

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

RE: Serial No.: 88/603,599

Mailing Date: November 13, 2019

Mark: Pump Trade Dress as seen below



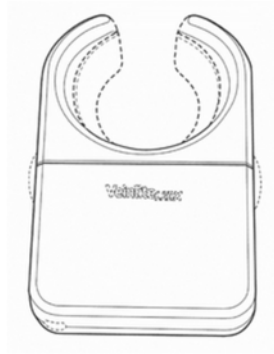
**I. Functionality Refusal**

The Examiner provisionally refused registration of Applicant's trade dress application for the shape of a pump and suction cup apparatus (the "Mark") for "Snake bite kits; Suction cups for medical purposes; Wound suction apparatus" in Class 10 ("Applicant's Goods") on the ground that Applicant's Mark is functional. Applicant respectfully disagrees and asserts that its Mark is not functional.

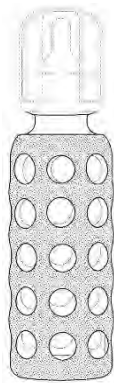
Applicant seeks to protect the distinctive shape of its well-known product. A feature is only functional "if it is essential to the use or purpose of the article or if it affects the cost or quality of the article." *TrafFix Devices, Inc. v. Mktg. Displays, Inc.*, 532 U.S. 23, 33, 58 USPQ2d 1001, 1006 (2001) (internal citations omitted). Here, the Mark, namely the shape of the pump and suction cup apparatus, is not essential to the product's usefulness, and does not improve the quality or affect the cost of Applicant's Goods. The purpose of Applicant's Goods is to create suction on the skin, but Applicant's product could be shaped any number of alternative ways to achieve this goal. The unique shape of Applicant's product is recognizable as a source indicator for Applicant's Goods.

**A. Applicant's Mark is a Source Indicator**

Several registrations for marks comparable to Applicant's Mark exist on the Principal Registry for configurations of medical devices and related goods. For example, U.S. Registration No. 5304214 for the mark seen below for "Light emitting diode (LED) apparatus for lighting, incorporated into medical instruments" is a configuration of exactly that; the product itself is functional, and the shape is simple, but the shape is still a source indicator.

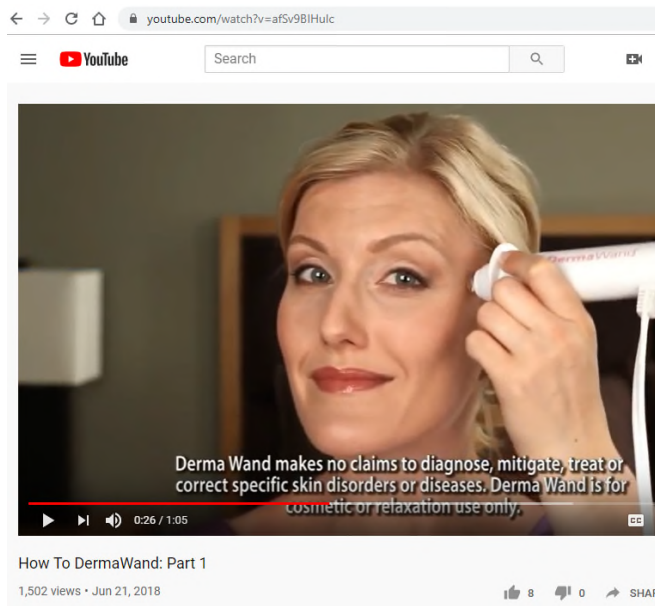
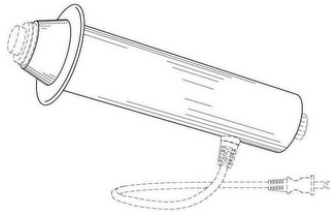


Similarly, U.S. Registration No. 4741613 for the mark seen below for "baby bottles" is a configuration of the bottle. Although the holes may provide extra grip and the product is a convenient cylindrical shape, the overall shape and appearance are still distinctive. Despite the configuration being a functional bottle, the shape is recognized as a source indicator, and the USPTO granted registration.

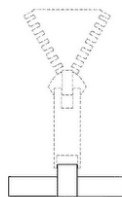


The USPTO has also recognized a product with a similar shape for a beauty product: U.S. Registration No. 5175108 for "Radio frequency skin care device which generates ozone gas for the treatment of the skin; high-frequency skin care device which generates ozone gas

for the treatment of the skin.” The mark itself is merely the cylindrical body, a flange, and part of the tip. The shape was deemed registrable, despite the flange on the product functioning as a handle for the product as seen below.



Registrations for comparable configurations also exist outside of the safety, beauty, and medical industries. For example, U.S. Registration No. 4293621 for “coats; jackets” and the mark, seen below, is a “three-dimensional stylized T-shaped configuration of a zipper pull.” This registration overcame an initial functionality refusal based partially on an explanation that the configuration was “superfluous” to the functionality, because the zipper could operate without the distinctive configuration.



A reference chart and TSDR Printouts for these comparable registrations are attached as Exhibit A. Although third-party registrations are not dispositive, the marks protected by these registrations are comparable to Applicant's Mark because they are simple shapes that signify the source of the goods despite an underlying function. Similarly here, Applicant's Mark is a shape that is not essential to the product's function.

As further evidence that Applicant's Mark is inherently distinctive, consumers and professional caretakers have long been recognized by its appearance alone: Applicant's The Extractor™ product has been incorporated into medical and veterinary practices for years. See, e.g., Exhibit B, a representative sample of media coverage of Applicant's product and Applicant's Mark from 1989 and 1990.

**B. Applicant's Expired Patent**

Applicant owned a patent for its product, U.S. Patent No. 4287819, but the patent claims did not depend on the overall shape of Applicant's product. The patent language describes the body of the product as "tubular," but otherwise there is no indication that the exact size, shape, or proportions of the product itself are essential to its purpose or function. The patent even allows for modifications and various embodiments. Exhibit C.

**C. Alternative Designs are Available**

The burden is on the Examiner to establish a *prima facie* case of functionality. See *In re Becton, Dickinson & Co.*, 675 F.3d 1368, 1374, 102 USPQ2d 1372, 1376 (Fed. Cir. 2012). To support the refusal, the Examiner presented evidence that product itself is functional, and that several of the parts of the product have their own function. The evidence does not prove, however, that the overall shape of the product is functional. In fact, the product could be reconfigured in a number of different ways and still function as well as it does. The Federal Circuit has held that the existence of theoretical or actual available alternative designs is probative to the functionality question because, especially in the case of actual alternatives, the design at issue is not essential to perform its function. See *Valu Eng'g, Inc. v. Rexnord Corp.*,

278 F.3d 1268, 1276 (Fed. Cir. 2002) (finding that alternative designs are a “legitimate source of evidence to determine whether a feature is functional in the first place”).

In addition to theoretical alternative designs, there are actual alternative designs for venom-removal devices on the market. For example, there are two other designs with “tubular” bodies that function nearly identically to Applicant’s product, but have distinct appearances, mainly with the way the product is handled. Exhibit D. These products along with Applicant’s product can be used with one hand and all of the products also operate by creating a vacuum.

## **II. Request for Information**

Aside from the information already provided herein, Applicant offers the following in response to the examiner’s questions:

- Applicant’s product design is not the result of a comparatively simple or inexpensive method of manufacture in relation to alternative designs. The cost and method of manufacture of Applicant’s product are confidential.
- The instruction manual for Applicant’s product is attached as Exhibit E.
- As explained in Applicant’s marketing materials and in its expired patent, the parts of its product may have an underlying function: the “tubular” body and the “plunger” create a vacuum, and the different-sized cups are used against the skin to help suction venom from under the skin. Other than the tubular body, though, the proportions of the product can differ. Also, the “flange” or handle is so that a person can operate the pump with one hand, but as seen in the alternative designs, the handle can be shaped any number of ways.

Respectfully submitted,

SEYFARTH SHAW LLP

/Becki C. Lee/

Becki C. Lee

# **EXHIBIT A**

**Generated on:** This page was generated by TSDR on 2019-12-17 09:29:30 EST

**Mark:** VEINLITELEDX



**US Serial Number:** 86880328

**Application Filing Date:** Jan. 20, 2016

**US Registration Number:** 5304214

**Registration Date:** Oct. 10, 2017

**Filed as TEAS Plus:** Yes

**Currently TEAS Plus:** Yes

**Register:** Principal

**Mark Type:** Trademark

**TM5 Common Status Descriptor:**



LIVE/REGISTRATION/Issued and Active

The trademark application has been registered with the Office.

**Status:** Registered. The registration date is used to determine when post-registration maintenance documents are due.

**Status Date:** Oct. 10, 2017

**Publication Date:** Jul. 25, 2017

## Mark Information

**Mark Literal Elements:** VEINLITELEDX

**Standard Character Claim:** No

**Mark Drawing Type:** 3 - AN ILLUSTRATION DRAWING WHICH INCLUDES WORD(S)/ LETTER(S)/NUMBER(S)

**Description of Mark:** The mark consists of the stylized term "VeinliteLEDX" in the middle of a three-dimensional configuration of a device consisting of a rectangular base that extends up to a curved top, resembling a sideways letter "C". Inside the "C" is a button and a series of LED lights. The design of the device is shown for placement purposes only and is not claimed as a feature of the mark.

**Color(s) Claimed:** Color is not claimed as a feature of the mark.

**Acquired Distinctiveness Claim:** In part

**Distinctiveness Limitation Statement:** as to "VEINLITELEDX"

**Design Search Code(s):** 10.07.25 - Bed pans; X-ray apparatus; Braces (neck, back, teeth, leg, etc.); Caps, surgical; Clamps, medical; Eye droppers; Face Masks, surgical; Gloves, surgical; Hearing aids; Heating pads; Hot water bottles; Inhalers (medical); Intravenous devices; Masks, surgical; Mirrors, dental; Pans, bed; Scrubs (surgical); Surgical caps; Surgical gowns; Blood pressure apparatus

## Related Properties Information

**Claimed Ownership of US Registrations:** 4207110, 4316855, 4978274 and others

## Goods and Services

### Note:

The following symbols indicate that the registrant/owner has amended the goods/services:

- Brackets [...] indicate deleted goods/services;
- Double parenthesis ((.)) identify any goods/services not claimed in a Section 15 affidavit of incontestability; and
- Asterisks \*.\* identify additional (new) wording in the goods/services.

**For:** Light emitting diode (LED) apparatus for lighting, incorporated into medical instruments

**International** 010 - Primary Class

**U.S Class(es):** 026, 039, 044

**Class(es):****Class Status:** ACTIVE**Basis:** 1(a)**First Use:** Jan. 01, 2005**Use in Commerce:** Jan. 01, 2005

## Basis Information (Case Level)

**Filed Use:** Yes**Currently Use:** Yes**Filed ITU:** No**Currently ITU:** No**Filed 44D:** No**Currently 44E:** No**Filed 44E:** No**Currently 66A:** No**Filed 66A:** No**Currently No Basis:** No**Filed No Basis:** No

## Current Owner(s) Information

**Owner Name:** Translite, LLC**Owner Address:** 345 Commerce Green Blvd.  
Sugar Land, TEXAS UNITED STATES 77478**Legal Entity Type:** LIMITED LIABILITY COMPANY**State or Country** DELAWARE  
**Where Organized:**

## Attorney/Correspondence Information

### Attorney of Record

**Attorney Name:** Stewart L Gitler**Docket Number:** WFG-7214**Attorney Primary** [mail@iplawsolutions.com](mailto:mail@iplawsolutions.com)  
**Email Address:****Attorney Email** Yes  
**Authorized:**

### Correspondent

**Correspondent** STEWART L GITLER  
**Name/Address:** WELSH FLAXMAN & GITLER LLC  
2000 DUKE ST STE 100  
ALEXANDRIA, VIRGINIA UNITED STATES 22314**Phone:** 703-920-1122**Fax:** 703-920-3399**Correspondent e-** [mail@iplawsolutions.com](mailto:mail@iplawsolutions.com)  
**mail:** [gitler@iplawsolutions.com](mailto:gitler@iplawsolutions.com)**Correspondent e-** Yes  
**mail Authorized:**

### Domestic Representative - Not Found

## Prosecution History

Date	Description	Proceeding Number
May 15, 2018	CERTIFICATE OF CORRECTION ISSUED	
Oct. 10, 2017	REGISTERED-PRINCIPAL REGISTER	
Jul. 25, 2017	OFFICIAL GAZETTE PUBLICATION CONFIRMATION E-MAILED	
Jul. 25, 2017	PUBLISHED FOR OPPOSITION	
Jul. 05, 2017	NOTIFICATION OF NOTICE OF PUBLICATION E-MAILED	
Jun. 19, 2017	LAW OFFICE PUBLICATION REVIEW COMPLETED	68123
Jun. 12, 2017	APPLICANT/CORRESPONDENCE CHANGES (NON-RESPONSIVE) ENTERED	88888
Jun. 12, 2017	TEAS CHANGE OF OWNER ADDRESS RECEIVED	
Jun. 12, 2017	EXPARTE APPEAL TERMINATED	880328
Jun. 12, 2017	APPROVED FOR PUB - PRINCIPAL REGISTER	
Jun. 09, 2017	TEAS/EMAIL CORRESPONDENCE ENTERED	68123
Jun. 09, 2017	CORRESPONDENCE RECEIVED IN LAW OFFICE	68123
Jun. 02, 2017	TEAS RESPONSE TO OFFICE ACTION RECEIVED	
May 15, 2017	NOTIFICATION OF NON-FINAL ACTION E-MAILED	6325
May 15, 2017	NON-FINAL ACTION E-MAILED	6325
May 15, 2017	NON-FINAL ACTION WRITTEN	81860



