

Note from the Making and Knowing Project:

This essay was written for “The Art Technological Source,” an 8-week graduate course at the University of Amsterdam offered by Dr. Marjolijn Bol in 2015 and 2016 to students enrolled in an MA program in either Technical Art History or Conservation and Restoration. Students worked on various recipes from BnF Ms. Fr. 640 on the following five topics: 1) tracing and painting on glass, 2) yellow dyes and their applications, 3) dragon’s blood, 4) painters’ varnishes, and 5) sieves.

This is an un-edited student paper that relies on an earlier state of the Making and Knowing Project’s transcription and translation of Ms. Fr. 640. For an updated version of the text, see:

Making and Knowing Project, Pamela H. Smith, Naomi Rosenkranz, Tianna Helena Uchacz, Tillmann Taape, Clément Godborge, Sophie Pitman, Jenny Boulboulle, Joel Klein, Donna Bilak, Marc Smith, and Terry Catapano, eds., *Secrets of Craft and Nature in Renaissance France. A Digital Critical Edition and English Translation of BnF Ms. Fr. 640* (New York: Making and Knowing Project, 2020), <https://edition640.makingandknowing.org>. DOI: <https://doi.org/10.7916/78yt-2v41>.

Sieves deconstructed

A search into the construction of historic sieves

Paulien Coopmans - The Art Technological Source - MA C&R Textiles – UvA
Tutor: Dr. M.A.H. Bol - 14-03-2016.

BnF Fr. Ms. 640:

Fol. 13r and 13v

French transcription:

<div>

<id>p013r_4</id>

<head>Tamis fins de <m>soye</m> creue</head>

<ab>On faict de l'estamine de <m>soye</m> crue au telier pour fayre de fins <lb/>
subtils tamis. Et pour cet effect, il ne fault pas choisir la <m>soye</m> crue<lb/>
blanchie à la fumee du <m>soufre</m>, qui rend la <m>soye</m> chargee d'une<lb/>
vapeur glua{n}te, qui retiendrait la <m>farine</m> & enfin empescheroit qu'elle ne</ab>
</div>

<id>p013r_4</id>

<ab>passeroit pas si bien. Mays choisis pour cet effect la <m>soye</m> crue<lb/>
jaulne & naturelle pource qu'elle est plus forte & rejete la<lb/>
<m>farine</m> comme le <m>poil de <al>cheval</al></m>.</ab></div>

English translation

<div>

<id>p013r_4</id>

<head>Fine raw <m>silk</m> sieves</head>

<ab>Musline of raw <m>silk</m> is made on a weaver to make very fine and delicate sieves. And for
that effect, you must not choose raw <m>silk</m> whitened by <m>sulphur</m> smoke which renders
the <m>silk</m> full of a sticky steam that would hold the flour and hinder it from t</ab>
</div>

<div>

<id>p013r_4</id>

passing through so well. But for this effect, choose yellow and natural raw <m>silk</m> because it is
stronger and rejects <m>flour</m> as <m><al>horse</al>hair</m> does.</ab></div>

Fol. 44v

French transcription:

<div>

<id>p044v_1</id>

<head>Tamis de <m>poil de <al>cheval</al></m></head>

<ab>Ils se font à <pl>Coustance</pl> en <pl>Normandie</pl> de </m>poil</m> de la
que^ue de <al>cheval,</al><lb/>

qu'ilz nettoient avecq de la <m>lessive</m> à cause qu'ilz les trient avecq<lb/>
la bouche & en separent les courts & rompus. Ils ne font<lb/>
pas la lame plus longue que le tamis, & est ronde. Ils attachent<lb/>
par les deulx extremités de la lames le <m>poil</m> ou blanc ou noir,<lb/>
selon l'ouvrage qu'ils veulent faire. Et <corr>est</corr> faicte la trame<lb/>
dessus & dessous comme pour faire quelque aultre tyssu. Et<lb/>
passant entre deulx un petit baston plat large de ii ou trois doi<corr>gt>/corr>s,<lb/>
ilz passent après deulx <m>poils</m> à chascue frapem{ent} de marche et<lb/>
tissent avecq trois marches. Il y a en tout le tamis xviic <m>poils.</m><lb/>
Ils les vendent à douzaines & chascune xxx s{ols}. Ils les portent<lb/>
jusques à <pl>Th{o}l{o}se</pl> pour les transporter après en <pl>Espagne</pl>, et<lb/>
prenent en eschange de l'estamine de <m>soye</m>.</ab></div>

English translation:

