandekommen
 dieser lokalen Anästhesie ver-
 langsamend ein.

Leider läßt die entzündliche
 Action des Japponins an der
 Applicationsstelle eine
 therapeutische Verwendung
 bei Menschen nicht zu.

†
 Das in das Blut aufgenommene
 Japponin wirkt lähmend auf
 Muskeln und Nerven und afficirt
 in eigenthümlicher Weise die
 Herznerven, indem es sowohl
 die Vagusendigungen und die
 Hammungencentren als die
 aus dem Sympathicus stammenden
 Beschleunigungsnerven lähmt
 und schließlic Herzstillstand

bedingt,

Digitalin bedingt bei Saponin-
 vergiftung ^{Weschlammigung}
 der stark retardirten Herz-
 action und Verstärkung des
 Herzcontractionen, ebenso
 beseitigt es das bei Saponin
 hervortretende Sinken des
 Blutdrucks. Vor Eintritt
 der Herzlähmung wird auch
 die Darmmusculation gelähmt,
 ferner wirkt Saponin rasch
 auf das vasomotorische Centrum
 und zwar zuerst erregend und
 dann rasch lähmend, sowie
 auf das respiratorische Centrum,
 das von größeren Dosen plötzlich,
 von kleineren allmählich gelähmt
 wird. Athemfrequenz und
 Temperatur sinken bei Saponin-
 vergiftung sehr bedeutend.

Klonische und tonische Krämpfe,
 welche nach Saponin vorkommen,

scheinen auf die Störungen des Herzens und der um Athembewegungen bezogen werden zu müssen; doch erzeugt Saponisirung des Rückenmarks bei Fröschen anfänglich Tetanus, später vom Centrum nach der Peripherie zu fortschreitende Lähmung. Das Verhalten der Pupille ist inconstant, dagegen findet sich stets nach grossen Dosen Saponin Trägheit und Unlust zu Bewegungen. Im Darm und Magen bewirkt Saponin entzündliche Röthung; Speichelfluss und Vermehrung anderer Secretionen ruft es nicht hervor. Diese aus Untersuchungen von H. Köhler sich ergebenden physiologischen Wirkungen lassen das Saponin als ein Antipyreticum an-

wunderbar erscheinen, doch ist es in dieser Richtung bisher nicht benutzt. A. Lange will es zu 15 Gm pro dosi mit Erfolg bei Mutterblutung gegeben haben.

Die *Radia Saponariae* findet meist in Verbindung mit andern vegetabilischen Antidyscraticis innerlich im Decoct (i: 10-20, zu 10-15 Gm pro die) Anwendung und wird gewöhnlich in Speciesform verordnet. Früher kann sie auch häufig als Bestandtheil der Kämpferschen Visceralclystiere in Gebrauch.



Respondents include Pfeiffer & Hilt
David H. Carlisle
Special Examiner

Compliments, nitro, Sharple, documentary, Exhibit no 2,
Dandt, booby, speed, examens.

CHENEY & MYRICK,

Wholesale Dealers in, and Exporters of American Drugs.

JOBBERs IN DRUGS, CHEMICALS, ESSENTIAL OILS, &c.

Manufacturers of Fluid Extracts, Eclectic and Pharmaceutical Preparations.

**NO. 15 UNION STREET,
BOSTON.**

PRICES SUBJECT TO FLUCTUATIONS.

	Press'd.	Pow'd.		Press'd.	Pow'd.		Press'd.	Pow'd.
Abscess Root.....	100		Butter Cup.....	50		Elder Bark.....	25	
Aconite Leaves.....	25		Butternut Bark.....	15	20	“ Berries.....	50	
“ Root.....	22	30	Cancer Root.....	25		“ Flowers.....	25	
Agrimony.....	20		Canella.....	20	25	“ Root, Dwarf.....	25	
Alder Bark, Black.....	20	25	Canker Weed.....	25		Elecampane Root.....	20	25
“ “ Red.....	15	20	Caraway Seed.....	17	25	“ Ground.....	20	
Althea, Cut.....	30		Cardinal Flowers.....	30		Elm Bark, Slippery, Extra.....		
Alum Root.....	22		Cardus, Spotted.....	25		“ “ Ground.....	20	
Angelica Leaves.....	18		Carrot Seed, (Wild).....	25		Fennel Seed.....	20	25
“ Root.....	25		Cascarella.....	15	20	Fern, Male.....	25	
“ Seed.....	25		Catnip.....	18		“ Sweet.....	20	
Angustura Bark.....	35		Cayenne, Af. Pure.....		50	Feverbush.....	25	
Apple Tree Bark.....	20		Celandine, Garden.....	25		Feverfew.....	38	
Arnica Flowers.....	25		“ Wild.....	18		Fireweed.....	25	
“ Root.....	30		Centaury, Red.....	25		Fit Root.....	45	
Ash Bark, Mountain.....	20		Chamomile Flowers.....			Fivefinger.....	25	
“ Prickly.....	20	25	“ Low.....	100		Flabada.....	20	
“ White.....	25		Checkerberry Leaves.....	20		Foxglove.....	22	25
Ash Berries, Prickly.....	35		Cherries, (Dried).....	50		Frostwort.....	25	
Asparagus Root.....	50		Cherry Bark, (Wild).....	12	16	Garget Berries.....	25	
Avens Root.....	30	35	Chestnut Bark.....	25		“ Root.....	18	25
Balm Gilead Buds.....	40		“ Leaves.....	25		Gelsemium.....	25	
“ Lemon.....	25		Chickory Herb.....	18		Gentian Root.....	15	18
“ Sweet.....	25		Chickweed.....	25		Ginseng Root.....		
Balmomy.....	20	25	Cicely, Sweet.....	75		Golden Rod.....	20	
Balsam, Sweet.....	20		Cicuta Leaves.....	20	30	Goldenseal Root.....	25	30
Barberry Bark.....	25	30	“ Seeds.....	50		Goldthread.....	50	
Basil, Sweet.....	25		Clary.....	30		Gravel Plant.....	25	
Basswood Bark.....	20		Cleavers.....	22		Hackmetack Bark.....	18	
Bayberry Bark.....	12	15	Clover Heads, Red.....	25		Hair Cap Moss.....	22	
“ Leaves.....	25		“ White.....	30		Hardhack.....	20	
Beech Bark.....	20		Cocash Root.....	50		Heal-all.....	18	
“ Drops.....	25		Cohosh, Black Root.....	15	18	Heart's-ease.....	18	
“ Leaves.....	20		“ Blue.....	18	25	Hellebore Root, Black.....	25	30
Belladonna Leaves.....	35	40	“ Red.....	25	30	“ “ White.....	22	28
Bellwort.....	50		“ White.....	25	28	Hemlock Bark.....	12	15
Beth Root.....	25	30	Coldwater Root.....	50		“ Leaves.....	20	
Betony Weed.....	50		Colombo.....	20	25	Henbane Leaves.....	30	35
Birch Bark, Black.....	15	20	Colts-foot Leaves.....	20		Hollyhock Flowers.....	60	
Bitter Root.....	30	35	“ Root.....	40		Hops.....	25	
Bittersweet Bark.....	35	40	Coolwort.....	50		Horehound.....	20	
“ Twigs.....	20		Comfrey Root.....	20	25	Horsemint.....	20	
Black Root.....	25	30	Cotton Root Bark.....	30	35	Horseradish Leaves.....	20	
Blackberry Bark, (of Root).....	20	25	Cow Parsnip Root.....	75		“ Root.....	30	
Blood Root.....	18	20	“ Seed.....	75		House Leek.....	50	
Bine Fig Root.....	25	30	Cramp Bark.....	20	25	Hydrangea.....	25	
Boneset.....	18	20	Cranesbill Root.....	20	22	Hyssop.....	20	
Borage.....	30		Crawley Root.....	100	110	Iceland Moss.....	17	
Boxwood Bark.....	20	25	Cuckold.....	25		Indian Hemp, Black.....	30	35
“ Flowers.....	25		Culver's Root.....	25	28	“ “ White.....	22	30
Brooklime.....	40		Daisy Flowers.....	25		Indian Physic.....	20	
Broom Herb.....	30		Dandelion Herb.....	20		Indian Turnip.....	25	28
Buckbean.....	36		“ Root.....	20	22	Indigo Root, Wild.....	20	28
Buckhorn Brake Root.....	25		Dittany.....	25		Ivy, Am. Bark.....	30	
Buckthorn Berries.....	75		Dock Root, Yellow.....	20	25	Ivy, Ground.....	20	
Bugle, Bitter.....	20		Dog Grass.....	25				
“ Sweet.....	20		Dragon Root.....	25	28			
Burdock Leaves.....	18		Dulse.....	15				
“ Root.....	20	25						
“ Seed.....	18							