May 15, 2017	JURISDICTION RESTORED TO EXAMINING ATTORNEY	880328
May 10, 2017	EXAMINERS REQUEST FOR REMAND TO TTAB	81860
May 01, 2017	ASSIGNED TO EXAMINER	81860
Apr. 25, 2017	JURISDICTION RESTORED TO EXAMINING ATTORNEY	880328
Mar. 06, 2017	NOTIFICATION OF ACTION DENYING REQ FOR RECON E-MAILED	
Mar. 06, 2017	ACTION DENYING REQ FOR RECON E-MAILED	
Mar. 06, 2017	ACTION CONTINUING FINAL - COMPLETED	90329
Jan. 26, 2017	TEAS/EMAIL CORRESPONDENCE ENTERED	68123
Jan. 26, 2017	CORRESPONDENCE RECEIVED IN LAW OFFICE	68123
Jan. 19, 2017	TEAS REQUEST FOR RECONSIDERATION RECEIVED	
Jan. 19, 2017	EX PARTE APPEAL-INSTITUTED	880328
Jan. 19, 2017	JURISDICTION RESTORED TO EXAMINING ATTORNEY	880328
Jan. 19, 2017	EXPARTE APPEAL RECEIVED AT TTAB	
Jul. 21, 2016	NOTIFICATION OF FINAL REFUSAL EMAILED	
Jul. 21, 2016	FINAL REFUSAL E-MAILED	
Jul. 21, 2016	FINAL REFUSAL WRITTEN	90329
Jun. 29, 2016	TEAS/EMAIL CORRESPONDENCE ENTERED	68123
Jun. 29, 2016	CORRESPONDENCE RECEIVED IN LAW OFFICE	68123
Jun. 17, 2016	ASSIGNED TO LIE	68123
Jun. 09, 2016	TEAS RESPONSE TO OFFICE ACTION RECEIVED	
Apr. 07, 2016	NOTIFICATION OF NON-FINAL ACTION E-MAILED	6325
Apr. 07, 2016	NON-FINAL ACTION E-MAILED	6325
Apr. 07, 2016	NON-FINAL ACTION WRITTEN	90329
Mar. 31, 2016	ASSIGNED TO EXAMINER	90329
Jan. 26, 2016	NOTICE OF DESIGN SEARCH CODE E-MAILED	
Jan. 25, 2016	NEW APPLICATION OFFICE SUPPLIED DATA ENTERED IN TRAM	
Jan. 23, 2016	NEW APPLICATION ENTERED IN TRAM	

## TM Staff and Location Information

### TM Staff Information - None

#### File Location

**Current Location:** PUBLICATION AND ISSUE SECTION

**Date in Location:** Oct. 10, 2017

## Proceedings

### Summary

**Number of Proceedings:** 1

### Type of Proceeding: Exparte Appeal

**Proceeding Number:** [86880328](#)

**Filing Date:** Jan 19, 2017

**Status:** Terminated

**Status Date:** Jun 12, 2017

**Interlocutory Attorney:**

#### Plaintiff(s)

**Name:** Translite, LLC

**Correspondent Address:** STEWART L GITLER  
WELSH FLAXMAN & GITLER LLC  
2000 DUKE ST STE 100  
ALEXANDRIA VA UNITED STATES , 22314

**Correspondent e-mail:** [mail@iplawsolutions.com](mailto:mail@iplawsolutions.com) , [gitler@iplawsolutions.com](mailto:gitler@iplawsolutions.com)

### Associated marks

Mark	Application Status	Serial Number	Registration Number
VEINLITELEDX	Registered	86880328	5304214

**Prosecution History**

<b>Entry Number</b>	<b>History Text</b>	<b>Date</b>	<b>Due Date</b>
1	APPEAL TO BOARD	Jan 19, 2017	
2	APPEAL ACKNOWLEDGED; CASE REMANDED	Jan 19, 2017	
3	INSTITUTED	Jan 19, 2017	
4	REQ FOR RECON	Jan 09, 2017	
5	RECON DENIED	Mar 06, 2017	
6	PROCEEDINGS RESUMED	Mar 13, 2017	
7	APPEAL BRIEF	Apr 19, 2017	
8	APPEAL FORWARDED TO EXAMINER FOR BRIEF	Apr 25, 2017	
9	EXAMINER'S REQ FOR REMAND	May 10, 2017	
10	JURISDICTION RESTORED / REMANDED TO EXAMINER	May 15, 2017	
11	TERMINATED	Jun 12, 2017	

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Mark:

US Serial Number: 86022475

Application Filing Date: Jul. 29, 2013

US Registration Number: 4741613

Registration Date: May 26, 2015

Register: Principal

Mark Type: Trademark

TM5 Common Status Descriptor:



LIVE/REGISTRATION/Issued and Active

The trademark application has been registered with the Office.

Status: Registered. The registration date is used to determine when post-registration maintenance documents are due.

Status Date: May 26, 2015

Publication Date: Mar. 10, 2015

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## Mark Information

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Mark Literal Elements: None

Standard Character Claim: No

Mark Drawing Type: 2 - AN ILLUSTRATION DRAWING WITHOUT ANY WORDS(S)/ LETTER(S)/NUMBER(S)

Description of Mark: The mark consists of a three-dimensional configuration of a baby bottle with a protective sleeve with circular holes arranged in a repeating stacked circle design. The broken lines depicting the nipple, cap, bottle and protective sleeve indicate placement of the mark on the goods and are not part of the mark.

Color(s) Claimed: Color is not claimed as a feature of the mark.

Lining and Stippling Statement: The stippling is for shading purposes only.

Acquired Distinctiveness Claim: In whole

Design Search Code(s): 19.09.03 - Bottles, jars or flasks with straight, vertical sides; Flasks with straight or vertical sides; Jars with straight or vertical sides  
26.01.31 - Circles - five or more; Five or more circles

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## Goods and Services

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**Note:**

The following symbols indicate that the registrant/owner has amended the goods/services:

- Brackets [...] indicate deleted goods/services;
- Double parenthesis ((.)) identify any goods/services not claimed in a Section 15 affidavit of incontestability; and
- Asterisks \*.\* identify additional (new) wording in the goods/services.

For: Baby bottles

International Class(es): 010 - Primary Class

U.S Class(es): 026, 039, 044

Class Status: ACTIVE

Basis: 1(a)

First Use: Sep. 2007

Use in Commerce: Sep. 2007

## Basis Information (Case Level)

Filed Use: Yes

Currently Use: Yes

Filed ITU: No

Currently ITU: No

Filed 44D: No

Currently 44E: No

Filed 44E: No

Currently 66A: No

Filed 66A: No

Currently No Basis: No

Filed No Basis: No

## Current Owner(s) Information

Owner Name: THERMOS L.L.C.

Owner Address: 475 N. MARTINGALE ROAD  
SCHAUMBURG, ILLINOIS UNITED STATES 60173

Legal Entity Type: LIMITED LIABILITY COMPANY

State or Country: DELAWARE  
Where Organized:

## Attorney/Correspondence Information

### Attorney of Record

Attorney Name: Adam S. Weiss

Attorney Primary Email Address: [uspt@polsinelli.com](mailto:uspt@polsinelli.com)

Attorney Email Authorized: Yes

### Correspondent

Correspondent Name/Address: Adam S. Weiss  
Polsinelli PC  
150 N. Riverside Plaza  
Suite 3000  
Chicago, ILLINOIS UNITED STATES 60606

Phone: 312-873-3644

Fax: 312-819-1910

Correspondent e-mail: [uspt@polsinelli.com](mailto:uspt@polsinelli.com) [aweiss@polsinelli.com](mailto:aweiss@polsinelli.com)

Correspondent e-mail Authorized: Yes

### Domestic Representative - Not Found

## Prosecution History

Date	Description	Proceeding Number
Aug. 22, 2018	AUTOMATIC UPDATE OF ASSIGNMENT OF OWNERSHIP	
Jan. 19, 2018	ATTORNEY/DOM.REP.REVOKED AND/OR APPOINTED	
Jan. 19, 2018	TEAS REVOKE/APP/CHANGE ADDR OF ATTY/DOM REP RECEIVED	
Aug. 03, 2017	ATTORNEY/DOM.REP.REVOKED AND/OR APPOINTED	
Aug. 03, 2017	TEAS REVOKE/APP/CHANGE ADDR OF ATTY/DOM REP RECEIVED	
May 26, 2015	REGISTERED-PRINCIPAL REGISTER	
Apr. 07, 2015	ATTORNEY/DOM.REP.REVOKED AND/OR APPOINTED	
Apr. 07, 2015	TEAS REVOKE/APP/CHANGE ADDR OF ATTY/DOM REP RECEIVED	
Mar. 10, 2015	OFFICIAL GAZETTE PUBLICATION CONFIRMATION E-MAILED	
Mar. 10, 2015	PUBLISHED FOR OPPOSITION	
Feb. 18, 2015	NOTIFICATION OF NOTICE OF PUBLICATION E-MAILED	
Feb. 02, 2015	LAW OFFICE PUBLICATION REVIEW COMPLETED	77976
Feb. 02, 2015	ASSIGNED TO LIE	77976
Jan. 12, 2015	APPROVED FOR PUB - PRINCIPAL REGISTER	
Dec. 12, 2014	TEAS/EMAIL CORRESPONDENCE ENTERED	88889
Dec. 11, 2014	CORRESPONDENCE RECEIVED IN LAW OFFICE	88889
Dec. 11, 2014	TEAS RESPONSE TO OFFICE ACTION RECEIVED	

Jun. 12, 2014	NOTIFICATION OF NON-FINAL ACTION E-MAILED	6325
Jun. 12, 2014	NON-FINAL ACTION E-MAILED	6325
Jun. 12, 2014	NON-FINAL ACTION WRITTEN	72004
May 23, 2014	TEAS/EMAIL CORRESPONDENCE ENTERED	88889
May 22, 2014	CORRESPONDENCE RECEIVED IN LAW OFFICE	88889
May 22, 2014	TEAS RESPONSE TO OFFICE ACTION RECEIVED	
Nov. 22, 2013	NOTIFICATION OF NON-FINAL ACTION E-MAILED	6325
Nov. 22, 2013	NON-FINAL ACTION E-MAILED	6325
Nov. 22, 2013	NON-FINAL ACTION WRITTEN	72004
Nov. 12, 2013	ASSIGNED TO EXAMINER	72004
Aug. 03, 2013	NOTICE OF DESIGN SEARCH CODE E-MAILED	
Aug. 02, 2013	NEW APPLICATION OFFICE SUPPLIED DATA ENTERED IN TRAM	
Aug. 01, 2013	NEW APPLICATION ENTERED IN TRAM	

## TM Staff and Location Information

### TM Staff Information - None

#### File Location

**Current Location:** PUBLICATION AND ISSUE SECTION

**Date in Location:** May 26, 2015

## Assignment Abstract Of Title Information

### Summary

**Total Assignments:** 1

**Registrant:** Lifefactory, Inc.

### Assignment 1 of 1

**Conveyance:** MERGER EFFECTIVE 07/23/2018

**Reel/Frame:** [6413/0537](#)

**Pages:** 15

**Date Recorded:** Aug. 14, 2018

**Supporting Documents:** [assignment-tm-6413-0537.pdf](#)

#### Assignor

**Name:** [LIFEFACTORY, INC.](#)

**Execution Date:** Jun. 28, 2018

**Legal Entity Type:** CORPORATION

**State or Country Where Organized:** CALIFORNIA

#### Assignee

**Name:** [THERMOS L.L.C.](#)

**Legal Entity Type:** LIMITED LIABILITY COMPANY

**State or Country Where Organized:** DELAWARE

**Address:** 475 N. MARTINGALE ROAD  
SCHAUMBURG, ILLINOIS 60173

#### Correspondent

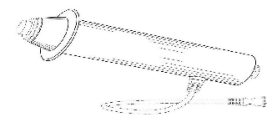
**Correspondent Name:** ADAM S. WEISS

**Correspondent Address:** 150 N. RIVERSIDE PLAZA, SUITE 3000  
CHICAGO, IL 60606

**Domestic Representative - Not Found**

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Mark:



US Serial Number: 87061932

Application Filing Date: Jun. 06, 2016

US Registration Number: 5175108

Registration Date: Apr. 04, 2017

Filed as TEAS RF: Yes

Currently TEAS RF: Yes

Register: Principal

Mark Type: Trademark

TM5 Common Status Descriptor:



LIVE/REGISTRATION/Issued and Active

The trademark application has been registered with the Office.

Status: Registered. The registration date is used to determine when post-registration maintenance documents are due.

Status Date: Apr. 04, 2017

Publication Date: Jan. 17, 2017

## Mark Information

Mark Literal Elements: None

Standard Character Claim: No

Mark Drawing Type: 2 - AN ILLUSTRATION DRAWING WITHOUT ANY WORDS(S)/ LETTER(S)/NUMBER(S)

Description of Mark: The mark consists of a three-dimensional configuration of the goods consisting of a cylindrical housing with an annular flange near a first end, the first end tapering to a truncated end. The bulb, adjustment knob and electrical cord are shown in phantom, are not part of the mark, and serve only to indicate the position of the mark.

Color(s) Claimed: Color is not claimed as a feature of the mark.