<div>

<id>p044v_1</id>

<head><m><al>Horse</al>hair sieves</m></head>

<ab>They are made often in <pl>Normandy</pl> with <m><al>horse</al>tail hairy</m> that they
clean with some washing <m>water</m> because they pick them out with their mouth and separate
short and broken ones. They do not make the <m>thread</m> longer than the sieve and it is round.
They attach the black or white <m>hair</m> at the two edges of the thread, according to the piece
they want to make. And the thread is woven above and below like any other fabric. And passing a small
flat stick of ii or three fingers wide between two, they pass between after two bits of hair at each step
strike and weave with three steps. The entire sieve is made of xvii bits of <m>hair</m>. They sell them
by dozens and each xxx sols. They bring them to <pl>Toulouse</pl> to send them then to
<pl>Spain</pl> and there, they exchange it with <m>silk</m>.</ab></div>

Introduction

One of the crafts that the author-practitioner discusses in BnF Ms. Fr. 640 is the art of sieve making. The manufacturing of this particular tool is discussed in two different entries of the manuscript. The recipe in fol. 13r and 13v outlines making a sieve out of silk and the recipe in fol. 44v deals with making sieves out of horsehair. The author-practitioner mainly focuses on the materials and methods used for weaving the bottom of the sieve, which can be considered the most crucial part of the sieve. However, he does not say much about what the sieves he refers to look like and how they are constructed. Yet, these are crucial aspects that one comes across immediately when trying to make a historically accurate reconstruction of a sieve, like my fellow students and me did.¹ The fact is that the woven cloth has to be stretched somehow to give it strength and make the sieve work. The only clue that the author-practitioner gives, is that the sieve is round:

*'They are made often in Normandy with horsetail hairy that they clean with some washing water because they pick them out with their mouth and separate short and broken ones. They do not make the thread longer than the sieve and it is **round**. They attach the black or white hair at the two edges of the thread, according to the piece they want to make.'*²

The author-practitioner also does not say anything about the materials that are used to make the frame of the sieve, the way of attaching the woven cloth (either made of horsehair or silk) to the frame, or the size of the sieves. He also does not mention in what context these sieves were used.

To my knowledge, no recent research has been done so far into the subject of sieves.³ Therefore, only historical images and descriptions can be used to get an idea of what these tools looked like and how they were made. This annotation, therefore, deals with the question in which way we can learn more about the appearance and construction of the sieves (both of horsehair and silk), as mentioned in BnF Ms. Fr. 640. To come to an answer, historical images and descriptions of sieves from the fifteenth to the eighteenth century are studied in this annotation. The reason for this

¹ During the course *The Art Technological Source* (part of the Master's Program of Conservation and Restoration of Cultural Heritage at the University of Amsterdam) we had to make historically accurate reconstructions of recipes taken from BnF Fr. Ms. 640. We made a reconstruction of the recipes in fol. 13r, 13v and 44v. These recipes dealt with making sieves out of silk and horsehair. This reconstruction was executed between 17-02-2016 and 25-02-2016 by Paulien Coopmans, Hanneke Kramer, Lieke Boerstra, Annelena de Groot, Kirsten Derks and Lisanne van den Heuvel. A logbook of the reconstruction can be found here: <https://drive.google.com/open?id=11aPkppKskHB6lg9okRYMuDtBFZ2Zz9LQBF66ELl6lhs>.

² BnF Fr. Ms. 640. Fol 44v. Original French transcription: *'Ils se font à Coustance en Normandie de poil de la queue de cheval, qu'ilz nettoient avecq de la lessive à cause qu'ilz les trient avecq la bouche & en separent les courts & rompus. Ils ne font pas la lame plus longue que le tamis, & **est ronde**. Ils attachent par les deulx extremités de la lames le poil ou blanc ou noir, selon l'ouvrage qu'ils veulent faire.'*

³ Recent scientific literature doesn't seem to concern itself with the construction of historical sieves. Recent literature seems to focus primarily on industrial sieves or on the act of sieving in historical recipes.

wide time range is the lack of sixteenth century images and descriptions of sieves.⁴ It is interesting that almost all the images found show a certain continuity. For this reason, I assume that even images and descriptions of sieves from before and after the sixteenth century (the century BnF Ms. Fr. 640 was written) are representative for the kind of sieves described in the manuscript, and can be used to derive information from about the appearance and construction of the sieves the author-practitioner mentions. The different sources in which images and descriptions of sieves can be found will be discussed in this annotation. Then, for each type of source will be examined whether that source can be useful to gain more knowledge about the sieve's appearance and construction and will be discussed what can be concluded about sieves from these sources.

Sieves in images and descriptions

Images and descriptions of sieves can be found in various sources. To gain more insight into the different types of sources and their relevance, in this annotation, the images are grouped in three categories: sieves in an iconographic tradition, sieves as tool and sieves in the sieve maker's craft.

1. The sieve as an attribute and symbol in iconographic traditions

Firstly, most of the images found are of sieves depicted in an emblematic context or iconographic tradition. Three main iconographic traditions can be distinguished within this category. Firstly, the story of Tuccia; one of the Vestal Virgins of Rome, who impersonates chastity. In the story Tuccia carries a sieve full of water from the Tiber to the Temple of Vesta to prove her innocence after having been accused of incest.⁵ This way, the sieve became her attribute. Some well-known examples of images with the sieve in this meaning are the so-called *Sieve Portraits* of Queen



Fig. 1. Elizabeth I is holding a sieve in her left hand. Quentin Metsys the Younger, *The Siena Sieve Portrait*, 1583.