CHENEY & MYRICK, Wholesale Druggists, 15 Union Street, Boston.

	Press'd.	Pow'd.		Press'd.	Pow'd.		Press'd.	Pow'd.
Jacob's Ladder.....	25		Pleurisy Root.....	25	30	Thorn Apple Leaves.....	20	25
Johnswort.....	20		Poke Berries.....	25		" " Seed.....	20	
Juniper Berries.....	12		Poke Root.....	18	22	Thyme.....	30	35
Knot Grass.....	25		Polypody.....	30		Tilia Flowers.....	100	
Koussou.....			" Root.....	40		Tormentilla Root.....	50	
Labrador Tea.....	25		Pomegranate Peel.....	30	50	Turkey Corn.....	25	30
Ladies' Slipper.....	25	30	Poplar Bark.....	12	15	Unicorn Root.....	25	30
Larkspur Herb.....	40		Poppy Flowers.....	100		Uva Ursi.....	15	20
" Seed.....	200		" Heads.....	50		Valerian, Am.....	25	30
Laurel Leaves.....	25	30	" Leaves.....	50		" Root, Eng.....	25	30
Lavender Flowers.....	22		Princes' Pine.....	20	25	Vervain, Blue.....	20	
Lettuce, Garden.....	22		Ptelia Bark.....	40	50	Violet, Blue.....	40	
" Wild.....	25		Pumpkin Seeds.....	18		Virgin's Bower.....	35	
Life Everlasting.....	18		Quassia.....	15		Wahoo Bark.....	35	40
Life Root.....	25	30	Queen of Meadow, Herb.....	20		Walnut Bark.....	25	
Lily Root, White.....	20	25	" " Root.....	20	25	" Leaves.....	25	
" Yellow.....	20	25	Queen's Root.....	25	30	Water Cup.....	25	
Liverwort Noble.....	30		Quince Seed.....	100		Water Melon Seeds.....	25	
Lebelia.....	25	30	Raspberry Leaves.....	18		Water Pepper.....	18	
" Seed.....	40	50	Rhatany Root.....	40		Whitewood Bark.....	20	25
Lovage Leaves.....	25		Rhubarb, Am.....	50	60	Whortleberries.....	50	
" Root.....	40		Rockbrake.....	30		Wickup Root.....	50	60
Lungwort.....	30		" Root.....	40		Wild Turnip.....	25	28
Lupuline.....	100		Roman Wormwood.....	20		Wild Yam.....	25	30
Maiden Hair.....	20		Rose Flowers, Red.....	75		Willow Bark.....	25	
Mallow, Low.....	20		" White.....	150		" " Pussy.....	25	30
" Marsh.....	20		Rosemary Leaves.....	20		Wintergreen.....	20	
" " Root.....	25	30	Rose Willow Bark.....	25		Witch Hazel Bark.....	18	22
Man Root.....	25	30	Rosin Weed.....	30		" " Leaves.....	18	22
Mandrake Root.....	16	18	Rue Herb.....	30		Wormseed.....	20	
Maple Bark, Red.....	22		Saffron.....	50		Wormwood.....	20	
Marjoram, Sweet.....	30	36	Sage.....	20		Yarrow.....	20	
Marsh Rosemary Root.....	25	30	" Ground.....	25		Yellow Jessamine.....	25	30
Marygold Flowers.....	75		" Willow, Bark Root.....	50		" Parilla.....	20	25
Masterwort Root.....	75		" " Herb.....	50		" Root.....	25	
" Seed.....	75		Sanicle Root, Black.....	100				
Matico Leaves.....	18		Sarsaparilla Root, Am.....	20	25			
Mayweed.....	60		Sassafras Bark.....	15	18			
Meadow Fern Burrs.....	25		" Pith.....	100				
" Leaves.....	50		Savin.....	20	25			
Mezereon Bark.....	25	30	Scabious, Sweet.....	20				
Milkweed Root.....	25	30	Scabious, Sweet.....	20				
Moccasin Root.....	25	30	Seabish.....	20				
Moosewood Bark.....	20		Serofula Plant.....	50				
Motherwort.....	20		Seullecap.....	25	30			
Mountain Dittany.....	25		Senega Root.....	25				
" Mint.....	25		Senna, Am.....	18				
Mouse Ear.....	20		Side Saddle Plant.....	25				
Mugwort.....	20		" Root.....	50				
Mullein Leaves.....	20		Skunk Cabbage Root.....	25	30			
Mustard Seed, Black.....	18		Snakehead.....	20	25			
" " White.....	15		Snake Root, Canada.....	40				
Nannybush Bark.....	25		" " Virginia.....	35	40			
Nerve Root.....	25	30	Soaptree Bark.....	30				
Nettle Herb.....	25		Soapwort.....	25				
" Root.....	25		Solomon Seal Root.....	25	30			
Oak Bark, Black.....	20	30	Sorrel Leaves.....	25				
" Red.....	20	30	Southernwood.....	35				
" White.....	12	18	Spearmint.....	20	25			
Oak Jerusalem.....	25		Spikenard Root.....	20	25			
" " Seed.....	20		Squaw Vine.....	25				
Orange Peel.....	20		Stillingia Root.....	25	30			
Osier Bark, Green.....	20		Stone Root.....	20	25			
Pareira Brava.....	20	25	Stramonium Leaves.....	20	25			
Parilla, Yellow Root.....	20		" Seed.....	20				
Parsley Leaves.....	20		Strawberry Leaves.....	25				
" Root.....	30		Succory Herb.....	18				
Partridgeberry Vine.....	25		" Root.....	22				
Peach Bark.....	20		Sumach Bark.....	18				
" Leaves.....	25		" Berries.....	18				
" Pits.....	30		" Leaves.....	18				
Pennyroyal.....	20		Summer Savory.....	25	30			
Peony Flowers.....	75		Sunflower Seed.....	40				
" Root.....	50		Sweet Clover.....	25				
Peppermint.....	20	25	Sweet Flag Root, Am.....	20	25			
Pilewort.....	25		Sweet Gale Burrs.....	60				
Pine Bark, White.....	18		" Herb.....	25				
Pine Pitch, ".....	15		Sweet Gum Bark.....	50				
Pink Root.....	20		Tamarac Bark.....	18	20			
Plantain Leaves.....	20		Tansy.....	18				
			Thimbleweed.....	25				
			Thistle Herb.....	25				
			" Root.....	30				