Acquired Distinctiveness Claim: In whole

Design Search Code(s): 10.07.25 - Gloves, surgical; Surgical gowns; Surgical caps; Scrubs (surgical); Pans, bed; Bed pans; Blood pressure apparatus; Braces (neck, back, teeth, leg, etc.); Caps, surgical; Clamps, medical; Eye droppers; Face Masks, surgical; X-ray apparatus; Hearing aids; Heating pads; Hot water bottles; Inhalers (medical); Intravenous devices; Masks, surgical; Mirrors, dental  
14.01.03 - Plugs, electrical; Electrical wire/cables, With plug; Cords, electrical (with plugs); Cables, electrical, With electric plugs  
26.19.02 - Cylinders (geometric)

## Goods and Services

### Note:

The following symbols indicate that the registrant/owner has amended the goods/services:

- Brackets [...] indicate deleted goods/services;
- Double parenthesis (()) identify any goods/services not claimed in a Section 15 affidavit of incontestability; and
- Asterisks \*..\* identify additional (new) wording in the goods/services.

For: Radio frequency skin care device which generates ozone gas for the treatment of the skin; high-frequency skin care device which generates ozone gas for the treatment of the skin

International Class(es): 010 - Primary Class

U.S Class(es): 026, 039, 044

Class Status: ACTIVE

Basis: 1(a)

First Use: Jan. 1997

Use in Commerce: Jan. 1997

## Basis Information (Case Level)

Filed Use: Yes

Currently Use: Yes

Filed ITU: No

Currently ITU: No

Filed 44D: No

Currently 44E: No

Filed 44E: No

Currently 66A: No

Filed 66A: No

Currently No Basis: No

Filed No Basis: No

## Current Owner(s) Information

Owner Name: ICTV Brands Inc.

Owner Address: 489 Devon Park Drive, Suite 315  
Wayne, FLORIDA UNITED STATES 19087

Legal Entity Type: CORPORATION

State or Country Where Organized: NEVADA

## Attorney/Correspondence Information

### Attorney of Record

Attorney Name: Kevin P. Crosby

Docket Number: 825305-144

Attorney Primary Email Address: [livery@rubinandrubin.com](mailto:livery@rubinandrubin.com)

Attorney Email Authorized: Yes

### Correspondent

Correspondent Name/Address: Kevin P. Crosby  
Rubin & Rubin  
8201 Peters Road, Suite 1000  
Plantation, FLORIDA UNITED STATES 33324

Phone: 772-283-2004

Fax: 772-283-2009

Correspondent e-mail: [livery@rubinandrubin.com](mailto:livery@rubinandrubin.com) [kcrosby@rubinandrubin.com](mailto:kcrosby@rubinandrubin.com)

Correspondent e-mail Authorized: Yes

### Domestic Representative - Not Found

## Prosecution History

Date	Description	Proceeding Number
Sep. 04, 2018	ATTORNEY/DOM.REP.REVOKED AND/OR APPOINTED	
Sep. 04, 2018	TEAS REVOKE/APP/CHANGE ADDR OF ATTY/DOM REP RECEIVED	
Apr. 04, 2017	REGISTERED-PRINCIPAL REGISTER	
Jan. 17, 2017	OFFICIAL GAZETTE PUBLICATION CONFIRMATION E-MAILED	
Jan. 17, 2017	PUBLISHED FOR OPPOSITION	
Dec. 28, 2016	NOTIFICATION OF NOTICE OF PUBLICATION E-MAILED	
Dec. 07, 2016	APPROVED FOR PUB - PRINCIPAL REGISTER	
Nov. 16, 2016	TEAS/EMAIL CORRESPONDENCE ENTERED	88889
Nov. 15, 2016	CORRESPONDENCE RECEIVED IN LAW OFFICE	88889
Nov. 15, 2016	TEAS RESPONSE TO OFFICE ACTION RECEIVED	
Oct. 11, 2016	NOTIFICATION OF NON-FINAL ACTION E-MAILED	6325
Oct. 11, 2016	NON-FINAL ACTION E-MAILED	6325
Oct. 11, 2016	NON-FINAL ACTION WRITTEN	76626
Sep. 16, 2016	ASSIGNED TO EXAMINER	76626
Jun. 15, 2016	NOTICE OF DESIGN SEARCH CODE E-MAILED	
Jun. 14, 2016	NEW APPLICATION OFFICE SUPPLIED DATA ENTERED IN TRAM	
Jun. 09, 2016	NEW APPLICATION ENTERED IN TRAM	

## TM Staff and Location Information

### TM Staff Information - None

#### File Location

Current Location: PUBLICATION AND ISSUE SECTION

Date in Location: Apr. 04, 2017





Generated on: This page was generated by TSDR on 2019-12-17 09:29:03 EST

Mark:



US Serial Number: 85555066

Application Filing Date: Feb. 28, 2012

US Registration Number: 4293621

Registration Date: Feb. 19, 2013

Filed as TEAS Plus: Yes

Currently TEAS Plus: Yes

Register: Supplemental

Mark Type: Trademark

TM5 Common Status Descriptor:



LIVE/REGISTRATION/Issued and Active

The trademark application has been registered with the Office.

Amended to Principal Register: No

Date Amended to Current Register: Dec. 14, 2012

Status: A Section 8 declaration has been accepted.

Status Date: Mar. 16, 2019

## Mark Information

Mark Literal Elements: None

Standard Character Claim: No

Mark Drawing Type: 2 - AN ILLUSTRATION DRAWING WITHOUT ANY WORDS(S)/ LETTER(S)/NUMBER(S)

Description of Mark: The mark consists of a three-dimensional stylized T-shaped configuration of a zipper pull. The area shown in dotted lines is not part of the mark and merely shows the placement of the mark on the goods.

Color(s) Claimed: Color is not claimed as a feature of the mark.

Design Search Code(s): 09.09.05 - Zippers (textile or clothing)

## Goods and Services

### Note:

The following symbols indicate that the registrant/owner has amended the goods/services:

- Brackets [...] indicate deleted goods/services;
- Double parenthesis ((.)) identify any goods/services not claimed in a Section 15 affidavit of incontestability; and
- Asterisks \*..\* identify additional (new) wording in the goods/services.

For: Coats; Jackets

International Class(es): 025 - Primary Class

U.S Class(es): 022, 039

Class Status: ACTIVE

Basis: 1(a)

First Use: Nov. 03, 2011

Use in Commerce: Nov. 03, 2011

## Basis Information (Case Level)

Filed Use: Yes

Currently Use: Yes

Filed ITU: No

Currently ITU: No

Filed 44D: No

Currently 44E: No

Filed 44E: No

Currently 66A: No

Filed 66A: No

Currently No Basis: No

Filed No Basis: No

## Current Owner(s) Information

**Owner Name:** The Haddad Apparel Group Limited

**Owner Address:** 90 E. 5th Street  
Bayonne, NEW JERSEY UNITED STATES 07002

**Legal Entity Type:** CORPORATION

**State or Country Where Organized:** NEW YORK

## Attorney/Correspondence Information

### Attorney of Record

**Attorney Name:** Brad D. Rose, Esq.

**Docket Number:** 17371.00001

**Attorney Primary Email Address:** [tlee@pryorcashman.com](mailto:tlee@pryorcashman.com)

**Attorney Email Authorized:** Yes

### Correspondent

**Correspondent Name/Address:** Brad D. Rose, Esq.  
Pryor Cashman LLP  
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New York, NEW YORK UNITED STATES 10036

**Phone:** 212 326 0875

**Fax:** 212 798 6369

**Correspondent e-mail:** [tlee@pryorcashman.com](mailto:tlee@pryorcashman.com) [tmdocketing@pryorcashman.com](mailto:tmdocketing@pryorcashman.com)

**Correspondent e-mail Authorized:** Yes

### Domestic Representative - Not Found

## Prosecution History

Date	Description	Proceeding Number
Mar. 16, 2019	NOTICE OF ACCEPTANCE OF SEC. 8 - E-MAILED	
Mar. 16, 2019	REGISTERED - SEC. 8 (6-YR) ACCEPTED	68335
Mar. 16, 2019	CASE ASSIGNED TO POST REGISTRATION PARALEGAL	68335
Feb. 19, 2019	TEAS SECTION 8 RECEIVED	
Dec. 11, 2018	ATTORNEY/DOM.REP.REVOKED AND/OR APPOINTED	
Dec. 11, 2018	TEAS REVOKE/APP/CHANGE ADDR OF ATTY/DOM REP RECEIVED	
Feb. 19, 2018	COURTESY REMINDER - SEC. 8 (6-YR) E-MAILED	
Sep. 05, 2013	TEAS CHANGE OF CORRESPONDENCE RECEIVED	
Feb. 19, 2013	REGISTERED-SUPPLEMENTAL REGISTER	
Jan. 11, 2013	LAW OFFICE PUBLICATION REVIEW COMPLETED	70138
Jan. 08, 2013	APPROVED FOR REGISTRATION SUPPLEMENTAL REGISTER	
Jan. 08, 2013	TEAS/EMAIL CORRESPONDENCE ENTERED	70138
Jan. 08, 2013	CORRESPONDENCE RECEIVED IN LAW OFFICE	70138
Jan. 08, 2013	ASSIGNED TO LIE	70138
Jan. 02, 2013	TEAS VOLUNTARY AMENDMENT RECEIVED	
Dec. 15, 2012	TEAS/EMAIL CORRESPONDENCE ENTERED	88889
Dec. 14, 2012	CORRESPONDENCE RECEIVED IN LAW OFFICE	88889
Dec. 14, 2012	TEAS RESPONSE TO OFFICE ACTION RECEIVED	
Jun. 14, 2012	NOTIFICATION OF NON-FINAL ACTION E-MAILED	6325
Jun. 14, 2012	NON-FINAL ACTION E-MAILED	6325
Jun. 14, 2012	NON-FINAL ACTION WRITTEN	82085
Jun. 07, 2012	ASSIGNED TO EXAMINER	82085
Mar. 08, 2012	NOTICE OF DESIGN SEARCH CODE MAILED	
Mar. 07, 2012	NEW APPLICATION OFFICE SUPPLIED DATA ENTERED IN TRAM	
Mar. 02, 2012	NEW APPLICATION ENTERED IN TRAM	

## TM Staff and Location Information

TM Staff Information - None

File Location

Current Location: TMEG LAW OFFICE 105

Date in Location: Mar. 16, 2019

## Assignment Abstract Of Title Information

### Summary

Total Assignments: 1

Registrant: The Haddad Apparel Group Limited

### Assignment 1 of 1

Conveyance: SECURITY INTEREST

Reel/Frame: [5579/0462](#)

Pages: 9

Date Recorded: Jul. 17, 2015

Supporting Documents: [assignment-tm-5579-0462.pdf](#)

#### Assignor

Name: [THE HADDAD APPAREL GROUP, LTD.](#)

Execution Date: Jul. 16, 2015

Legal Entity Type: CORPORATION

State or Country Where Organized: NEW YORK

#### Assignee

Name: [JPMORGAN CHASE BANK, N.A.](#)

Legal Entity Type: NATIONAL ASSOCIATION

State or Country Where Organized: UNITED STATES

Address: 270 PARK AVENUE  
42ND FLOOR  
NEW YORK, NEW YORK 10017

#### Correspondent

Correspondent Name: ROBERT S. BRODER

Correspondent Address: 2 PARK AVENUE  
HERRICK, FEINSTEIN LLP  
NEW YORK, NY 10016

Domestic Representative - Not Found

# **EXHIBIT B**

rattlesnake continued

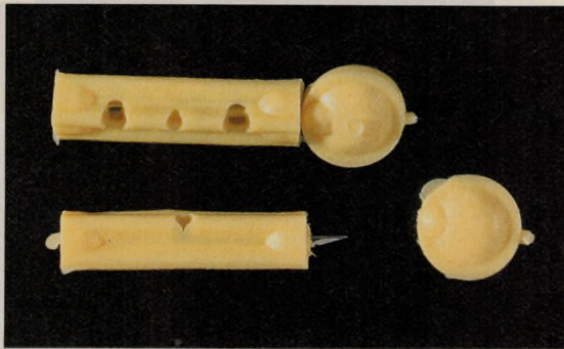


Figure 6. Lancet used at the San Diego Zoo.



Figure 7. Current San Diego Zoo snakebite kit.

The constricting band can be left in place for an extended period of time and normally is best removed only after antivenom infusion has begun.

**Apply Suction.** Suction applied directly over the fang marks has been shown to extract some of the venom.<sup>4</sup> The suction must be strong and applied within the first five minutes to be effective. After 30 minutes, the venom is diffused and cannot be removed by suction.

Incisions over, through, around, and into the bite site are no longer recommended because

they seem to cause more harm than good. We recommend that lay people make no incision. Those at high risk should carry an effective suction apparatus. (The best suction device currently available is called the Extractor. It allegedly applies one atmosphere of suction, and in both the laboratory and the field it has been shown to remove venom.<sup>4</sup>) It is our feeling that one or two cutaneous punctures may facilitate suction removal of the venom. Lancets designed for finger-stick blood sampling are ideal for this purpose. They are sterile, disposable, and cheap. They have a controlled depth and a sufficient bore so that they can facilitate venom extraction. One or two punctures are made at each fang mark before suction is applied. Figure 6 is a picture of the lancet we use at the San Diego Zoo.

A sharp knife or a 20-gauge needle would work well in skilled hands, but each of these could inflict unnecessary injury. Figure 7 shows the current San Diego Zoo snakebite kit. It consists of a Sawyer Pump extractor package (Sawyer Products, Long Beach, CA) with Penrose drain and lancet.

**Transport Victim to Medical Care Facility.** If the victim is near a car, use it to transport him or her to the nearest medical facility. If the victim is within 10 to 20 minutes' walking distance of a car, walk to the car and then drive to a medical facility. If an individual is more than a one-hour walk from transportation, it is probably best to send someone for help and to arrange to transport the victim by horse, helicopter, or stretcher. If the victim is more than one hour from medical care and if a helicopter can pick up the victim safely, it should be summoned. Snakebite is rarely fatal, so subjecting helicopter rescue crews to dangerous pickups is rarely warranted. There is little question that the sooner antivenom is given, the less morbidity will be incurred.

