

LINT AND CHARPIE:  
IT'S NOT YOUR DRYER LINT

Virginia Mescher

In reading numerous accounts of women's contributions during the Civil War, one usually sees references to lint, scraping lint and the amount of lint sent to hospitals by relief societies. The lint phenomena occurred in both the North and South, where ladies' aid societies and lint societies were formed to produce lint for the wounded.

Lint was a common medical product which was used to dress wounds but to completely understand exactly what was meant by lint or scraping lint, one must be aware of the period definition. There were two types of lint used for dressings. Lint was defined in *Webster's Dictionary*, 1861 as, "Flax, but more generally, linen scraped into a soft substance, and used for dressing wounds and sores." The definition of lint in the *Oxford English Dictionary* is, "A soft material for dressing wounds, prepared by ravelling or scraping linen cloth." The first recorded mention of lint was in 1440. To create more confusion, the word "charpie" was synonymous with lint. Charpie was defined as, "Lint for dressing a wound" (*Webster's Dictionary*) and "Old linen unravelled into short ends of thread for surgical dressings; very narrow, thread-like strips of linen torn off so as to leave fringed ends." (*Oxford English Dictionary*) The first mention of charpie occurred in 1797 and was thought to have been an invention of the French.

Henry Hollingsworth Smith, author of *Minor Surgery; or Hints on the Every-day Duties of the Surgeon* wrote an excellent description of lint and charpie. "Lint is a soft, delicate tissue or mass, prepared in two ways, in one of which the transverse threads of soft, old linen are drawn out by a machine, leaving the longitudinal ones covered by a sort of tomentum or cotton-like mass; whilst the other, the cotton-like surface is produced by scraping with a sharp knife a similar

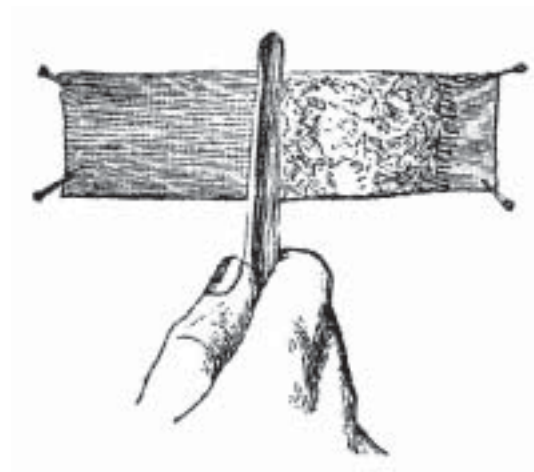


*Patent Lint or Charpie (made by author)*

piece of cloth previously fastened to some firm substance. The first is known as Patent Lint, and may be obtained of any druggist, being now generally manufactured. The second is Domestic Lint, and may be made at a moment's notice when the first is not convenient. They are both employed as primary dressings, either spread with ointments, or alone." Smith also described charpie: "Charpie is a substance much employed by the French Surgeons and now gaining a more general application in the United States. It is made by collecting the threads torn from pieces of linen, four to five inches square, such as is used in patent lint. The process, however, goes a step farther than that for making lint, and tears the threads entirely apart instead of pre-



*Domestic or Scraped Lint (made by author)*



*Illustration showing how to scrape lint (from Minor Surgery)*

serving the cloth. The linen from which it is made should always be new, and not worn table cloths as sometimes is employed. Gerdy having proved, that when Charpie is made from new linen it absorbs better than when from old. Charpie is usually divided into two kinds, according to the length and fineness of the thread composing it; that which is long and coarse being employed to keep open the sinus, fistulae, and to act as an outer dressing; while the softer, finer kind is placed in immediate contact with the part, especially where the surface requires stimulation."

"Various names are given to Charpie, according to the way in which the fibers are arranged previously to its application. Thus, we have the Pledget, Roll, Tent, Mesh, Bullet, Tampon, Pellet, each of which have their particular advantage."

Lint and charpie were used in various ways. Probably the most common way lint was used was in a compressive dressing. It was folded and pressed into or on wounds and a bandage was placed over the lint; this action helped to control bleeding. It was also used wet and used as a sponge. Charpie was mainly used for absorption of drainage and was used to pack in wounds and then covered with a mixture of wax, rosin, white lead and other substances that would block out air to the wound. Even though it adhered to the wound, when the dressing was changed and the mass was pulled away, only the dead matter adhered to the dressing and the healthy area was not affected. A Federal surgeon, writing in 1905, indicated that lint was most often applied wet

to the wound, covered with a piece of gauze muslin and then covered with an adhesive plaster. The dressing would then be kept wet. This action was thought to have kept the wound “clean and sweet.”