Extra charge of 6 cents per pound for Herbs in one, two or four ounce packages.
Roots and Barks crushed or granulated, and pressed in one pound Packages only.

Complimentary Exhibit No 1. Dana H. Coolidge,
Special Examiner.

[65.]

DEPARTMENT OF THE INTERIOR,
UNITED STATES PATENT OFFICE.



To all Persons to whom these Presents shall come, Greeting:

This is to Certify that the annexed is a true copy from
the Records of this Office of the Letter Patent
granted Horace L. Bowker Dated
July 24th 1877 # 193,476
for
"Improvement in Syrups and Mineral
Waters"

In testimony whereof, I, *A. H. Coolidge*

ACTING COMMISSIONER OF PATENTS, have caused the SEAL of the
PATENT OFFICE to be hereunto affixed this *Ninth*
day of *January*, in the year of our Lord one
thousand eight hundred and seventy-eight, and of the Inde=
pendence of the United States the one hundred and second.

M. Doolittle

Acting Commissioner.

No 193 414

The United States of America



~~TO ALL TO WHOM THESE PRESENTS SHALL COME:~~

Whereas Norace L. Bonney

Boston, Massachusetts

has presented to the Commissioner of Patents a petition praying for the grant of **LETTERS PATENT** for an alleged new and useful

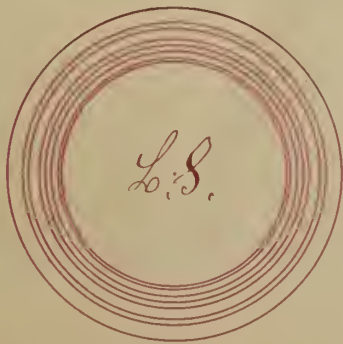
Improvement in
Syrups and Mineral Waters &c.

a description of which invention is contained in the Specification of which a copy is hereto annexed and made a part hereof, and has complied with the various requirements of Law in such cases made and provided; and

Whereas upon due examination made the said Claimant is adjudged to be justly entitled to a Patent under the Law;

Now therefore these **LETTERS PATENT** are to grant unto the said

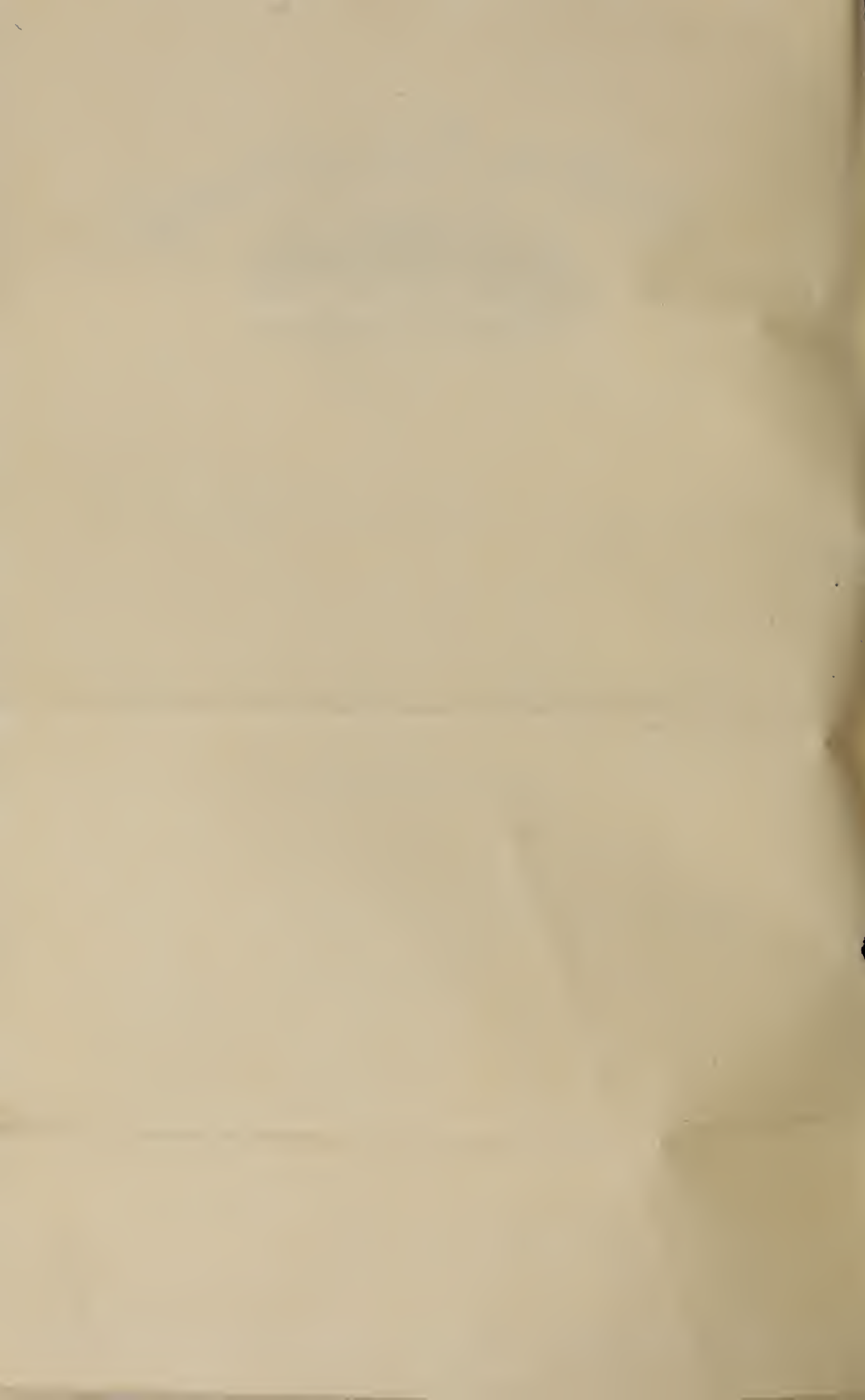
Norace L. Bonney his _____ heirs or assigns for the term of seventeen years from the Twenty fourth day of July one thousand eight hundred and seventy seven the exclusive right to make, use and vend the said invention throughout the United States and the Territories thereof.