**Warnings.** Do not use ice and do not carry or use antivenom in the field unless you carry 20 vials and are fully prepared to treat anaphylaxis.

#### Medical Management

A history and physical examination is used to determine the patient's general health and to evaluate the presence and degree of envenoma-

# Repellents Sting Market Like A Bee

By CYNTHIA KRAMER  
Staff Writer for Tampa Bay Business

**S**awyer Products Inc. is attempting to take a big bite out of the outdoor protection market.

The 6-year-old Safety Harbor-based firm, which manufactures and markets a variety of outdoor protection products, plans to sell to commercial markets other than the sporting goods retail industry. Insect repellent, emergency first aid kits and The Extractor, a hand-held suction pump that sucks venom or irritants out of a bee sting or snakebite, are a few of the company's products that have received national recognition in outdoor sporting magazines.

Deet Plus Repellent and Itch Balm Plus are other products the company makes for fishing, backpacking and hunting enthusiasts. The repellent protects the user against ticks, mosquitoes, flies, gnats and chiggers.

And although Sawyer's sales for 1990 are up 300% to 400%, according to firm President Kurt Avery, this will be the company's first profitable year. Avery would not disclose company sales dollars, however. Avery also declined to reveal the number of employees.

"We lost money for the last six years," he says. "We are still in an investment mode."

Bob Wendt, a chemist for the firm's plant in Safety Harbor, invented the insect repellent about six years ago, Avery



Company President Kurt Avery displays the insect repellent products.

says.

Sawyer was formed in 1984 in Chicago. While the sales offices were in

Chicago, the manufacturing facilities were in California. In May 1988, the company moved both offices to Safety Harbor because the owners wanted to market the insect repellent creams and manufacture the products in one location, Avery says. At that time, Sawyer secured a mutually exclusive supply agreement with Star-mark, the manufacturer of the creams.

Sawyer Products, which was incorporated in 1984, has 31 shareholders. Avery owns 70% to 80% of the private company. Although Avery would not disclose the company's original investment, he says the company received a \$550,000 loan from the Small Business Administration.

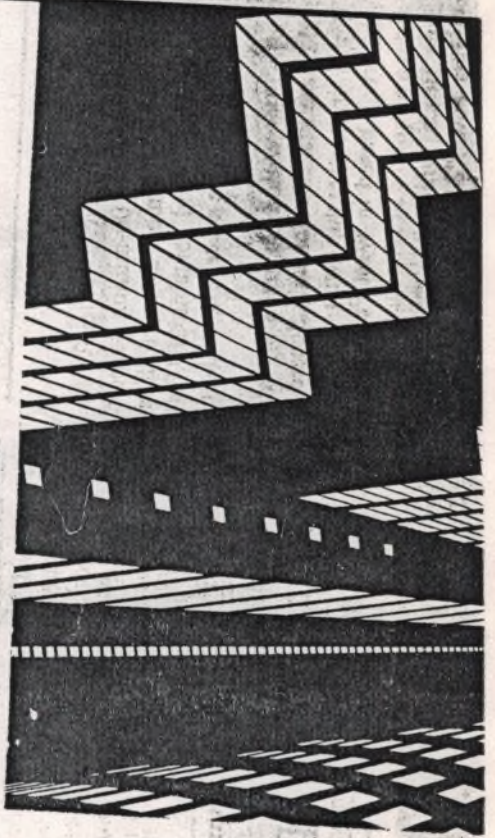
Avery says his company's strategy is similar to the one Wal-Mart follows: Sell quality products that are packaged well for a lesser price.

"I have held prices for seven years," Avery says. "We go for volume and go for commitment to our product."

The price strategy will allow the company to steal the insect repellent lotion business from drug stores and spread into other areas of the market, Avery says.

Avery plans to market the repellent product line to construction companies, surveyors, power companies, oil companies and departments of transportation. "We're talking with state agencies," he says.

## Second Quarter Report: June 18, 1990 Office Space/ Commercial Real Estate/ Business Parks



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**Tampa Bay  
Business** Journal

Issue Date:  
Space Reservation:

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June 8, 1990

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**461-0365 in Pinellas**

for commitment to our product."

The price strategy will allow the company to steal the insect repellent lotion business from drug stores and spread into other areas of the market, Avery says.

Avery plans to market the repellent product line to construction companies, surveyors, power companies, oil companies and departments of transportation. "We're talking with state agencies," he says.

Less than 10% of the firm's sales are from industrial firms. About 2% of the firm's sales come from poison centers, hospitals and industrial distributors in other countries, he says.

Although Avery received the license to market The Extractor in 1984 from the French developer, public awareness of the product has formed only recently. It has taken about four years to get the medical community's endorsement, Avery says.

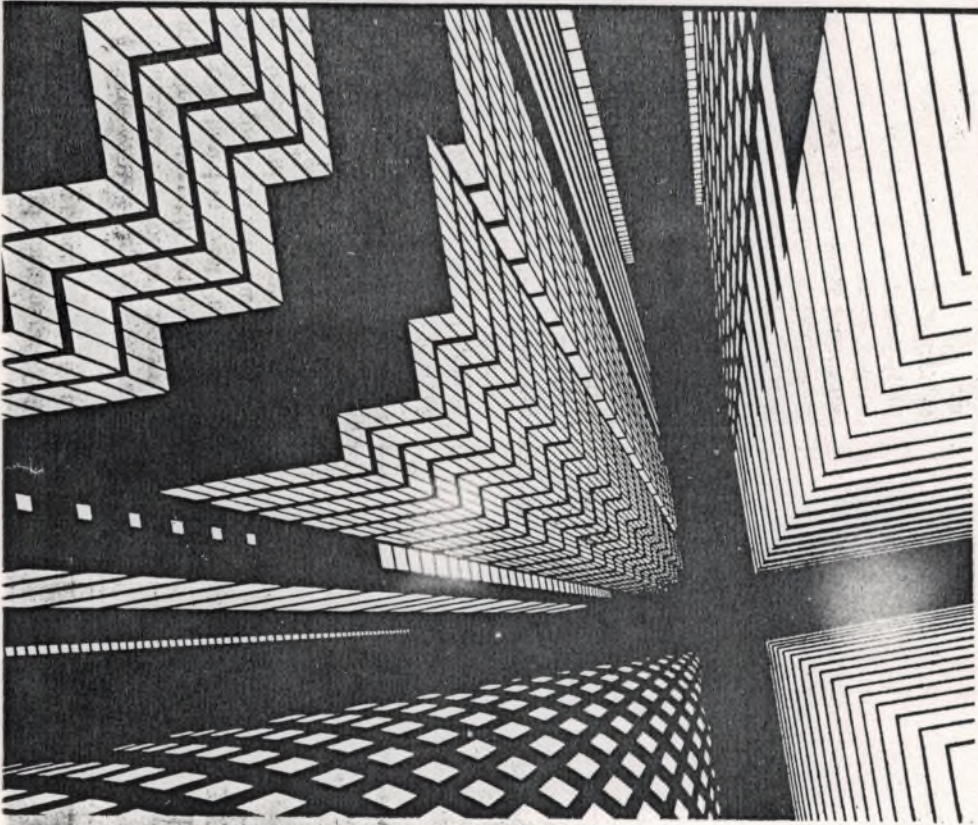
Avery says the pump is medically recognized by toxicologists as the only acceptable first aid treatment of snakebites.

Dr. Alvin Bronstein, medical director for the occupational toxicology clinic at Boulder Community Hospital in Denver, says there is no other product on the market like the pump. Bronstein helped conduct research on the pump's effectiveness in 1986. Animal research showed the pump removed up to one-third of the venom from a snakebite.

Generally, in 60 to 90 seconds, the pump can suck poison from a bee sting. In five minutes or more, it can take out a snake's venom, Avery says. The plunger in the tool creates suction when it is thrust downward using the thumb and fingers. After use, pain and swelling is either reduced or eliminated.

In addition, extraction of the poison allows the victim to avoid an increase in reaction to future bee stings. Avery says

**See STING, page 12**



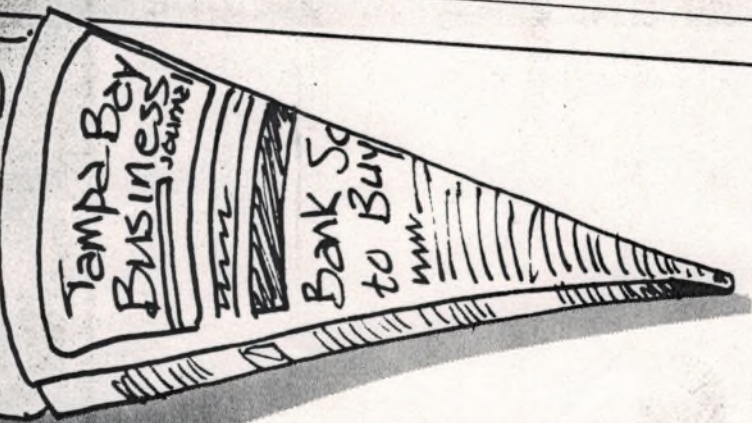
# YES!

French Manufacturer  
Seeks Tampa Venture  
(May 20-26 edition)

## Tampa Bay Business Journal

# CAN!

are a few of the  
s first reported by  
a Bay Business  
l writers in recent



PA BAY BUSINESS/June 3-9, 1990

tion, held in St. Louis on June 10.  
Earle Palmer Brown of Tampa received  
the "Best of Show" award for a business  
magazine campaign produced to pro-  
mote the Adweek Creative Seminar. EPB  
won five other awards in various cate-  
gories.

Other local winners include Altman  
Meder Lawrence Hill with a total of nine  
awards; Pearson, Thomas/Levy King &  
White with three; and Russell Alexander  
Frederick with two.

#### PINELLAS WINNERS

CONSUMER MAGAZINE  
FULL PAGE, 4 COLOR--FKQ Advertising for Dollar  
Rent-a-Car.

#### MUSICAL CONCEPT

JINGLE, MORE THAN 30 SECONDS--Hillis, Sekeres  
& James Inc. for Rutenberg Construction Co.

#### HILLSBOROUGH WINNERS

#### PRINT

EXTERNAL HOUSE MAGAZINE, 4 COLOR OR  
MORE--Marketing Associates/USA Inc. for Barnett Bank  
of Tampa.

ANNUAL REPORT, LESS THAN 4 COLOR--Diane  
Schultz for The Housing Authority of the City of St. Peters-  
burg.

ANNUAL REPORT, 4 COLOR OR MORE--The Salva-  
tion Army for The Salvation Army.

#### OUT OF HOME MEDIA

OUTDOOR CAMPAIGN, 2 OR MORE PRESENTA-  
TIONS--Esselin & Hall/Earle Palmer Brown for WRVA-  
AM.

#### DIRECT MAIL

TRAFFIC BUILDING CAMPAIGN--Altman Meder  
Lawrence Hill for Joy's Shoe Salon.

#### FARM PUBLICATION

UP TO FULL PAGE, 4 COLOR OR MORE--Altman  
Meder Lawrence Hill for Speedling Inc.

REGIONAL/NATIONAL CAMPAIGN, LESS THAN 4  
COLOR--Esselin & Hall/Earle Palmer Brown for Adweek  
Creative Seminar.

#### NEWSPAPER

REGIONAL/NATIONAL, MORE THAN HALF  
PAGE--Esselin & Hall/Earle Palmer Brown for WRVA-  
AM.

LOCAL COLOR, HALF PAGE OR LESS--Pearson,  
Thomas/Levy King & White for Central Florida Block-  
buster Video.

LOCAL COLOR, HALF PAGE OR MORE--Bealito  
Advertising for WFLA, Channel 8.

REGIONAL/NATIONAL COLOR, HALF PAGE OR  
LESS--Blond & Associates Advertising Inc. for J.W. Hunt  
Produce Inc.

#### RADIO

REGIONAL/NATIONAL, MORE THAN 30 SEC-  
ONDS--Wanner Koenig & Associates for Arab Termite &  
Pest Control.

# STING

Continued from page 10

it is most beneficial to about 8 million  
people who could die from a bee sting.

About 90% of the company's sales  
come from sporting goods stores across  
the country. The Sports Authority, Osh-  
man's Sporting Goods and Sports Un-  
limited are three local stores that carry  
the pump and other products.

Tampa-based Sports Unlimited car-  
ries The Extractor, which sells for about  
\$12, and the \$10 emergency kits at its 13  
stores in Florida.

Bob Pittman, camping and hunting  
hardgoods buyer for the chain, says the  
products are not only popular but safe  
and functional.

"Some of the (other) kits have items in  
them where they're clumsy," he says.  
"The Sawyer kit is very safe to use."