There was little information in primary sources that describe exactly how the lint was used. Dr. John Gunn included a mention of the use of lint in his family medical book. He wrote, “Treatment of Wounds..... [after the bleeding is stopped]. After sprinkling on a quantity of this [styptic substance such as alum, burnt copperas] enough to thinly cover the surface of the wound, or the parts of it from which the hemorrhage proceeds, place over it a pledget, or bunch of lint or cotton, or a bit of old muslin folded, and apply a bandage..... Bring the edges of the wound together carefully and as close as you can; across the wound, leaving a little space between each to allow any fluid to escape that may run from the wound. Place over the straps a bunch of lint, or cotton, or compress of muslin, and over it a bandage.”

Adams wrote in *Doctors in Blue*: “There were two schools on the uses of lint. One held that a wad of it should be placed into the wound ‘to keep it open;’ the other was that lint was of use only as padding around a splint or to wipe away pus and had come into use on the mistaken theory that it is necessary to keep a wound from healing to permit the escape of humors....

..... The lint used, much as absorbent cotton is used now, was supposed to have been scraped from clean pieces of cloth, but of course was not aseptic. Frequently it was be applied wet, covered with a piece of gauze, and held in place by an adhesive plaster.”

Both patent and scraped lint were considered a necessary part of regulation medical equipment for both the north and south. U. S. army regulations indicated that four pounds of patent lint and two pounds of scraped lint was standard in a properly equipped medical wagon and a half pound of patent lint was needed for a medical pannier. The Confederate army regulations suggested the amount of lint necessary for a regiment (eight pounds); battalion (four pounds); and company (two pounds) for three months. Specific amounts were also proposed for hospitals of different sizes. The suggested amounts did not really indicate an accurate figure of what would be required in field and stationary hospitals and even before the war started, individuals realized that more than the recommended amounts of lint would not be sufficient for the needs of both armies.

It was recognized the lint would be needed if war became a reality. Even before the war officially began, there were references to lint in southern newspapers. The *Charleston Mercury*, in the January 7, 1861 issue included the following item. “Lint. — An interesting circumstance connected with the lint, which the teachers and pupils of the Columbia Female College (during this their present recess) are preparing for the use, if need be, by our Southern army, is, that it is from linen sheets, spun and wove by a woman of the Revolution of 1776 (the great-grand-mother of one of the teachers of the institution). The women of one revolution, thus, as it were, coming up to the help of the women of another, even as the memory of the patriotism of the women of the past causes to glow with increased ardor that of the women of the present. — Carolinian.”

Right after the beginning of the war, publications stressed the upcoming need of lint and its scarcity. In the *Natchez Daily Courier* on April 26, 1861 Dr. Schuppert wrote, “War seeming

to be inevitable, I would suggest an appeal to the well-known patriotism of the ladies of this city and the country at large, to furnish the military stores with an implement of great importance to the active surgeons of the army — we mean “charple,” [charpie] or picked lint, of which there are not fifty pounds to be found, even if you would buy out all the drug stores of the city of New Orleans. The lint, which is commonly used as a surrogate for dressing wounds, does not come up at all to the purpose it is required for in actual warfare; besides, it is a costly article. The charple [sic], as used in the French and German armies, is prepared out of old worn-out shirts and sheets, which are commonly thrown away. We would, therefore, say: ‘Save the pieces;’ cut them in squares of 4 or 5 inches, pick them, and the required article is prepared. If it is sweet to bleed for the country, it is not less sweet to know that the wounds will be dressed properly; moreover, by the handwork of our mothers and sisters.”

There are numerous references to lint and lint scraping recorded in diaries, letters and memoirs. It seemed to be a primary activity for ladies’ relief societies in both the north and south. An anonymous wife of an Confederate officer related her experiences, of the Civil War, to Mryta Avary. She wrote of setting up aid societies in churches and as well as making shirts, havelocks and knapsacks, bandages were being rolled and lint was being picked and rolled into balls. Varina Davis wrote in the *Confederate Veteran* in May, 1893: “Towels and sheets were spun from cotton to replace the house linen which as been cut into bandages, or scraped into lint for the surgeons in the field. One handsome young woman, the daughter of and ex Minister to Spain, rise before me out of the haze of bygone years, stepping lightly to and fro winding bandages on the spindle of her wheel and talking pleasantly to her visitors, while her patriotic mother sat by cutting up the table linen which she had treasured for forty years. The daughter show great callous knots on her shapely hands made by scraping lint, and mentioned them with an expression of gratitude to God that she could procure material for so much work.”