In testimony whereof I have hereto set my hand and caused the seal of the Patent Office to be affixed at the City of Washington, this Twenty fourth day of July in the year of our Lord one thousand eight hundred and seventy seven and of the Independence of the United States of America the One and Twentieth

Countersigned:

Ellis Spear, Acting Secretary of the Interior.
Commissioner of Patents



UNITED STATES PATENT OFFICE.

HORACE L. BOWKER, OF BOSTON, MASSACHUSETTS.

IMPROVEMENT IN SIRUPS AND MINERAL WATERS, &c.

Specification forming part of Letters Patent No. 193,476, dated July 24, 1877; application filed July 7, 1877.

To all whom it may concern:

Be it known that I, HORACE L. BOWKER, of Boston, in the county of Suffolk and State of Massachusetts, have invented certain new and useful Improvements in Sirups and Mineral Waters, &c.; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to improvements in sirups, mineral waters, ciders, beers, ales, or in any and all liquids containing carbonic-acid gas, whether natural or artificial, for the purpose of creating and sustaining a sparkling, frothy foam or head on the drink when drawn from the bottle or fountain, &c., or in whatever manner drawn; and this my invention consists in combining with sirups, mineral waters, or drinks, as aforesaid, a small quantity of saponin extracts produced from any vegetable matters containing saponin—such as, for instance, “soap-bark” from the *Quillaya saponaria* tree, the root and leaves of “soap-wort,” (*Saponaria officinalis*), seneca or snake-root, and of the various species of smilax, or other vegetable products containing saponin, as aforesaid.

The saponin extract may be obtained from the vegetable products containing the same by soaking, steeping, or boiling such products in water, alcohol, ethers, or any other menstruum or process, by which the saponin properties are extracted. This liquid extract of saponin is or may be separated and prepared by any other convenient process, and is afterward filtered and strained, and is then ready to be mixed with the sirup, mineral waters, and aerated liquors, &c. This gum or liquid containing saponin, when mixed in small quantities with sirups, mineral waters, liquors, &c., as above-named, produces a very beautiful sparkling, frothy foam or head on the drink, and, what is still better, this foam remains on the drink for quite a long time, so that the carbonic-acid gas in the drink is prevented from escaping, and thereby retains the vivacity and invigorating properties of the drink a long time after it is drawn.

Where soda-water or ginger-ale is drawn, it fills the glass with a beautiful cream-like foam, which remains for a long time. It is also excellent in small-beer, for champagne-cider, and in all preparations where carbonic-acid gas exists, either fermented, charged, natural, or artificial.

This saponin gum is very pure and wholesome, will not hurt or spoil or make any liquid morbid or cloudy, whether used in large or small quantities. It has also the tendency to preserve beer and sirups from souring.

The advantage of the froth and foam produced by this mixture of saponin extract with the drinks, as aforesaid, is not merely to please the eye, but it tends to hold the carbonic-acid gas a long while in the liquid after it is drawn, which makes the drink taste more palatable and pleasant.

Where this saponin extract is used, the soda-water, ginger-ale, or whatever it is used in, need not be charged as high by 20° to produce the same effect, by which a great saving is made to parties who charge liquids or drinks with carbonic-acid gas. The chief merit of combining this saponin extract with sirups, mineral waters, &c., is that it prevents the carbonic-acid gas from escaping from the tumbler, and, as is well known, when soda-water, beers, &c., are drawn in an open tumbler, the gas escapes so rapidly that unless it is drunk instantly it is flat and worthless.

Having thus fully described my invention, I wish to secure by Letters Patent, and claim—