# **EXHIBIT C**

[54] SOURCE OF VACUUM AND DEVICE FOR MAINTAINING A NEGATIVE PRESSURE IN AN ENCLOSURE

1,556,981	10/1925	Voight	141/65
2,436,849	3/1948	Billetter	141/65
3,135,411	6/1964	Osborne	215/312 X
3,452,708	7/1969	Richardson	73/146.8 X
3,800,780	4/1974	Elliott	128/276
3,980,082	9/1976	Miller	73/731 X

[76] Inventor: André A. C. Emerit, 30 Rue du Docteur Roux, 95110 Sannois, France

[21] Appl. No.: 957,286

[22] Filed: Nov. 2, 1978

[30] Foreign Application Priority Data

Nov. 9, 1977 [FR]	France	77 33716
Aug. 2, 1978 [FR]	France	78 22802

[51] Int. Cl.<sup>3</sup> ..... A61M 1/00; B65B 31/04; B65D 81/20; F04B 21/00

[52] U.S. Cl. .... 99/472; 73/731; 116/DIG. 9; 128/278; 128/297; 128/765; 141/65; 215/230; 215/260; 215/311; 215/365; 417/437; 417/555 R

[58] Field of Search ..... 417/490, 497, 555, 545, 417/437; 4/255, 257; 92/100; 215/260, 365, 230, 311, 312; 116/DIG. 9, 266; 73/731, 146.8, 146.2; 53/510; 141/65; 220/85 B; 128/760, 763, 765, 276, 278, 297, 220, 237, 234; 433/91, 92; 99/472

[56] References Cited

U.S. PATENT DOCUMENTS

578,410	3/1897	Lord	99/472
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FOREIGN PATENT DOCUMENTS

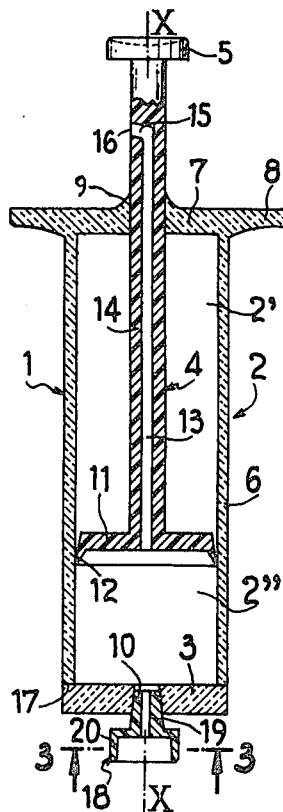
599822	10/1934	Fed. Rep. of Germany	99/472
565067	1/1924	France	417/437
886540	10/1943	France	99/472
54924	8/1923	Sweden	128/297
1061801	3/1967	United Kingdom	215/365

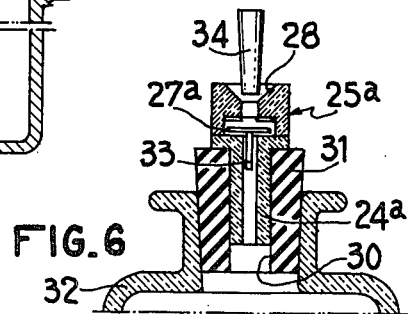
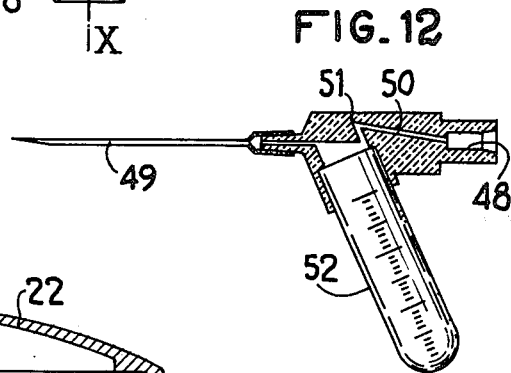
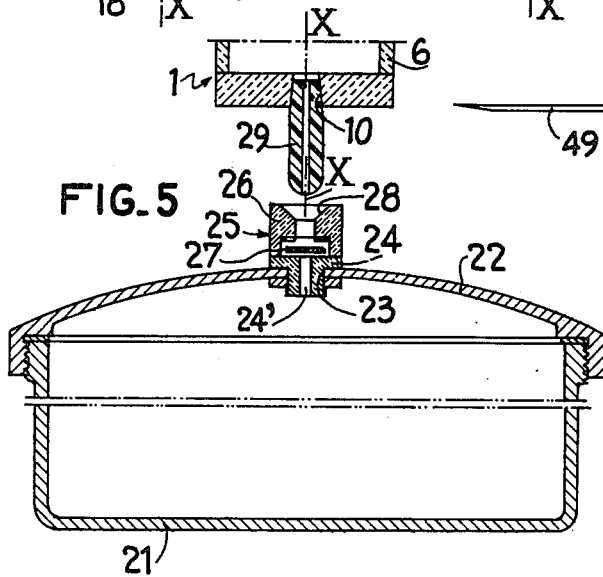
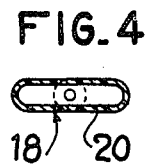
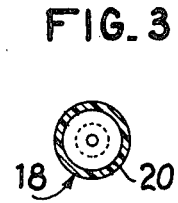
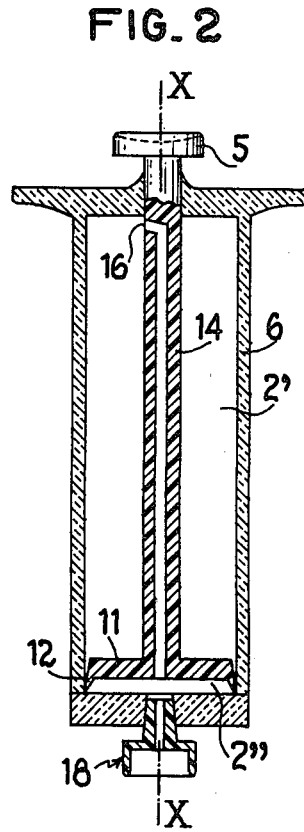
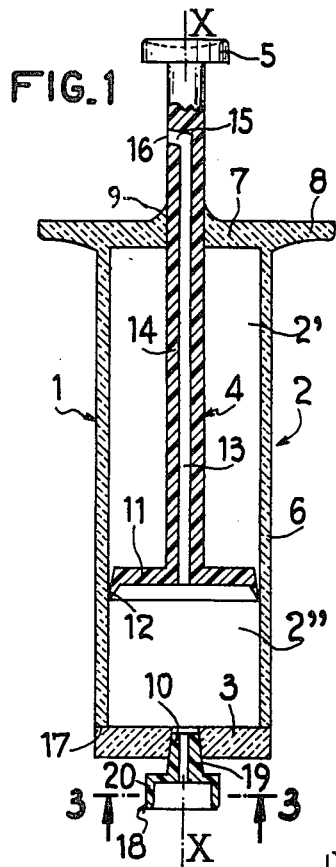
Primary Examiner—Leonard E. Smith  
Attorney, Agent, or Firm—Irons and Sears

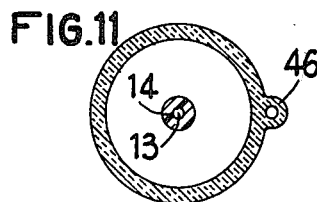
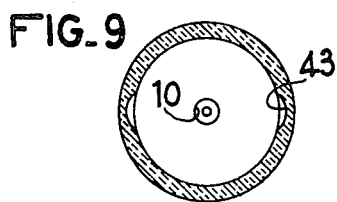
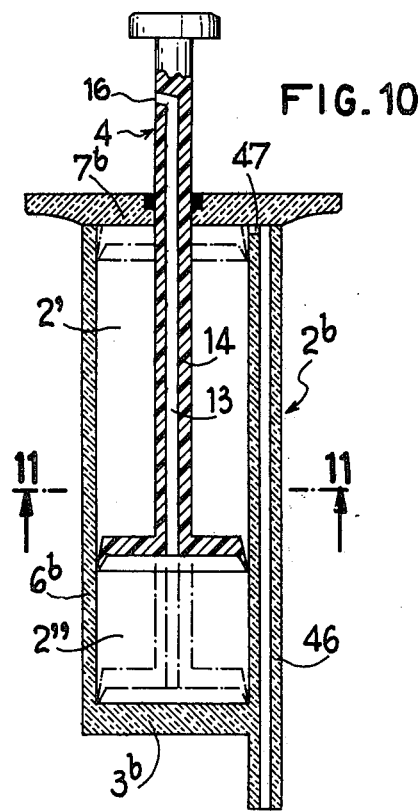
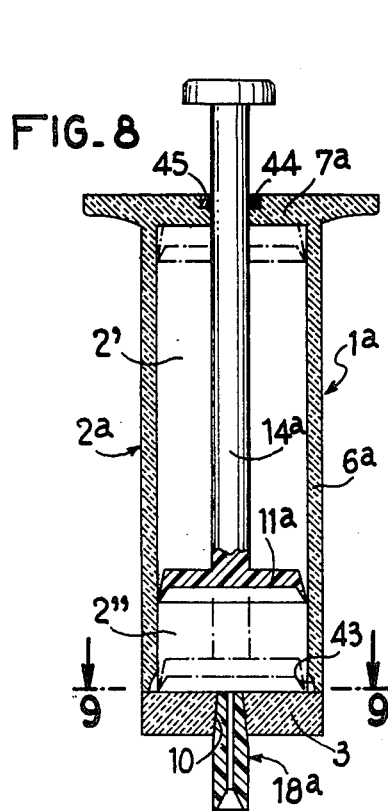
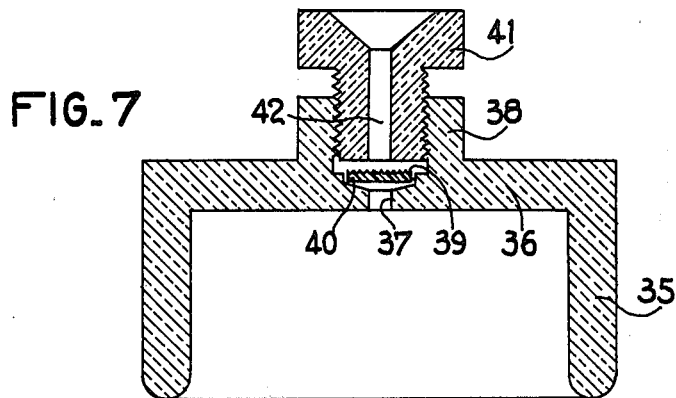
[57] ABSTRACT

The source of vacuum comprises a tubular body in which a piston which is combined with a piston rod is axially slidable. A seal is interposed between the rod and the body where the rod extends out of the body. A suction orifice is provided which is on the axis of or in the vicinity of the axis of the body and parallel to the axis. An arrangement is provided for holding the body and urging the piston to one end of the body in one hand. A communication passage is provided for putting the suction orifice in communication with a chamber defined between the piston and the body when the piston is depressed relative to the body.

13 Claims, 16 Drawing Figures







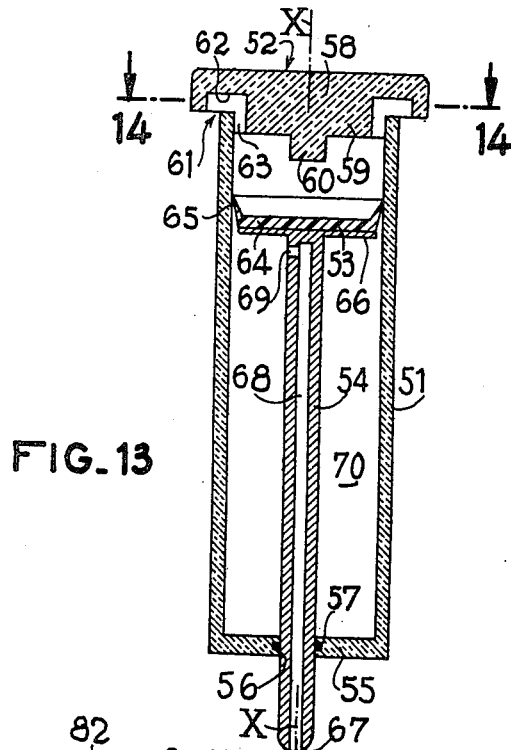


FIG. 13

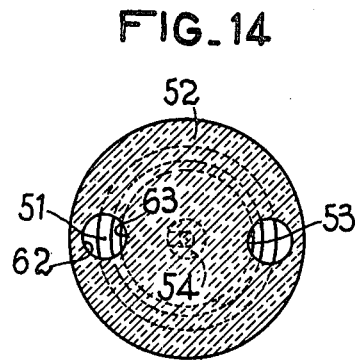


FIG. 14

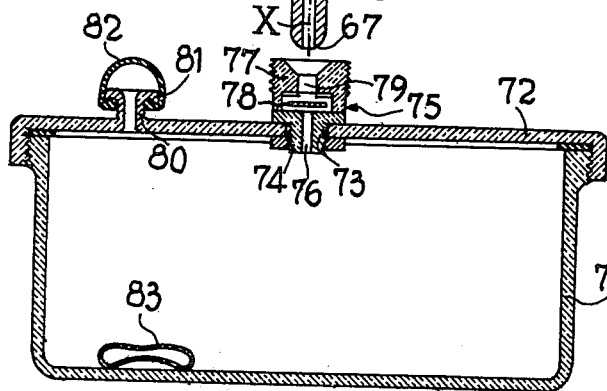


FIG. 15

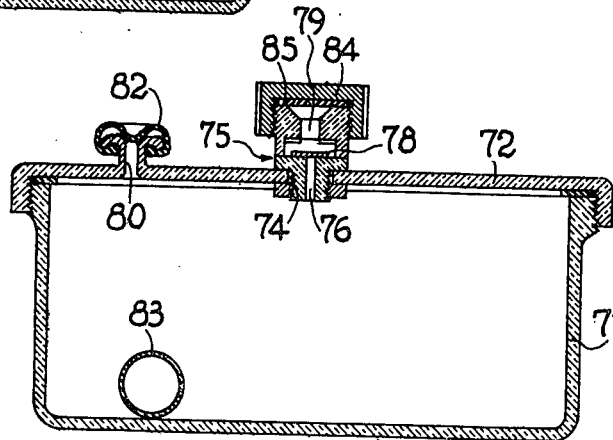


FIG. 16

## SOURCE OF VACUUM AND DEVICE FOR MAINTAINING A NEGATIVE PRESSURE IN AN ENCLOSURE

### DESCRIPTION

The present invention relates to sources of vacuum.