This was not only done in the South and as early as April 30, 1861, the *New York Times* was publishing the lint contributions of northern ladies’ aid societies. Even though lint was a much needed item in hospitals some women responded to the extreme as indicated by Mary Livermore. She wrote in her book, *My Story of the War*, “The decline of the Havelock fever was followed by a ‘lint and bandage’ mania, which set in with great fury. For a time it was the absorbingly topic. Knowing how insignificant in value these items of relief proved in the actual experience of the war, one cannot forbear a smile when reading the sapient discussions of the time. ‘What is the best material for lint?’ ‘How is it best scraped and prepared?’ ‘By what means can it best be gathered, in the largest quantities?’ These were the questions of the hour, discussed gravely by professional men. And the ‘New York Medical Association for furnishing Hospital Supplies,’ actually held meeting to discuss a ‘lint and bandage depot.’ Thus stimulated, every household gave its leisure time to scraping lint and rolling bandages, till the mighty accumulations compelled the ordering of a halt. A little later, the making of lint by machine relieved women of any further effort in this direction.” [In Smith’s 1850 book, he mentioned that lint could be made by machine.]

Despite what Mary Livermore wrote about the excess of lint, some northern newspapers did request that civilians donate lint and northern women still scraped lint. Lida Bender of Waynesboro, Pennsylvania wrote, in 1862, about the Battle of South Mountain. On hearing the

guns, Bender and other women hurriedly prepared hospital supplies, working at night in “the low- ceiled, unfurnished room, the only light a few tallow candles, a large clothes-basket in the center, and round about a circle of girls, each with a pine shingle, a knife, and a lapful of pieces of old linen tablecloths, towels, and napkins which we were scraping into lint. Back of us the older women were making neat rolls of strips of old soft muslin for bandages. Suddenly above the scrape, scrape of the knives, the swish of tearing muslin and the low murmur of voices, a woman’s shrill scream rang out on the night. Terrified, we dropped our work, and ran out to the sidewalk. It was a mother’s cry for her boy, who had been killed the day before, only eighteen miles from home. That night, I felt the horror of war.” The following appeared in the *Davenport* [IA] *Daily Gazette* on September 3, 1862. “Lint Societies .— By reference to the Gazette of yesterday morning, the little girls of our city will find a direct appeal made to them from the Surgeon General of the United States, that they revive their lint societies and go to work to pick lint for the poor wounded soldiers. Just to think, hundred and thousands of soldiers, the brothers and fathers of little girls like yourselves, now suffering anguish from their bleeding wounds, when a little lint might stop the flow of blood and help to relieve their pain. Go to work little girls and pick lint — it will all be needed, more than your industrious fingers can supply.” The *Davenport Daily Gazette* also published the contributions of the lint societies. Later in the war, it was evident that the necessity for the home production of lint had lessened. The following letter was written by Mrs. S. E. Hooper, of the U. S. Sanitary Commission, to a Miss Wilson on September 15, 1864, thanking her for the contributions to the Commission. In part the letter states, “.... You mention having a quantity of lint — We shall be glad of what you have although we do not recommend much to be made as the call is much less than formerly.”

To aid individuals producing lint and the lint societies and magazines and newspapers included directions on how to produce lint and bandages. The following appeared in the August, 1861 *Peterson’s Magazine*. “Lint and Bandages. — Lint should be made of unraveled linen, new or old (the latter preferred), by cutting it in pieces of four or five inches square, which would be highly acceptable, while lint made from canton flannel [a cotton flannel that is twilled on one side and fuzzy on the other side] is irritating to the wound.” The *Bellville* [Texas] *Countryman*, on May 22, 1861 included the following advice for making lint. “The lint should be made of linen cloth, scraped or ravelled [sic], but the ravelled [sic] is very much preferable, as it can be more easily removed from the wounds. The linen should be cut into pieces about three inches square and then ravelled [sic]. These directions are of extreme importance. Very much labor of the French ladies during the Crimean war was useless, because misapplied.”

Women adopted their own methods of scraping lint according to their preferences. The *Southern Confederacy*, in the April 25, 1861 issue, included the following. “We recommend the following from a lady friend to the ladies of our own and other communities. Lint and bandages may become very necessary to the troops now marching to battle. To the Ladies. — A New Way of Making Lint. — On Saturday last as the Court House in this city, I noticed several ladies engaged in scraping lint with knives, it appeared to be a very tedious business. After working away for some time trying different kinds of knives, Miss McKey, one of the party suggested tearing up the linen into fine pieces, and then carding it. They all agreed to her proposition so she had some cards brought and it proved to be the very idea. It was not long before they had a large box of nice fine carded lint. I would recommend all persons who are engaged in scraping



lint, to try Miss McKey's plan of carding."