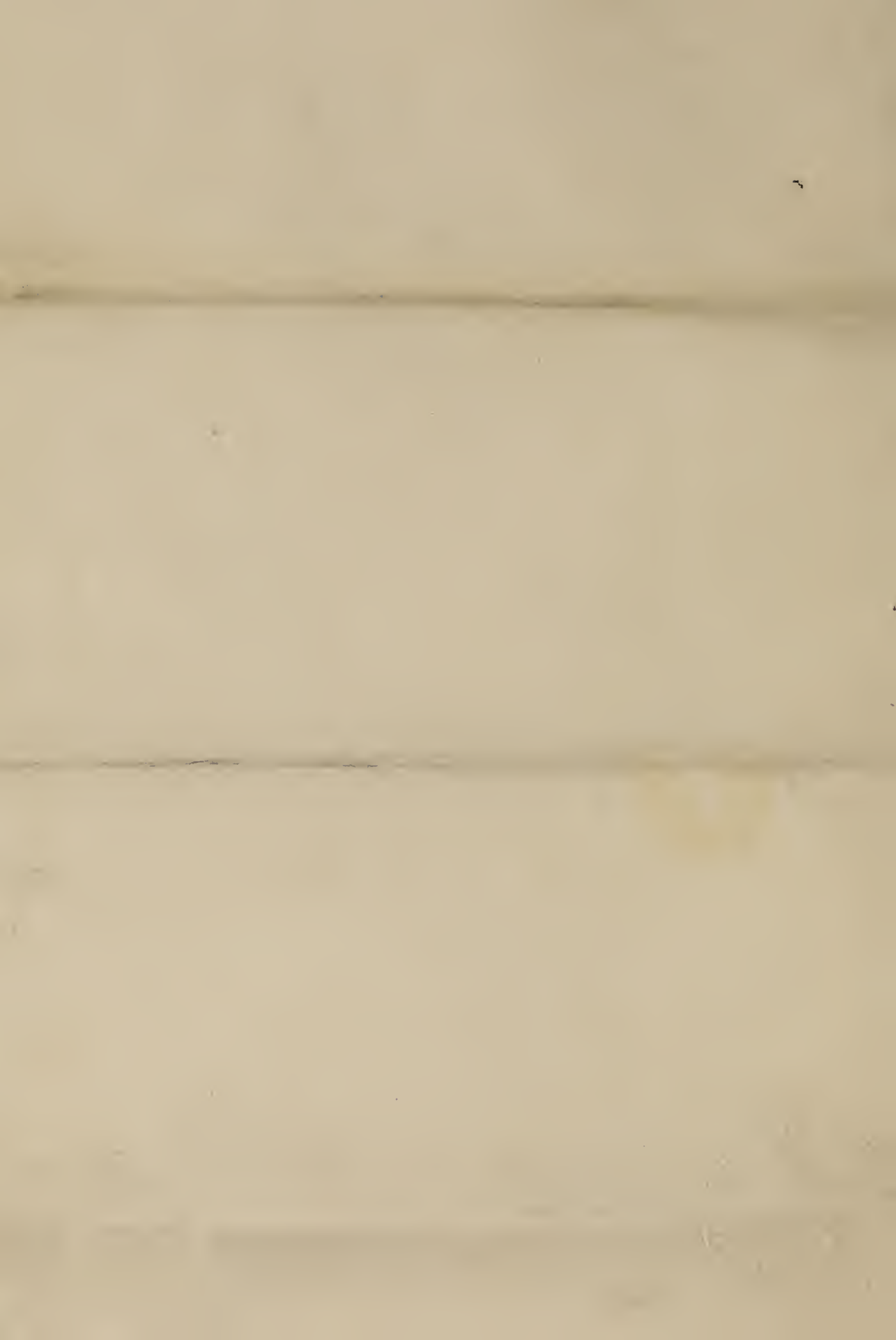
The combination of saponin extracted from vegetable products with sirups, mineral waters, ciders, beers, ales, &c., or other liquids containing carbonic-acid gas, whether natural or artificial, as and for the purpose herein set forth and described.

In testimony that I claim the foregoing as my own invention I have affixed my signature in presence of two witnesses.

HORACE L. BOWKER.

Witnesses:

ALBAN ANDRÉN,
HENRY CHADBOURN.



Circuit Court of the United States.
District of Massachusetts.

In Equity.

Horace L. Bowker }
 ^N }
Gustavus D. Dows. }

Replication.

The Plaintiff, saving and reserving to himself all and all manner of exception or otherwise to the manifold insufficiencies of the answer, for replication thereto, says he will aver and prove the bill to be true, certain and sufficient in the law to be answered unto; and that the defendant's answer is uncertain, untrue, and insufficient to be replied unto; without this, that any matter or thing in the answer material or effectual to be replied unto, confessed and avoided, traversed or denied, is true. All which this repliant is and will be ready to aver and prove as this Honorable Court

shall direct, and humbly prays as in and by
his bill, he has already prayed.

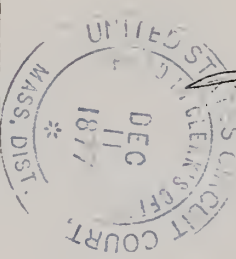
A. J. Robinson.

Solicitor for Plaintiff.



Ernest S. Bowker
vs
Abraham D. Bowker

Replication.



Service of a copy of
the within Replication
is hereby admitted,
this eleventh day of
December, A.D. 1877.

James B. Moore
Solicitor for Defendant

A. Robinson,
Solicitor for Plaintiff.

UNITED STATES OF AMERICA.

Massachusetts District, ss.

To
Gustavus D. Dows
of Boston in our District of
Massachusetts.

GREETING:

FOR CERTAIN CAUSES, offered before the Circuit Court of the United States of America, for the first Circuit, within and for the Massachusetts District, as a Court of Chancery, WE COMMAND AND STRICTLY ENJOIN YOU, laying all other matters aside, and notwithstanding any excuse, that you personally be and appear before our said Circuit Court at the Rules, to be holden at the Office of the Clerk of our said Court, in Boston, in said District, on the first Monday, being the *fifth* day of *November* next, to answer to a Bill of Complaint exhibited against you in our said Court, wherein

Horace L. Bowker of said
Boston

2

is Complainant and you are Defendant ;
and to do further and receive that which our said Circuit Court shall consider in this behalf. And this you are in no wise to omit, under the pains and penalties of what may befall thereon.

Witness, the Honorable *Mission R. Waité* at Boston,
this *twelfth* day of *October* A. D. 1877, in
the ~~ninth~~ *102nd* year of the Independence of the United States of America.

Alex. H. Troubridge
Deputy Clerk.

MEMORANDUM. The defendant is to enter his appearance in the suit in the Clerk's Office on or before the day at which the writ is returnable, otherwise the bill may be taken *pro confesso*.

1794

919

In Equity,

George L. Barber

Gustavus D. Davis

SUBPOENA,

RETURNABLE, Nov^{rs} RULES,

To wit, Nov^{rs} 5th 1877.

A. J. R. [Signature]

Attorney.

United States }
Marshal. }

[Signature]

See
Leach. 262
Copy \$3.82

I hereby certify that I have served the within Subpoena by
the within named Marshal & have a
true and correct copy of the same.

United States of America,
MASSACHUSETTS DISTRICT, SS.

John 12th Dec^r 1877

UNITED STATES OF AMERICA.

Massachusetts District, ss.

THE PRESIDENT OF THE UNITED STATES OF AMERICA,

To

Gustavus S. Doros of Boston
in said District -

Your Agents and Servants, GREETING.

WHEREAS

Horace L. Brooker of said
Boston

has exhibited his Bill of Complaint before the Justices of our Circuit Court of the United States for the First Circuit, begun and holden at Boston, within and for the District of Massachusetts, on the *fifteenth* day of *May* A.D. 1878, against you the said

Gustavus S. Doros

praying to be relieved touching the matters therein complained of, and whereas, by an Order from said Court, made on the *nineteenth* day of *October* A. D. 1878, it was ordered that a Writ of Injunction issue under the Seal of the said Court, to restrain you and each and every of you, from doing all the matters and things from the doing of which you are prayed to be restrained in said Bill, according in full with the prayer of said Bill.

WE therefore, in consideration thereof, ENJOIN AND COMMAND you each, and every of you that from and immediately after the receipt and notice of this our Writ, by you, or any of you, you shall not *make use or sell the combination of Saponin extracted from vegetable products with Syrups, mineral waters, ciders, beers, ales, &c or other liquids containing carbonic acid gas whether natural or artificial, described and claimed in Letters Patent of the United States No 193476 granted said Brooker July 24, 1877 for Improvement in Syrups and Mineral waters*

WHEREOF you are not to fail on pain of ten thousand dollars, to be levied on your and each of your goods, chattels, lands and tenements, to our use.