An object of the invention is to provide a portable source of vacuum whereby it is possible in particular to exert a suction on oneself at practically any point of the body for the purpose of drawing off the venom of a sting or bite after having applied the suction orifice in a sealed manner on the skin.

For this purpose, the source of vacuum according to the invention comprises: a tubular body in which is slidable a piston connected to a rod which extends through a sealed aperture of a first end of the body, a suction orifice located on the axis or in the vicinity of and parallel to the axis of the body, means for holding the body and driving the piston toward a second end of the body with one hand, and communication means for putting the suction orifice in communication with a chamber of the body adjacent the first end when the piston is depressed.

In one embodiment, the body has two radial ears in the vicinity of the first end, the suction orifice is formed in the second end of the body and said communication means put the suction orifice suddenly in communication with said chamber of the body when the piston reaches a predetermined position. According to another embodiment, whereby it is possible to regulate the negative pressure obtained, the communication means permanently put the suction orifice in communication with said chamber.

In the latter case, the invention provides in particular an embodiment which is more particularly adapted for certain applications, such as the creation of a partial vacuum in a jar or the like which has a cover provided with a check-valve and is placed on a table or a shelf. In this source of vacuum, the body may be held fully in one hand, and the rod of the piston is provided with an axial passageway which extends from its free end to the vicinity of the piston where it communicates with said chamber of the body by way of a radial orifice, the second end of the body being provided with venting means.

The source of vacuum according to the invention may be in particular employed in combination with a device for creating and maintaining a negative pressure in an enclosure comprising a check valve connected to a wall of the enclosure and means for connecting the valve to a source of vacuum, these means comprising a screwed coupling which presses the closure member of the valve against its seat when it is completely screwed in position.

In order to check the maintenance of the negative pressure, according to another feature of the invention, there may be provided an elastically deformable membrane which is subjected on a single side thereof to the pressure prevailing in the enclosure.

Further features and advantages of the invention will be apparent from the ensuing description which is given solely by way of example with reference to the accompanying drawings in which:

FIG. 1 is a longitudinal sectional view of a source of vacuum according to the invention;

FIG. 2 is a view similar to FIG. 1 of the same source of vacuum in the suction position;

FIG. 3 is a sectional view taken on line 3—3 of FIG. 1;

FIG. 4 is a view similar to FIG. 3 of a modification; FIGS. 5 to 7 are partial sectional views of devices according to the invention for creating and maintaining a negative pressure;

FIGS. 8 and 10 are longitudinal sectional views of two other embodiments of a source of vacuum according to the invention;

FIGS. 9 and 11 are respectively cross-sectional views taken on lines 9—9 and 11—11 of FIGS. 8 and 10;

FIG. 12 is a sectional view of a device for drawing off blood of utility in particular with the source of vacuum shown in FIGS. 10 and 11;

FIG. 13 is an axial sectional view of a source of vacuum according to another embodiment of the invention;

FIG. 14 is a sectional view taken on line 14—14 of FIG. 13;

FIG. 15 is an axial sectional view of a jar provided with two checking devices according to the invention, and,

FIG. 16 is a view similar to FIG. 15 of the jar after a negative pressure has been created therein.

The source of vacuum or syringe 1 shown in FIGS. 1 and 2 comprises four members: a body 2, a cap 3 and piston-rod unit 4 provided with an actuating knob 5. Each of these members is made from moulded plastics material.

The body 2 has a generally cylindrical shape having an axis X—X and comprises a tube 6 at one end of which is provided a flat end portion 7 and two outer radial ears 8. For convenience of description, it will be assumed that the axis X—X is vertical and that the end portion 7 and the ears 8 are at the upper end of the tube 6. The other end of the latter is open.

The end portion 7 is provided with a central orifice 9 whose upper part is constricted by a relatively flexible thin flange.

The cap 3 is a disc whose outside diameter is equal to that of the tube 6 and comprises at its centre an upwardly convergent orifice 10.

The piston 11 has on its periphery a divergent annular lip portion 12 of short axial extent and extending downwardly. An axial passageway 13 extends from the lower face of this piston through the major part of the length of the rod 14 and terminates in an elbow 15 and radially opens out by way of a vent 16. The diameter of the rod 14 is roughly equal to that of the lower part of the orifice 9 of the end portion 7.

The syringe 1 is assembled in the following manner:

The rod 14 is inserted in the tube 6 through the bottom of the latter and made to pass through the orifice 9. The flange of the latter is then deformed upwardly and forms an annular lip portion 9 which hermetically bears against the rod 14 while it allows the sliding of the latter, with the lip portion 12 of the piston 11 sliding hermetically against the inner wall of the tube 6. The knob 5 is then secured, for example by adhesion, to the upper end of the rod 14 and the cap 3 is likewise secured to the lower planar end face 17 of the tube 6.

This syringe operates in the following manner:

With the piston in the upper position, the syringe is held in one hand in the conventional manner with two fingers under the ears 8 and the thumb on the knob 5. The latter is depressed and this causes the piston to descend. The air under the piston escapes to the atmo-

sphere by way of the passageway 13 and the vent 16. Possibly, it may also escape by way of the orifice 10 if the latter is opened to the atmosphere.

At the end of the travel of the piston, when the latter abuts against the cap 3, the vent 16 passes just below the end portion 7 (FIG. 2). The chambers 2' and 2'' of the body are then put into communication with each other by way of the passageway 13 so that the vacuum created in the upper chamber 2' by the descent of the piston produces a sudden negative pressure in the lower chamber 2'' the volume of which is at this moment very small.

An end member 18 may be fitted in the orifice 10, this member 18 comprising a frustoconical upper connector 19 provided axially with a cylindrical lower skirt portion 20 which is open on the underside and connected to the connector 19 by a flange. If this skirt portion is applied on a wound, a bite or a sting before the piston 11 has been shifted downwardly, or at least before the piston reaches the cap 3, the end of the descent of the piston results in a sudden suction whereby it is possible to draw off the locally soiled blood. This first aid may be carried out on oneself in a very convenient manner on practically any part of the body, since one hand is sufficient to create the suction.

FIGS. 3 and 4 show two modifications of the section of the skirt portion 20, one being circular and the other oblong, which may be used as desired in accordance with the shape of the wound to be treated.

FIG. 5 shows a container 21 for preserving a product, for example a food product, under a partial vacuum. This container is provided with a screwed lid 22 provided with a central aperture 23 in which the lower portion 24 of a check-valve 25 is fixed. This lower portion comprises a passageway 24' and a planar upper surface on which the periphery of an upper member 26 is hermetically fixed. The member 26 defines with the portion 24 a cavity for a planar free closure member 27. This cavity communicates at the upper end with the exterior by way of a passageway 28 which is cylindrical and then divergent. The upper surface of the cavity is planar but grooved.

In order to create a negative pressure in the container 21, there is fitted in the orifice 10 of the syringe 1 an end member 29 which has a longitudinal passageway and a rounded end portion. This end portion is applied in the opening of the passageway 28 and the piston of the syringe is fully depressed. The negative pressure thus produced raises the closure member 27 and the grooves of its cavity allow the air to escape. It will be understood that the operation may be carried out several times for the purpose of increasing the negative pressure in the container 21, the value of the negative pressure merely being limited by the degree of fluidtightness of the various parts. Thus it is very simple to preserve food in the container under a vacuum.

The valve 25<sup>a</sup> shown in FIG. 6 is on the whole similar to the preceding valve but its lower portion 24<sup>a</sup> is longer and is fitted in the passageway 30 of a flexible stopper 31 of a jar 32 or the like. Moreover, the closure member 27<sup>a</sup> is provided with a lower guide rod 33 which slides with clearance in the passageway of the portion 24<sup>a</sup>. The operation is the same as that of the embodiment shown in FIG. 5 and may, for example, serve to preserve under a vacuum products in a laboratory. In both cases, in order to compensate for any defective seal afforded by the closure member, the passageway 28 may be closed by a stopper, for example a frustoconical

flexible stopper 34 after the negative pressure has been created.

FIG. 7 shows a medical suction-producing cupping member comprising a cylindrical body 35 the upper end of which is closed by an end portion 36 whereas the lower end is open, the end portion being provided with a centre orifice 37. Upwardly projecting from the end portion 36 is a coaxial tapped tube 38. A counter-bore 39 surrounds the orifice 37 and receives the closure member 40 which is a planar disc whose height exceeds the depth of the counter-bore and is grooved on its upper side. The cupping member is completed by a connector 41 which is screwed in the tube 38. This connector has a planar lower face and an axial passageway 42 whose upper open portion is divergent. In order to place the cupping member on the back of a patient, the connector 41 is slightly unscrewed so as to allow a small vertical clearance for the closure member 40 as shown in FIG. 7. The end of the end member 29 mounted on the syringe 1 is inserted in the passageway 42 and the piston 11 is depressed fully. The grooves of the closure member 40 allow the air to escape. The cupping member is very easily and quickly mounted. If the seal is desired to be guaranteed for a long period, the connector 41 is screwed until it abuts against the periphery of the counter-bore 39 and slightly crushes the closure member. By way of a modification, the disc 40 may be replaced by a ball.

The syringe 1<sup>a</sup> shown in FIGS. 8 and 9 differs from that shown in FIGS. 1 and 2 by the fact that the rod 14<sup>a</sup> of the piston 11<sup>a</sup> is solid and the inner wall of the tube 6<sup>a</sup> has two axial notches 43 adjacent the cap 3. Moreover, a seal is provided between the rod 14<sup>a</sup> and the end portion 7<sup>a</sup> by means of an O-ring 44 disposed in a groove 45 in this end portion. There is moreover shown an end member 18<sup>a</sup> fitted in the orifice 10 and having a roughly cylindrical elongated shape, the central passageway of this end member being divergent at its lower end. The end member 18<sup>a</sup> may be in particular employed for treating small stings.

The syringe 1<sup>a</sup> produces, in the same way as the syringe 1, a sudden negative pressure at the end of the travel of the piston by putting two chambers 2', 2'' of the body 2<sup>a</sup> of the syringe in communication with each other when the lip portion of the piston arrives in a position in front of the notches 43. Consequently, these two syringes may be employed for the same uses. Note that, in this embodiment, it is necessary to bring the piston near to the notches 43 before connecting the syringe to the object to be subjected to suction in order to allow the evacuation of the air from the chamber 2''.

In some cases, the suddenness of the creation of the negative pressure may be undesirable, for example for taking off blood. The syringe 1<sup>b</sup> shown in FIGS. 10 and 11 enables an adjustable progressive negative pressure to be obtained. A conduit 46 extends along the tube 6<sup>b</sup> and communicates with the chamber 2' by way of a radial orifice 37 adjacent the end portion 7<sup>b</sup> and extends downwardly beyond the cap 3<sup>b</sup>, the latter being devoid of a central orifice. FIG. 10 shows a syringe body 2<sup>b</sup> comprising two moulded parts which are assembled by planar surfaces. The piston-rod unit 4 is the same as that shown in FIG. 1.

When the piston is brought from its upper position to any position, such as that shown in FIG. 10, it creates in the chamber 2' a negative pressure which is transmitted by way of the conduit 46. For example, the latter may be connected to the entrance 48 of the blood taking

device of FIG. 12, which is connected to a hollow needle 49 through a conduit 50 having a labyrinth 51. A graduated tube 52 is connected between the labyrinth 51 and the needle 49. The negative pressure produced by the movement of the piston depends on the position of the latter and determines the drawing off of the desired amount of blood in the tube 52.

Note that, for maximum negative pressure, the vent 16 is in the chamber 2', so that the piston is subjected to the same pressure on both sides thereof and has no tendency to rise. By way of a modification, the vent could be located on the rod 14 so as to be always above the end portion 7<sup>b</sup>, or the rod could be solid as in FIG. 8 and the cap 3<sup>b</sup> provided with an orifice allowing the air in the chamber 2'' to escape.

Of course, it is possible to envisage very many applications of the syringes shown in FIGS. 1, 8 and 10 which may be used whenever it is desired to create a negative pressure rapidly and conveniently with a source of vacuum which is small and always available, in particular at home or in the laboratory: clearing of small obturated pipes, the priming of water traps, transfer of dangerous fluids between two vessels, etc..

The source of vacuum shown in FIGS. 13 and 14 comprises three elements, namely a body 51, a cover 52 and a piston 53 connected to a piston rod 54.

The body 51 is cylindrical and has an axis X—X which will be assumed to be vertical for convenience of description. Its lower end is formed by an end portion 55 provided with a central orifice 56. The latter is provided with an annular groove in which is disposed an O-ring 57 for sealing purposes. The upper end of the body 51 is open.

The cover 52 comprises, geometrically, a disc 58 whose diameter exceeds the outside diameter of the body 51 and whose lower surface is applied coaxially against the upper end edge of the body 51. The cover 52 is held in position by a cylindrical centre portion 59 which extends downwardly from the disc 58 and is a close fit in the upper end of the body 51. A central spigot 60 projects downwardly from this part 59.

Two diametrically opposed vents 61 are provided in the cover 52. Each one thereof is formed by a recess 62 formed in the lower side of the disc 58 so as to extend across the wall of the body 51. This recess is extended downwardly in the radially inner part thereof by a groove 63 which extends through the thickness of the part 59 of the cover. Thus, each vent 61 has an L-shaped axial section (FIG. 13) and a circular section in plan (FIG. 14). It puts the interior of the body 51 permanently in communication with the atmosphere.

The piston 53 comprises a solid end 64 around which extends a flexible skirt portion 65 which extends upwardly and slides on the inner surface of the cylindrical wall of the body 51. The height of the skirt portion 65 exceeds the height of the spigot 60. The end portion 64 is secured to a circular end plate 66 of the rod 54. The latter extends through the orifice 56 and has a hemispherical free end portion 67 which is located below the end of the body irrespective of the position of the piston 53 in the latter. A blind axial passageway 68 extends from the end portion 67 to a place located just below the plate 66. In this region, a radial orifice 69 puts it in communication with the lower chamber 70 of the body 51.