Some doctors also gave advice on easier ways to produce the lint or use substitute items. In the [Little Rock] *Weekly Arkansas Gazette* on June 8, 1861, Dr. J. C. Nott, Medical Director, wrote, "In my daily rounds I see our ladies wearing out their fingers and eyes in picking lint for our brave soldiers, and while I admire their patriotism and charity, I hope I may be permitted to say, I think they are, for want of information, throwing away much time that might be more usefully spent. Clean cotton is easily obtained in any quantity, and answers just as well for dressing wounds as the ordinary lint. The 'patent lint' commonly used by surgeons is all, or nearly all, made of cotton. Some of the best European surgeons use the cotton-wool in preference to lint. Everybody uses cotton for a dressing for a burn, the most intense of all inflammations. To these facts I may add my own ample experiences. I have for years been in the habit of using good sample cotton and lint indiscriminately, in dressing wounds of all kinds, and could never see any difference. Finely carded, clean, white cotton makes most excellent lint. It can be conveniently put up for use in small bales — say two feet long by ten inches thick.

A bale of hemp might easily be opened and the fibres [sic] cut about three inches in length. It could then be immersed for some days in a solution of chloride of soda, and subsequently bleached in the sun and dried thoroughly. When dry it is fit to be carded, and the process of carding, when well completed, will convert it into white and disinfecting lint or charpie. The hemp so prepared was used by the French surgeons in the Crimean war.

A scientific apothecary should superintend the preparation of the hemp and the packing in bales of two feet long and ten inches wide.

One bale of hemp would supply an army of 50,000 men."

In *Doctors in Gray*, Cunningham Cunningham stated that raw, ginned cotton was baked in an oven until it was charred and then was used in place of conventional lint. In a medical exhibit of the Petersburg Siege Museum there was an example of the burned cotton, which was a square of flattened cotton batting similar to cotton quilt batting. It was charred black on one side and plain on the other side.

It would be impossible to ascertain the amount of lint that was shipped to the confederate army, but by just reading newspaper accounts of what individual groups sent to the army, the amount of lint was phenomenal. The Confederacy did not have a source of manufactured lint available throughout the war so pleas were made for the home production of lint. Even as late as 1864 items such as the one that follows appeared in southern newspapers. The *Mobile Register & Advertiser*, on August 3, 1864, printed, "Lint for the Wounded. — Mr. Editor: I beg permission through the columns of your paper, to make a suggestion to the children of Mobile, and in reference to the purpose of which I am persuaded you will heartily concur.

Little children, I write unto you because you have much time to spare, and because your little fingers can perform as much service, and therefore do as much towards administering to the comfort and care of the thousands of brave wounded soldiers as older ones can. I wish you to ask your parents and friends for old linen table cloths, napkins and such like — tear them into pieces about two or three inches square, then pull out the strands, and make all the lint you can for a week to come. Bring it to the Soldiers' Reading Room, where I will be most glad to welcome you with it every day until 4 until 6 o'clock in the afternoon. I wish to take it to

the hospitals, where it is much wanted by all the poor sufferers, and who will, I am sure, call down God's blessing on the heads of the children of Mobile. Try then who can make the most, and send me away with a "heap" of lint for our suffering braves.

Your friend,

B. M. Miller, Post chaplain.

P.S. — The above is by no means designed to exclude the co-operation of young ladies and gentlemen of larger growth, who may also find many leisure hours to devote to this god-like charity at such a time as the present."

Mrs. Livermore had indicated the North did not need the vast home production of lint and charpie and even though it continued to be manufactured at home by some women, the U. S. Army purchased large amount of lint. According to the *Medical and Surgical History of the War of the Rebellion*, 147,135 pounds of patent lint, either cotton or linen, were purchased and 82,754 pounds of lint, picked or scraped linen were purchased or manufactured during the civil war. It is unclear as to whether or not the above totals include hundreds of pounds of lint shipped by the relief organizations, such as the Sanitary Commission, to northern hospitals.