Witness the Honorable *Morrison R. Waite*, at Boston,
this *first* day of *November* in the year of our Lord one thousand
eight hundred and seventy *eight*

John S. Stetson Clerk.

Rowland 2

United States of America,
MASSACHUSETTS DISTRICT, ss. }

~~I HEREBY CERTIFY that I have notified the within named respondent~~

I have before acting as attorney for and
on behalf of Gustavus D Green etc hereby from
the said Gustavus D Green accept of the service
of the within ~~process~~ writ of injunction
Done at Boston
attorney for and in behalf
Gustavus D Green

919

Anna L. Parker

IN EQUITY,

VERSUS

Gustavus D. Green

WRIT OF INJUNCTION.

Nov. 1, 1878

Circuit Court of the United States
District of Massachusetts

In Equity

The answer of Gustavus D. Dows to the Bill
of Complaint of Horace L. Bowker.

The defendant now and at all times
hereafter saving and reserving to himself,
according to the approved formula in that
regard, every benefit of exception to the bill
aforesaid, for answer unto so much thereof
as he is advised it is material that he
should make answer unto, answering says:

I.—He admits, upon information and belief,
the grant of the Letters Patent to the complain-
ant as alleged in said bill; but requires their
production at the hearing and when the
proofs are taken.

II.—He denies that the complainant was
the original and first inventor of the im-
provement set forth and claimed in said
Letters Patent. And he avers, upon informa-
tion and belief, that previous to the alleged
invention of said improvement by the com-
plainant, it was known to the persons whose
names and residences are first set forth
in the following list, as having been used

by those whose names respectively are set opposite the names of those having such knowledge, and at the places over against their respective names, to wit:

Witnesses	Residence	Users	Where
D. H. Vincent	Boston	Vincent, Hathaway & Co.	Boston
Levi S. Hathaway	"	" " "	"
Moses Fairbanks	"	Moses Fairbanks & Co.	"
J. Bartlett Patten	"	J. Bartlett Patten	"
Joseph S. Brown	"	Joseph S. Brown	"
A. G. Wilbur	"	A. G. Wilbur	"
Frank B. Dole	"	Dole Brothers	"
W ^m A. Guild	South Boston	W ^m A. Guild	South Boston
Charles S. Gove	Cambridgeport	Cornstock, Gove & Co.,	Boston
Hiram M. Cornstock	"	" " "	"
Daniel Sands	Dorchester	" " "	"
Levi Fairbanks	Cambridge	Moses Fairbanks & Co.	"
Otis S. Keale	"	" " "	"
James W. Tufts	Medford	James W. Tufts	"
J. D. Burbank	Charlestown	J. D. Burbank	"
Charles S. Copeland,	Stoneham	Charles Copeland & Son	"
John K. Southmayd	Malden	John K. Southmayd	"
C. J. Hood	Lowell	C. J. Hood & Co.	Lowell
C. M. Ballard	Worcester,	C. M. Ballard	Worcester
Albert Aiken,	E. Somerville,	Albert Aiken	E. Somerville
S. B. Winn,	Salem,	S. B. Winn	Salem
C. J. Clapp	Foxborough	C. J. Clapp	Foxborough
Oliver Johnson	Providence	Oliver Johnson	Providence

Hedgman	New York city,	Hedgman	New York
E. R. Durkee	" " "	E. R. Durkee & Co.	" " city
Hudnut	" "	Hudnut	" " "
Benj W. Dyer	" "	Benj W. Dyer	" " "
Frederick Brown	Philadelphia	Frederick Brown	Philadelphia
Wm B. Burke	"	Wm B. Burke & Co.	"
G. W. Carpenter	"	G. W. Carpenter	"
James Bailey	Baltimore	James Bailey	Baltimore
Henry A. Elliott	"	Henry A. Elliott	"
John B. H. Jefferson	"	John B. H. Jefferson	"
John W. Drew	Washington	John W. Drew	Washington
Henry Sweet	Chicago	Henry Sweet	Chicago
H. A. Hurlbut	"	H. A. Hurlbut	"
J. S. Merrill	St. Louis	J. S. Merrill	St. Louis

III. - And this defendant, further answering avers, upon information and belief, that Letters Patent for a mode of "Saturating and super-saturating with carbonic acid" which embraces the mode set forth and described in the complainant's said patent, was granted in England to William Francis Hamilton, dated May 4th 1809, and enrolled November 2^d 1809.

IV. - This defendant avers and charges, that the description and specification of the complainant's alleged and pretended invention contained in his said patent does not describe the same in such full, clear, and exact terms, as to enable any

person skilled in the art to which it appertains or with which it is most nearly connected, to make, compound, and use the said invention, without the aid of repeated experiments and discovery; and that the complainant, well knowing the defectiveness of said description and specification, and that they contained less than the whole truth relative to the said invention, did, as this defendant is advised and believes, file the same in the patent office for the purpose of deceiving the public; and that the public, moreover, have been deceived and misled thereby.

V.- This defendant, further answering says he does not know and is not informed, save in and by said bill of complaint against him, whether said complainant has invested and expended large sums of money, and has been to great trouble in and about said alleged invention, and for the purpose of carrying on the business and manufacturing and selling the same, and making the same profitable to himself and the public; and this defendant denies the allegations to that effect in said bill of complaint, and leaves the complainant to make such proof thereof as he may be advised is expedient and useful.

VI.- This defendant denies, upon knowledge, information and belief, that said alleged invention

has been and is of great benefit and advantage to the public and to said complainant; and that the public have very largely or to any great extent, acknowledged and acquiesced in his alleged rights and claims.

VII.- This defendant avers that he has no knowledge or information sufficient to form a belief as to whether the anticipation of the complainant set forth in his said bill, respecting the gains and profits which he may receive under his said Letters Patent, if the alleged infringement thereof is prevented will or will not be realized; and he leaves said complainant to make such proof thereof as he may be advised is material.

VIII.- This defendant denies that he has ever contrived or is now contriving to injure the complainant and to deprive him of the benefits and advantages which would rightfully accrue unto him from said alleged invention; and denies that he has ever infringed or is now infringing the complainant's said Letters Patent, and that he ever threatened or now threatens so to do; and denies that he has ever been guilty of any act or avowal whatsoever which would have the effect to encourage or induce such infringement on the part of others.

IX.- He admits the receipt by him of notice of the infringement with which he stands charged in said bill of complaint.