FIG. 15 shows a vessel 71 for preserving a product, for example a food product, under a partial vacuum. This vessel is provided with a hermetically screwed lid

72 provided with a central aperture 73 in which the lower portion 74 of a check-valve or non-return valve 75 is secured. This lower portion comprises a passageway 76 and a planar upper side on which the periphery of an upper member 77 is secured hermetically. The member 77 defines with the portion 74 a cavity for receiving a free planar closure member 76, this cavity communicating upwardly with the exterior by way of a passageway 79 which is cylindrical and then divergent. The upper face of this cavity is planar but grooved.

The lid 72 is also provided with a short vertical pipe 80 having a flange 81. An elastic membrane 82 which is substantially hemispherical caps the pipe 80 and is engaged by its periphery under the flange 81. Further, placed in the vessel 71 is a very flexible elastic small balloon 83 the shape of which is flattened and which contains air under atmospheric pressure, or, possibly, a gas under a pressure slightly lower than the atmospheric pressure.

In order to produce a negative pressure in the vessel 71, which is for example placed on a table, the rod 54 is pulled until it is made to move to the maximum extent out of the body 51 which corresponds to a position of the plate 66 against the end portion 55. The body 51 is held completely in the hand and the end 67 of the rod 54 is applied on the divergent entrance of the passageway 79 and the body 51 is lowered until the end portion 64 of the piston abuts against the spigot 60. In doing so, the air which occupied the volume of the vessel and the passageway 68 occupies in addition practically the whole of the inner volume of the body 51 by raising the closure member 77 and passing through the grooves of its cavity and then through the passageways 79 and 68 and the orifice 69, so that the pressure drops. During this movement, the air which is in the body 51 above the piston 53 is expelled out of the body by way of the vents 61.

As soon as the rod 54 is moved away from the valve 75, the atmospheric pressure hermetically biases the closure member 78 against its lower seat and closes the passageway 76 in a fluidtight manner. Of course it is possible to repeat the operation several times in order to increase the negative pressure in the vessel 71, the value of the latter being limited merely by the degree of sealing of the various component parts. For example, food (rice, wine, etc. . . .) may be preserved under a partial vacuum in a very simple manner. The working position is particularly convenient since the device can be held in front of oneself roughly at the height of the eyes. Moreover, in order to improve the grip on the device, recesses may be provided for the fingers around the body 51 and/or a recess for the thumb on the top of the cover 52.

As soon as the pressure in the vessel 71 has dropped below a predetermined value, the membrane 82, under the effect of the differential pressure to which it is subjected, becomes hollow under the effect of the suction on its central part in the pipe 80. Simultaneously, or, by way of a modification, when another degree of vacuum is reached, the differential pressure exerted on the balloon 33 inflates the latter and causes it to assume a spherical shape (FIG. 16).

The maintenance of the vacuum is theoretically ensured by the fittings of the lid 72 and by the closure member 78 which may possibly be provided with a cap 84 which is provided with a sealing element 85 and screwed on the entrance of the valve 78 (FIG. 16). However, for various reasons, small leakages may



occur and produce the rise in pressure in the vessel 71. In this case, as soon as a certain pressure is reached, the membrane 82 returns to its initial convex shape and/or the balloon 83 collapses. In this way, the user is informed about the pressure prevailing in the vessel at a glance.

Having now described my invention what I claim as new and desire to secure by Letters Patent is:

1. A source of vacuum comprising: a wall laterally defining a tubular body which has a first end portion and a second end portion and an axis and defines an inner chamber, a piston slidable in the body, a rod connected to the piston, an aperture in the body, the rod extending through the aperture, sealing means interposed between the aperture and the rod, means defining a suction orifice located at least in the vicinity of and parallel to said axis, means for depressing the piston toward the second end portion of the body, and communication means for putting the suction orifice suddenly in communication with a part of said chamber in the body which is defined by the first end portion and the piston when the piston is depressed relative to the body toward said second end portion and reaches a predetermined position.

2. A source of vacuum comprising: a wall laterally defining a tubular body which has a first end portion and a second end portion and an axis and defines an inner chamber, two radial ears in the vicinity of the first end portion, an aperture in the body, means defining a suction orifice formed in the second end portion and located at least in the vicinity of and parallel to said axis, a piston slidable in the body, a rod connected to the piston, the rod extending through the aperture, sealing means interposed between the aperture and the rod, means for holding the body and for depressing the piston toward the second end portion of the body in one hand, and communication means for putting the suction orifice suddenly in communication with a part of said chamber in the body which is defined by the first end portion and the piston when the piston is depressed relative to the body toward said second end portion and reaches a predetermined position.

3. A source of vacuum as claimed in claim 2, wherein said communication means comprises a passageway which extends longitudinally in the rod from the piston and terminates in a radial vent which is so disposed as to travel from a side to another side of the first end portion of the body when the piston arrives at said predetermined position.

4. A source of vacuum as claimed in claim 2, wherein said communication means comprises a recess formed on an inner side of said wall of the body and having a dimension axially of the body which exceeds the dimension of the piston axially of the body.

5. A source of vacuum as claimed in any one of the claims 2, 3 or 4, wherein said predetermined position of the piston is a position thereof adjacent the second end portion of the body corresponding to a maximum depression of said piston.

6. A source of vacuum as claimed in any one of the claims 2, 3 or 4, wherein the piston has a peripheral skirt portion which is in contact with said body and extends from the piston toward the second end portion of the body.

7. A source of vacuum as claimed in any one of the claims 2, 3 or 4, wherein the second end portion comprises an end-of-travel abutment for the fully depressed position of the piston.

8. A source of vacuum as claimed in claim 2, wherein said source is coupled with a device for maintaining a negative pressure in an enclosure, the device comprising wall means defining the enclosure, a check-valve having a seat and a closure member associated with and movable relative to said seat, the valve being connected to said wall means, and means for connecting said valve to a source of vacuum and comprising a screwed connector which is associated with the closure member to urge the closure member against the seat when the connector is screwed to the full extent.

9. A source of vacuum as claimed in claim 2, wherein said source is coupled with a device for maintaining a negative pressure in an enclosure, the device comprising wall means defining the enclosure, a check-valve having a valve seat and a closure member associated with and movable relative to the seat, the valve being connected to the wall means, means for connecting the valve to a source of vacuum, an elastically deformable membrane, and means combining the membrane with the enclosure so that the membrane is subjected on a single side of the membrane to a pressure prevailing within the enclosure.

10. A source of vacuum as claimed in claim 9, wherein said combining means define an orifice in said wall means and the membrane has at rest substantially the shape of a hemisphere and has an edge portion which is fixed to a periphery of said means defining the orifice.

11. A source of vacuum as claimed in claim 9, wherein the membrane is constituted by a balloon disposed within the enclosure and having a shape which is flattened under the effect of atmospheric pressure.

12. A source of vacuum as claimed in claim 11, wherein the balloon contains air at atmospheric pressure.

13. A source of vacuum as claimed in claim 11, wherein the balloon contains a gas at a pressure slightly lower than atmospheric pressure.

\* \* \* \* \*

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# **EXHIBIT D**



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# **EXHIBIT E**

## EXTREME PROTECTION AGAINST BITES & STINGS



complete  
THE BITE & STING BOOK

### HOW TO USE THE EXTRACTOR® PUMP

The Extractor® pump creates powerful suction designed to remove venom from the body by sucking it out the same cavity through which it was injected.

For snake bites DO NOT cut an "X" or suck out venom with the mouth. This is ineffective and increases trauma in the area of the wound. The venom could get into the blood stream of a rescuer who has even a small cut in the mouth.

For bees, DO NOT pull a stinger with fingers or tweezers as this will squeeze more venom into the victim. Instead, carefully flick it out with the blunt side of a knife, a credit card or other non-sharp object.

1) Don't panic. Begin emergency treatment only after the victim is quiet. This will slow the body's absorption rate of the poison. The Extractor® pump is most effective when used quickly after the bite.

2) If necessary to improve suction, use the safety razor provided to remove body hair from the bitten area. This should only be necessary for treating bites from snakes, spiders, or sting rays. Other techniques to improve suction include wetting or covering the surface under the suction cup with petroleum jelly. (Note: applies only to areas of heavy body hair.)

3) Fit your Extractor® pump with the suitable size suction cup. The smallest cup may be fitted in either direction.

4) Pull the plunger out to its fullest extent and place the cup over the bite or sting.

5) Using your thumb, push the plunger all the way in until you feel the suction, and let the pump remove poison. This should take from 60-90 seconds for insect bites. The first five minutes are most beneficial for applying the pump to a snake bite. Center a suction cup over one fang hole at a time. Alternate between fang holes every two-three minutes for 15 minutes. Discontinue use after 15 minutes.

6) Pull the plunger up gently to release the vacuum. If present, poison mixed with body fluids will be on the surface of your skin. Be careful. Avoid poison splatter. For snakebite, if no venom appears on the skin's surface, and if there is no swelling, and if you were not bit by a coral snake, and if you have performed steps 1-6 correctly:

- It may have been a non-venomous snake
- It may have been a dry bite (no venom injected)

However, if symptoms appear within three to four hours seek medical attention immediately.

7) Wash the fluids away carefully from the wound with soap and water. Apply alcohol and cover wound with the bandage provided in your kit.

8) Treat for shock and give artificial respiration, if necessary. A high quality First Aid Kit such as Sawyer's includes a manual which will be helpful.

9) Seek medical help immediately. Children and adults under 120 lbs. are particularly at risk, as is anyone who has received multiple bites, stings, or a full load of venom.

10) After the person bitten is properly cared for, and the danger has passed, wash the suction cup so as to remove all the fluid residue. When possible, sterilize the cups between uses, especially after exposure to snake venom. DO NOT wash the pump! This may destroy the vacuum-creating mechanism and the pump.

DO NOT use the pump in areas of sensitive skin such as eyelids, genitals, or ear cavities.

### CARE & CLEANING OF THE EXTRACTOR® PUMP

DO NOT wash the pump or get it wet! This may destroy the vacuum-creating mechanism in the pump. You should wash and sterilize the cups after each use but do not wash the pump. Should the inner mechanism of the pump get wet or should the outer plastic barrel become cracked, you risk the possibility that the pump will not create enough suction to be effective. If this happens, the pump should be replaced.

Thoroughly cleaning the cups with soap and water is usually adequate. Treating with alcohol is best. DO NOT boil the cups in water.

### OVERVIEW - BITES & STINGS

The poisons or venoms injected by insects, snakes, spiders and some marine creatures have been categorized by chemical composition into three main types. **Defensive poisons** are used to discourage intruders from disturbing nests, hives or young, or for self-defense. **Offensive poisons** are used to disable or kill a potential meal.

**Anticoagulants** are designed to prevent a victim's blood from clotting after being bitten so the insect or arachnid can drink it.

#### Defensive poisons

Who uses them?

- Ants, Bees, Wasps, Hornets, Yellow Jackets, Scorpions, Stingrays

Why?

- To defend nests or hives or to allow defender to escape

What's the effect on a human victim?

- Pain lasting a short time (usually 5 to 15 minutes)
- Swelling

- Possible allergic reaction

Treatment — Insect Stings

▼ Sawyer® Extractor® pump creates a strong vacuum to suction out poisons and other foreign fluids, thus relieving pain, itching and swelling and reducing the risk of more serious reactions.

▼ Topical pain relievers and antihistamines for itching and swelling.

▼ Oral antihistamines such as Benadryl®

▼ Prescription medications such as Epinephrine for severe allergic reactions.

▼ Seek medical attention for multiple bites, signs of allergic reaction, and any scorpion bite, especially in children.

#### Offensive poisons

Who uses them?

- Snakes, Spiders, Jellyfish, Some lizards

Why?

- To disable or kill victim so it can be eaten
- To soften or predigest victim

What's the effect on a human victim?

- Dizziness
- Difficulty breathing
- Swelling, leading to pain
- Tissue and/or nerve damage

Treatment — By Type

▼ Sawyer® Extractor® pump, creates a strong vacuum to suction out venom, which may relieve pain, itching and swelling and reduce the risk of tissue damage.

▼ Seek medical attention if bitten or stung by a venomous snake, spider or marine creature.

▼ Topical pain relievers and antihistamines to relieve swelling.

#### Anticoagulants

Who uses them?

- Biting Flies, Mosquitoes, Fleas, Ticks, Chiggers

Why?

- To prevent the host's blood from clotting and closing the wound so the insect or arachnid can obtain a blood meal.

What's the effect on a human victim?

- Itching, which is the body's reaction to the anticoagulant. Pain from tearing of the skin in the case of mosquito and fly bites (chiggers and ticks don't cause pain because they insert their mouthparts so slowly).
- Possible allergic reaction to the anticoagulants.

Treatment

▼ Sawyer® Tick Plier™ to remove ticks safely, without squeezing, twisting or even touching the tick.

▼ Sawyer® Extractor® pump, which creates a strong vacuum to suction out anticoagulants and other foreign fluids, thus relieving pain, itching and swelling and reducing the risk of more serious reactions.

### TREATMENT OF SNAKE BITES

1) Remove yourself or victim from risk of a second bite.

2) Use the Extractor® pump immediately. you can leave the pump on for up to 15 minutes. The first few minutes are the most important for venom removal.

3) Calm the patient. Virtually all snakebites are successfully treated in the US.

4) Keep the extremity at heart level or lower. In most cases severe complications DO NOT occur until several hours post-bite. If the victim must be transported or walked out, make wise use of those first few hours.