Lint and lint scraping, even though mundane items, were inclusions or subjects of poetry, songs and were featured in civil war monuments and paintings. John Cornish wrote on January 12, 1861 a poem that he included in a letter to his brother. It described the firing on the steamer, *The Star of the West*. He wrote, "..... Lint and bandage, while their hearts are quaking; Mothers and Sisters are diligently making...." In a poem by written by Clara Barton and presented in 1892, titled, "The Women Who Went to the Field." She wrote, ".....They might pick some lint, and tear up some sheets...." Walt Whitman's poem, "The Wound Dresser" contained the following, "I undo the clotted lint, remove the slough, wash off the matter and blood." J. W. Barker wrote a poem/song titled, "Picking Lint." A civil war monument erected in Hamilton, Ohio features windows depicting the contribution of women during the war: one window is titled "Our Loyal Mothers and Sisters" and shows women and children rolling bandages and scraping lint." One painting done in 1871 by Mihály Munkácsy of Hungary was titled, "Making Lint" pictured women, girls, old people and children making lint for wounded soldiers. Even though this painting was done after the civil war, it does show the importance placed on lint in later times.

Lint was a necessary item for hospital use during the Civil War and came in various forms and substitutions, but its use did not end with the civil war. Both lint and charpie continued to be used by doctors until sterile gauze pads were introduced just before World War I.

#### SELECTED BIBLIOGRAPHY:

Adams, George Worthington. *Doctors in Blue*. New York: H. Schuman. 1952.

Avary, Myrta Lockett. *A Virginia Girl in the Civil War: 1861 -1865*. New York: D. Appleton and Company. 1903.

\_\_\_\_\_. *Weekly Arkansas Gazette*. June 8, 1861. <http://www.uttyl.edu/vbetts/>

\_\_\_\_\_. *Bellville Countryman*. May 22, 1861. <http://www.uttyl.edu/vbetts/>

Bender, Lida. <http://www.neh.fed.us/news/humanities/1997-03/valley.html>

\_\_\_\_\_. *Charleston Mercury*. January 7, 1861. <http://www.uttyl.edu/vbetts/>

Cunningham, H. H. *Doctors in Gray*. Baton Rouge: Louisiana State University Press. 1958.

\_\_\_\_\_. *Davenport Daily Gazette*. September 3, 1862.

Davis, Mrs. Jefferson (Varina). *The Confederate Veteran*. "Our Southern Women in War Times." May, 1893.

Gunn, John, Dr. *Gunn's New Domestic Physician or Home Book of Health. A Complete Guide for Families*. Cincinnati: Moore, Wiltstach, Keys & Co. 1863.

Hooper, Mrs. S. E. Letter to Miss Wilson dated September 15, 1864. In the collection of the Pocumtuck Valley Memorial Association. Deerfield, Massachusetts. <http://www.memorialhall.mass.edu>

King, Janet, RN., BSC, CCRN. "Civil War Medicine. Part III. The Surgical War." <http://www.vermontcivilwar.org>.

Livermore, Mary A. *My Story of the War*. New York: Da Capo Press. 1995. Originally published in 1887.

Munkácsy, Mahály. "Making Lint." *Fine Arts in Hungary*. <http://www.kfki.hu/>

\_\_\_\_\_. *Mobile Register & Advertiser*. October 31, 1861, and August 3, 1864. <http://www.uttyl.edu/vbetts/>

\_\_\_\_\_. *Natchez Daily Courier*. September 27, 1861. <http://www.uttyl.edu/vbetts/>

\_\_\_\_\_. *New York Times*. April 30, 1861.

\_\_\_\_\_. *Oxford English Dictionary*. <http://etext.lib.virginia.edu>

Pearson, Emma Maria and Louisa Elisabeth MacLaughlin. *Our Adventures During the War of 1870 by Two Englishwomen*. London: Richard Bentley & Son. 1871.

\_\_\_\_\_. *Peterson's Lady's Magazine*. Philadelphia: August, 1861.

\_\_\_\_\_. *Regulations for the Medical Department of the C. S. Army*. Richmond:



Ritchie & Dunnavant. 1862.

Schaadt, Mark J. *Civil War Medicine: An Illustrated History*. Quincy, IL: Cedarwood Publishing. 1998.

Smith, George Winston. *Medicines for the Union Army: The United States Army Laboratories During the Civil War*. Binghamton, New York: Haworth Press, Inc. 2001.

Smith, Henry Hollingsworth. *Minor Surgery: or Hints on the Every-day Duties of the Surgeon*. Philadelphia: E. Barrington & G. D. Haswell. 1850.

\_\_\_\_\_. *Southern Confederacy*. April 25, 1861. <http://www.uttyl.edu/vbetts/>

Webster, Noah. *An American Dictionary of the English Language*. Springfield, MA: George and Charles Merriam. 1861.

Wilbur, C. Keith. *Civil War Medicine: 1861-1865*. Old Saybrook, CT: Globe Pequot Press. 1988.

Copyright 2003 by Virginia Mescher. This article may not be published or reproduced in any way, including print or electronic means, without the prior written permission of the author. This prohibition includes posting to web sites, whether for profit or for free.