I. He denies all and all manner of unlawful combination and confederacy wherewith he is by ^{the} said bill charged; and denies each and every other allegation in the said bill contained, not hereinbefore admitted controverted or denied; without this that there is any other matter, cause or thing in the said complainants' bill of complaint contained, material or necessary for this defendant to make answer unto, and not herein and hereby well and sufficiently answered, confessed, traversed and avoided or denied, is true, to the knowledge or belief of this defendant; all which matters and things this defendant is ready and willing to aver, maintain and prove, as this Honorable Court shall direct; and humbly prays to be hence dismissed with his reasonable costs and charges in this behalf most wrongfully sustained.

Gustavus D. Dows

United States of America }
District of Massachusetts } ss

On this eleventh day of December, 1877, before me came Gustavus D. Dows who being by me duly sworn, says; that he is the defendant herein; that he has read the foregoing answer subscribed by him, and knows the contents thereof; and that ^{the} same is true of his own knowledge, except as to matters stated on information and belief, and as to those matters he believes it to be true.

Subscribed and — Gustavus D. Dows

sworn to before me, this eleventh day of December, 1877, at the City of Boston. J. J. [Signature] Boston Public

Horace L. Barker

419

v.

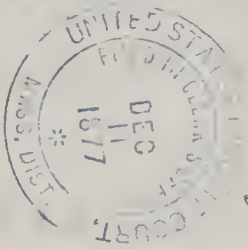
Guillaume D. Dore

Respondents

Answer

Service of a copy of the within
answer is hereby admitted
the eleventh day of
December A.D. 1877

A. H. Robinson
Solicitor for Dore



Circuit Court of the United States,
District of Massachusetts.

Grace L. Fowler }
v } In Equity.
Gustavus D. Sows }

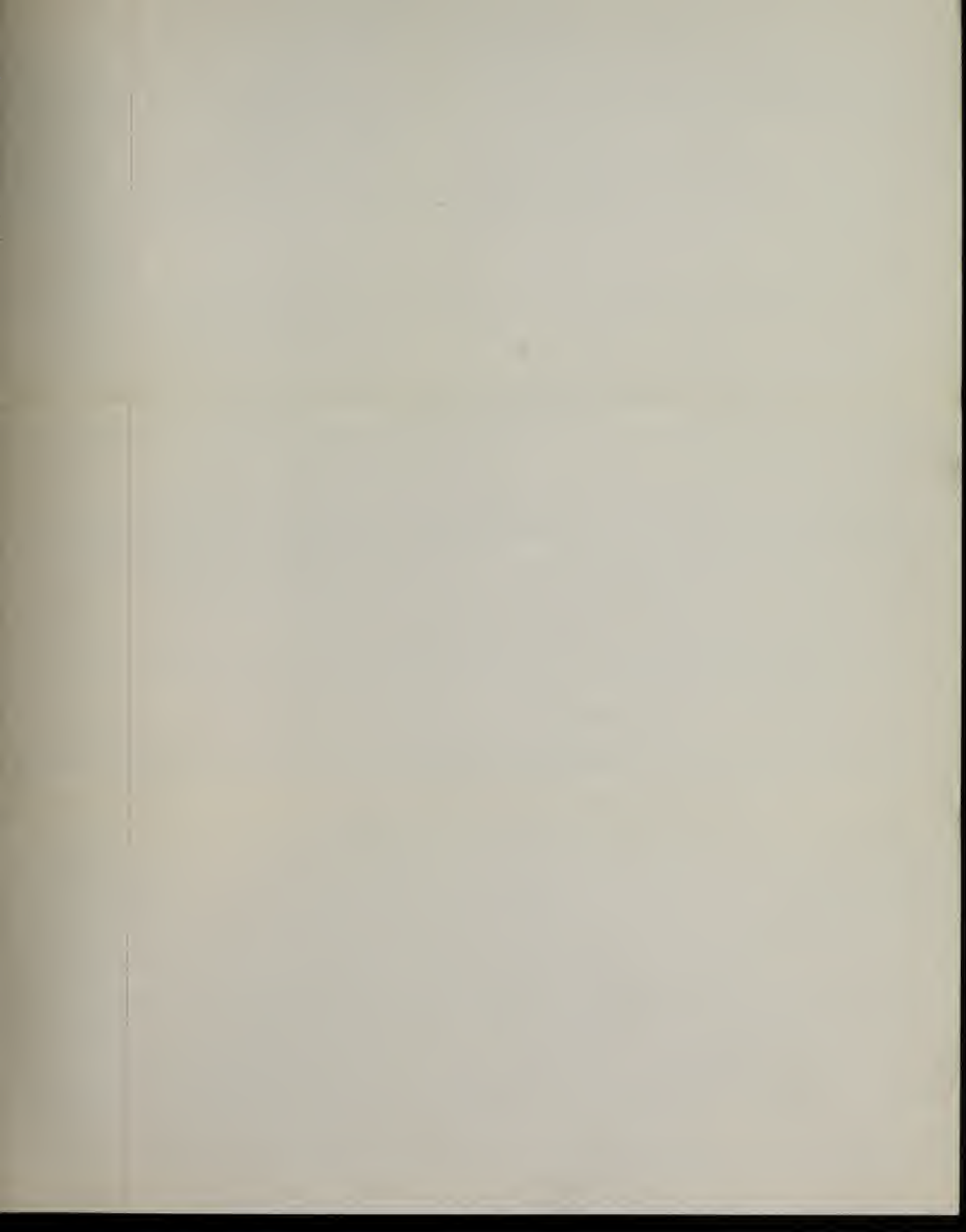
It is hereby stipulated and agreed that David H. Coolidge, Esq., of Boston, may, on appointment by the Court, serve as Special Examiner under and in accordance with the 67th rule in equity, for the taking of evidence in the above entitled cause.

A. J. Robinson, Complainant's Solicitor.

Jane B. Gove Resp. Solicitor

Boston, Dec. 12th 1877.





Herace L. Bowler

v

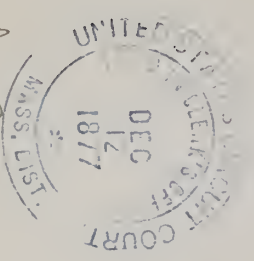
Quatern D. Bowler

Deputation

ca 15

Special Examiner

Almond Lewis J



A. J. Robinson
Comptroller's Secretary

Barra B. Lewis

United States Circuit Court,
District of Massachusetts.

Horace L. Bowker }
" } In Equity.
Gustavus D. Dows. }

Consent is hereby given, that the answer
in the above entitled cause may be filed and
a copy thereof served on the complainant, at
any time previous to December 15th, 1877, with the
same effect as if done in accordance with the
rule of Court relating thereto.