5) Seek medical help immediately. Children and adults under 120 lbs. are particularly at risk, as is anyone who has received multiple bites or a full load of venom.

6) Limit liquid intake because the body pumps fluids to the bite site, increasing painful swelling. Avoid alcohol, which increases metabolism and impairs judgment.

7) Remember that most bites, even from poisonous snakes, are not fatal. Panic can increase the danger to the victim by inducing rapid heartbeat.

Don't excite the victim or even allow the victim to walk if it can be avoided. Doing so will increase blood circulation, speeding the spread of the venom beyond the area of the bite.

Don't use the small rubber suction cups found in some first aid kits because they are too weak to remove any significant amount of venom.

Don't cut an "X" or suck out venom with the mouth. This is ineffective and increases trauma in the area of the wound.

Don't apply a tourniquet, constricting band, or "Australian Wrap," unless you are well-trained in its use.

Don't risk a second bite by chasing or trying to capture the snake. The antivenin for pit viper bites is the same for all species so identification is rarely necessary. Emergency room personnel will know from the type of bite (punctured versus "chewed" tissue) whether the attacker was a pit viper or coral snake.

### SLAKE BITES - BACKGROUND

The US has four major kinds of poisonous snakes:

- Pit Vipers: Rattlesnakes, Water Moccasins, Copperheads.

- Coral Snakes

Of the 10,000 - 20,000 snake bites reported in the US each year, less than ten are fatal. However, many more cause disfigurement or nerve or tissue damage. Quick use of the Extractor® pump can have significant benefits.

The name Pit Viper is derived from a small pit between the nostril and the eye on each side of the head. The bite of the Pit Viper is a lightning-like strike, usually on the legs or hands, as the snake injects venom from two fangs in the forward portion of its upper jaw. These fangs leave two distinctive puncture wounds at the point of entry.

Bites from Pit Vipers are serious. If bitten, the symptoms you feel will vary greatly, depending on your size, amount of venom injected, the amount you're able to remove with the Extractor® pump, the speed of absorption, and the location of the bite. Usually, the bite of a Pit Viper will cause severe pain and rapid swelling and discoloration of the skin at the bite area. Other conditions that may develop include general body weakness, rapid pulse, nausea, vomiting, shortness of breath, dimness of vision, shock, and even death.

Coral snakes inject venom by chewing on the victim. They often allow you to handle them for long periods of time before biting. Because they are colorful, children often catch and play with these snakes. Be sure your child can differentiate Coral Snakes from harmless colorful snakes. (See below).

### PREVENTING SNAKE BITES

1) Be aware of surroundings. Ask locals if snakes inhabit the area. If mice, chipmunks and other rodents are present, assume that snakes are, too.

2) Carry a walking stick and prod before stepping in or touching suspected areas. Snakes like to hide under rocks, logs and leaf debris. Pay attention to where you put your hands and feet. Never hop over a rock wall without knowing what's on the other side!

3) Wear high boots if walking through a snake-infested area. A snake can extend only half its body length, so, if it is on the ground, it will generally bite below your knee.

4) Step away slowly if you see a snake. If you panic and run, you may step on another snake nearby, or trip and fall.

5) Know which snakes are dangerous. Look for a triangular head (rattlesnakes, copperheads, cottonmouths) or red bands touching yellow to whitish bands (coral snakes).

6) Don't corner a snake. Give it plenty of room to escape.

### TREATMENT OF BEE, WASP & HORNET STINGS

Use the Sawyer® Extractor® pump to pull out the venom. By pulling out venom, you can relieve pain, itching and swelling and reduce the risk of future reactions.



Continued on back

Seek emergency medical help immediately if the victim has a history of serious reactions to stings or if a serious reaction seems to be developing. Keep the Sawyer® Extractor® pump on the sting area for up to two minutes while seeking help.

Don't pull a bee's stinger out with fingers or tweezers as this will squeeze more venom into the victim. Instead, carefully flick it out with the blunt side of a knife, a credit card or other non-sharp object.

Don't put meat tenderizer on a sting. Though this may provide temporary relief from itching and swelling, there are better methods available. Meat tenderizer contains enzymes designed to dissolve the fiber structure of muscle tissue and may permanently damage nerve tissue, resulting in loss of sensation if used repeatedly in one area.

### PREVENTING BEES, WASPS, HORNETS STINGS

Be aware of surroundings. Listen for buzzing and look for nests or hives. Check long grass before mowing, especially in late summer when yellow jackets are most aggressive. Wear light-colored clothing.

Escape into a body of water if possible when attacked by a swarm of flying insects. Remain submerged, moving away from the insects, if possible, until they leave.

Carry protection. Though repellents aren't effective against bees or wasps, the continuous flow of air from a spray can confuses them, giving you time to escape.

Remove and destroy nests, if necessary, at night when the insects are not active.

Don't wear strong perfumes or cosmetics, particularly floral-scented ones, which can attract bees and wasps.

Don't leave opened cans of sweet drinks or beer standing around. Always check before drinking from an open container, even if it contains only water.

### BEES, WASPS, HORNETS – BACKGROUND

Bees, wasps, hornets and yellow jackets all insert peptides when they sting, causing immediate, intense pain and swelling. Though peptides have no long-term effect, other chemicals in the venom induce a reaction from the victim's immune system, increasing potential for more severe reactions from future bites.

Every time a person is stung, he or she builds both a greater tolerance and a greater intolerance for the next sting. The tolerance dissipates in roughly six months, but the intolerance continues to build throughout one's lifetime. If you are stung frequently, your tolerance level remains high and overpowers your increasing intolerance. For this reason beekeepers, who may be stung often, do not have severe reactions to the stings. If, like most people, you are stung infrequently, your reactions to the stings are likely to be increasingly severe. Only the honeybee leaves a stinger in the victim.

Stinging insects kill 25 people per year in the U.S. Half the deaths are from honeybee stings, the remainder from yellow jackets or wasps. Social bees and wasps are more likely to sting in defense of their nests or hives than are solitary wasps which sting to paralyze prey.

### TREATMENT OF SCORPION BITES

Try to draw out venom immediately with the Extractor® pump. Seek pain relief. Cool water or ice may reduce the pain.

Monitor for allergic reaction. Scorpions are arachnids, related to spiders, ticks and mites. They're usually black or shades of yellow and brown and range in size from one half to eight inches long. There are 20 known species in the U.S., mostly in the Southwest, but one species has been found as far north as Alberta, Canada.

### TREATMENT OF FLY BITES

Try to draw out anticoagulants and irritants if there is local swelling and the appearance of allergic reaction to a fly bite. Use the Sawyer® Extractor® pump, which creates a strong vacuum to suction out poisons and other foreign fluids, thus relieving pain, itching and swelling and perhaps reducing the risk of more serious reactions.

### PREVENTING FLY BITES

The most bothersome flies are gnats, no-see-ums, sand flies, black flies and horseflies.

Use repellents containing R-326 (Di-n-propyl isocinchomerate), which is even more effective than Deet against flies. "Composite" repellents are best because they repel ticks and mosquitoes as well as flies. Sawyer® recommends Broad Spectrum which contains R-326 and Deet plus a third ingredient, MGK-264, that maximizes the effectiveness of both.

Spray tents and clothing with Permethrin, which lasts up to six weeks and is not washed off by rain water. Permethrin will also kill ticks and mosquitoes.

Dispose of litter, garbage, manure, decaying matter, and remove the places where maggots (fly larvae) can thrive.

Avoid areas of standing water where flies and mosquitoes may breed.

Dispose of standing water.

Use window and door screens. Repair holes promptly.

Spray screens with Permethrin to keep out tiny no-see-ums, fruit flies and pomace flies.

### TREATMENT OF TICK BITES

Use the Tick Plier™ to remove the tick.

Wash the area with soap and water and apply rubbing alcohol to avoid local infection.

Best known are the tiny deer tick, which spreads Lyme disease and the newly-diagnosed human granulocytic ehrlichia infection; the Lone Star Tick, which transmits Rocky Mountain Spotted Fever; and the dog tick. All ticks are capable of spreading disease to humans and animals. As a precaution, all ticks should be treated as if they carried disease.

Because ticks are so small, blood has for them the consistency of jello. In order to thin the blood meal so it's easier to suck in, the tick secretes saliva and in so doing may also secrete any disease-carrying bacteria harboring in its gut. This is how Lyme disease, Rocky Mountain spotted fever and other tick-borne illnesses are transmitted.

The process of transmitting Lyme or other diseases takes hours. Take a few seconds to remove the tick properly.

### PREVENTING TICK BITES

Wear long pants, preferably tucked into socks. Wear light colors (so you can spot ticks) and tight weaves (so ticks can't get a foothold).

Avoid brush and leaf debris. Stick to trails and check yourself regularly, especially around waistlines, knees, armpits, ears and crotch. Use the buddy system, and don't be modest!

Apply Permethrin repellent on tents, sleeping bags and clothing (not on skin). It kills ticks and mosquitoes on contact, lasts up to 42 days, and won't wash off with water. Ticks climb upwards so be sure that your barrier covers adequate areas above tick entry levels. If you are only in knee high grass then treating pants is probably adequate. However, if brush or trees are likely drop points for ticks then a total body coverage of Permethrin on clothing and Deet on skin is necessary.

Use insect repellents containing Deet. Composite repellents are best because they use enhancers to boost the power of Deet and therefore less of it is needed. Non-composite repellents require 30% Deet to be effective. Sawyer® recommends Broad Spectrum, which contains minimum Deet for mosquito and tick control, R-326 to repel flies and MGK 264 to render both more effective.

### TREATMENT OF SPIDER BITES

Most spider bites occur at night when a spider passes over a sleeping victim. When discovered hours later, usually a sore red bump, the skin has sealed over and removal of venom by applying the Extractor® pump is difficult, but worth a try.

The Brown Recluse, also known as the Violin or Fiddleback Spider because of the distinctive violin-shaped marking on its back, can also deliver a painless bite or a bite that merely itches and burns at first. Later the surrounding tissue turns red, or black and blue, and begins to disintegrate from the venom which is designed to digest the victim's flesh. A crusted wound forms and, after the crust falls off, continues to deepen, forming a crater that may take months to heal. Brown Recluse bites are often not diagnosed until considerable tissue damage has taken place, so it's important to inform the doctor if you suspect a bite.

Seek medical attention if you suspect a Brown Recluse or Black Widow bite.

### SPIDER BITES – BACKGROUND

Brown Recluses, like Black Widows, prefer warm climates but they can be shipped north and live comfortably indoors.

Only about 5/8 inch long, the Black Widow is extremely shy. She often eats the male (hence her name) after mating and can store sperm, producing more egg sacs without mating again. Black Widows live in wood piles, stone walls, outside toilets and similar hiding places.

Other spiders that deliver painful bites include wolf and jumping spiders, wandering and garden spiders and tarantulas.

Tarantulas are much feared and, in the case of some South American species, deservedly so. But the bite of the tarantulas that live in North America are no more serious than bee stings.

### TREATMENT OF ANT BITES

Try to remove poisons. For a manageable number of bites, Sawyer® recommends the Sawyer® Extractor® pump, which creates a strong vacuum to suction out poisons and other foreign fluids, thus relieving pain, itching and swelling and reducing the risk of more serious reactions.

Use hydrocortisone to relieve itching. Monitor for allergic reaction.

### TREATMENT OF MOSQUITO BITES

For very bothersome bites the Extractor® pump may be helpful by removing this mild form of poison and reducing itching.

Seek medical help if significant swelling appears in the area of the bite or if fever occurs. Though rare, this kind of reaction can be serious.

### PREVENTING MOSQUITO BITES

Deet is the most effective mosquito repellent, but it can irritate the skin. Don't use more than necessary, particularly on children. Fortunately, the repelling power of Deet is greatly increased by adding another ingredient known as a "synergist," which actually makes Deet work better. Broad Spectrum contains the synergist MGK-264, as well as R-326 which repels flies and ticks. Citronella, the most common of the 150 essential oils used to repel mosquitoes, works for short periods of time. However, if presented to the body in high concentrations, it can irritate. See "Warning" below.

Beware of formulas that are not registered with the EPA. Some unregistered repellents have dangerously high concentrations of essential oils and, though effective against insects, may irritate the skin and cause other side effects. The EPA does not approve any repellent containing more than 10% essential oils and requires registration of any formula with over 3% essential oils. At high concentrations, these essential oils may not be safe.

Spray tents, at least tent openings, sleeping bags, and clothing with Sawyer® Permethrin, which kills mosquitoes on contact. Permethrin lasts for up to six weeks and will not wash off with water.

Remove stagnant pools of water near your home.

### TREATMENT OF MARINE ENVENOMATIONS

Jellyfish: Seek medical attention if stung by a jellyfish. Use a topical agent for relief from pain and itching. A mixture of 50% vinegar and 50% rubbing alcohol should be applied first. This is to disinfect the wound.

Portuguese Man-of-War: Seek medical attention if attacked by a Portuguese Man-of-War. Apply vinegar and alcohol as above (see Jellyfish).

Stingrays: Seek medical attention if attacked by a stingray. Apply heat or immerse the affected area in hot water to thin the venom. Apply the Extractor® pump, and monitor for signs of allergic reaction.

Coral: Clean the affected area thoroughly with a solution of 50% vinegar and 50% rubbing alcohol.

Swimmer's itch: Clean the area and seek relief from itching. If itching persists, seek medical advice.

### FOR MORE INFORMATION ABOUT SAWYER PRODUCTS, INC.

Visit [www.sawyer.com](http://www.sawyer.com) to learn more about Sawyer's full line of Insect Repellents, First Aid Kits, Sunblocks, Water Filters and Purifiers.