A. J. Robinson. Solicitor for Complainant.

November 1, 1877.

Lana B. Good
Solicitor for Defendant

Honore & Sporken
v
Ludlow S. Sporken

Stipulation.



Bill of Complaint
in the
Circuit Court of the United States

In Equity.

To the Honorable the Judges of the Circuit
Court of the United States, for the District of
Massachusetts.

Horace L. Bowker, of Boston,
in the County of Suffolk and
Commonwealth of Massachusetts,
brings this Bill of Complaint
against
Guilavus D. Dows,
of said Boston.

And thereupon your orator complains and says:
That he is informed and believes himself to be
the original and first inventor of a new and
useful improvement in syrups and mineral^{waters} et
ceterae, fully described in the Letters Patent here-
inafter mentioned, and which had not been known
and used before his said invention, and which at
the time of his application for a patent, as here-
inafter mentioned, had not been for more than
two years in public use or on sale with his con-
sent or allowance.

And your orator, on information and belief
further shows unto your Honors, that the said

Bowker, being so, as aforesaid, the first inventor and discoverer of said improvement and being also a citizen of the United States, did on the 24th day of July 1877, upon due application therefor, obtain Letters Patent of the United States for said invention, in due form of law, under the seal of the Patent Office of the United States, signed by the Secretary of the Interior, and countersigned by the Commissioner of Patents of the United States, bearing date the day and year last aforesaid, whereby there was granted and secured to the said Bowker, his heirs, administrators, and assigns, or intended so to be, for the term of seventeen years from and after the date of the said Letters Patent, the full and exclusive right to make, use and vend to others to use the said invention and improvement, as set forth in said Letters Patent, which are now remaining on record in the Patent Office of the United States; and by virtue whereof the said Bowker became, and was, the sole owner of the rights and privileges granted and secured in and by said Letters Patent.

And your orator further shows unto your honors that your orator by virtue of the premises became and now is the exclusive owner of the said Letters Patent, and of the invention, and of the rights and privileges granted and secured, or intended to be granted and secured, thereby; and that he has invested large sums of money, and has been to great trouble, in and about said invention, and for the purpose of carrying on the

business, and manufacturing and selling the same, and making the same profitable to himself and the public; and that said invention has been, and is, of great benefit and advantage to the public and to your orator; and that the public have very largely acknowledged and acquiesced in the aforesaid rights of your orator; and your orator believes that he will receive and realize large gains and profits therefrom, if infringements thereof by the said defendant shall be prevented.

But the said defendant, well knowing the premises and the rights secured to your orator aforesaid, but contriving to injure your orator and deprive him of the advantages, which might, and otherwise would, accrue unto him from said invention, after the issue of the said Letters Patent to your orator and before the commencement of this suit, did, as your orator is informed and believes, without the license or allowance, and against the will of your orator, and in violation of his rights, and infringement of the said Letters Patent, unlawfully and wrongfully, and in defiance of the rights of your orator did make, use, and sell the said invention and improvement, and that he still continues to do so: that he is threatening to make, use and sell the same in large quantities, and to supply the market therewith, all in defiance of the rights acquired by and secured to, your orator, as aforesaid, and to his great and irreparable loss and injury, and by which he has been and is still being de-

prived of great gains and profits, which he might, and otherwise would, have obtained and which have been enjoyed, and are being received and enjoyed by the said defendant, by and through his aforesaid unlawful acts and doings.

And your orator further shows unto your Honors, on information and belief that said defendant has largely made, used, and sold the said invention and improvement, and has on hand in large quantity a certain preparation, containing said invention, which he is offering for sale, and has made and realized large profits and advantages therefrom; but, to what extent and how exactly your orator does not know, and prays a discovery thereof.

And your orator says that the using of said invention by the said defendant and his preparation therefor and avowed determination to continue the same, and his other aforesaid unlawful acts, in disregard and defiance of the rights of your orator have the effect to encourage and induce others to venture to infringe said patent in disregard of your orator's rights thereunder.

And your orator further shows unto your Honors, that he has caused notice to be given unto said defendant of said infringements, and of the rights of your orator in the premises, and requested him to desist and refrain from such infringements; but he has disregarded the said notice, and refused to desist from such in-

fringements, and still preserves and continues therein

And your orator prays that the said defendant, his servants, agents, attorneys, and workmen, and each and every of them, may be restrained and enjoined by the order and injunction of this Honorable Court from directly or indirectly, making, using or vending said invention and improvement, or his aforesaid preparation or any preparation containing the same or the substantial equivalent thereof, against the said rights of your orator, and that the said defendant may be decreed to pay the costs of this suit; and that your orator may have such further relief, or such other relief as to this Honorable Court shall seem meet, and as shall be agreeable to equity.

May it please your honors to grant unto your orator the writ of injunction issuing out of this Honorable Court, commanding, enjoining, and restraining the said defendant, and his servants, agents, attorneys, and workmen, and each and every of them, as hereinbefore in that behalf prayed.

And inasmuch as your orator can have no adequate relief except in this court, to the end therefore, that the said defendant may, if he can, show why your orator should not have the relief hereby prayed, and may upon his corporal oath, and according to his best and utmost knowledge, remembrance, information, and belief, full, true, direct and perfect answers make to

the premises, and to all the several matters here-
inbefore stated and charged, as fully and partic-
ularly as if severally and separately interrogated
as to each and every of said matters, and
may be compelled to account for, and pay to
your orator the profits by him acquired and
the damages suffered by your orator from the af-
said unlawful acts; and that the court may
assess said profits and damages, and may in-
crease the damages to a sum not exceeding
three times the amount thereof: May it please
your Honors to grant unto your orator the
writ of Subpoena issuing out of, and under
the seal of this Honorable Court, directed to the
said defendant, commanding him by a certain
day, and under a certain penalty, to be and
appear in this Honorable Court, then and there
to answer the premises, and to stand to, and
abide such order and decree as may be
made against him.

And your orator will ever pray &c.

Horace L. Bowker.

Alphonso J. Robinson,
Complainant's Solicitor.

United States of America }
District of Massachusetts, } ss.

On this first day of October,
A.D. 1877, before me personally appeared Horace L.
Bowker, who being by me duly sworn, deposes
and says that he is the above named com

plainant; that he has read the foregoing bill of complaint, subscribed by him, and knows the contents thereof and that the same is true of his own knowledge, except as to matters therein stated on information and belief, and to these he believes it to be true.

Henry R. Pughan,
Notary Public.





George W. Bowler

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Guillermo D. Dort

Recd
C. E. E.

Bail in Equity.



Booker T. Washington
to meet Nov. 5th 1877

A. J. Robinson
Complainant's Solicitor