⁴ My search for images of sieves in databases, manuscripts and encyclopedias resulted in a lot of images, of which unfortunately only a few date from the sixteenth century. Most of the images found are from a later date.

⁵ "Tuccia (Chastity)," Victoria and Albert Museum, accessed March 23, 2016, <http://collections.vam.ac.uk/item/O125590/tuccia-chastity-tempera-painting-neroni-bartolomeo/>

Elizabeth I [[Fig. 1: Metsys the Younger, *Siena Sieve portrait*](#)].⁶ Sieves also play a role in moralizing prints in which a person (often a son or a husband) is sifted in a large sieve to reveal this person's sins [[Fig. 2: Adriaen van de Venne, *Allegory of marriage*](#)].⁷ A final iconographical tradition in which the sieve is rendered is that of *Saint Benedict of Nursia and the Broken Sieve*. In this story Benedict's



Fig 2. The groom is sifted in a giant sieve. Adriaen van de Venne, *Allegory of Marriage*, 1630-1632, 54x76cm, pen on paper.

servant accidentally breaks a sieve, which is then miraculously mended by Benedict and hung on the church door [[Fig. 3: Hieronymus Wierix, *St. Benedict of Nursia*](#)].⁸

These sources can be useful to learn more about what sieves must have looked like in a certain period in time. Some of them are indeed illustrated in quite some detail, while others are pictured very schematically. It is likely, but not necessarily the case that painters and printmakers

(especially the ones that depict the sieves in great detail) drew upon their own experiences and knowledge of sieves taken from daily life when drawing a sieve. On the other hand it is conceivable that the artists (especially in this category) built on the existing iconographical tradition and 'copied' sieves found in earlier prints, drawings or paintings or even model-books. This means that it is hard to conclude whether the sieves in the images are realistic depictions of sieves and are exemplary for the time they were made in. However, when comparing all the images in this category it becomes clear that overall the sieves show great similarities.

⁶ In this portrait, the sieve has a double meaning. On the one hand the sieve refers to Tuccia and her virginity, on the other hand the sieve carries the emblematic meaning of discerning between good and bad. See for more information on the symbolic meaning of sieves in relation to Elizabeth I: Louis Montrose, *The Subject of Elizabeth: Authority, Gender, and Representation* (Chicago: University of Chicago press, 2006), 123-125.

⁷ The symbolic function of the sieve in this context overlaps with the second meaning of the sieve as discussed in footnote 6: discerning between good and bad. In this context the bad characteristics (sins) of a person are revealed by sifting this person. See for more information on a similar print: "The prodigal sifted," The British Museum, accessed March 23, 2016, http://www.britishmuseum.org/research/collection_online/collection_object_details.aspx?objectId=3070361&partId=1&searchText=hogarth+progress&page=2.

⁸ However, this one is interesting, because a lot of times the sieves that can be seen in depictions of this are not round, but rectangular (more like a serving tray). Therefore, these images are less valuable for this research. See for the complete story of St. Benedict and the Broken Sieve: "Saint Benedict Abbot, founder of Western Monasticism -480-550 A.D.," accessed March 23, 2016, <http://www.ewtn.com/library/MARY/BENEDICT.htm>.



Fig. 3 St. Benedict and the broken sieve. The sieve is depicted in the lower right corner. Hieronymus Wierix, *St. Benedict of Nursia*, 1563-1619, 16,2x12,2cm, engraving on paper, Rijksmuseum.

Thus, when looking at these images, some conclusions can be made about the characteristics of the sieves. First of all, it appears that in every image the sieve has the same round shape and consists of more than just a sieve cloth. The sieve isn't a flat object, but the bottom of the sieve is attached to a raised cylindrical-shaped rim, which makes the sieve look like a drum. In some of the more detailed images we can distinguish another element: in the middle of the rim runs a line; some sort of braided or twisted string. The usual size of a sieve can't be readily deduced from these images, because this depends on the function of the sieve in each particular image. When for example a grown up man is being sifted the sieve is depicted bigger than when a sieve is shown as an attribute of Saint Benedict or

Tuccia. Another aspect that can be seen, is that there were (at least) two ways of making the sieve's bottom: one by weaving or braiding a material to create a net, the other by taking a sheet of a material and making little holes in it (which can be seen in the portrait of Elizabeth I. [Fig. 1]).⁹ This second way of making the sieve's bottom is not discussed in BnF Ms. Fr. 640. In French this type of sieve is often called *un crible*, whereas as sieve with a woven cloth is referred to as *un tamis*. The French M. Fougeroux d'Angerville discusses how these *cribles* were made in his eighteenth century book *Le criblier, suite du parcheminier*.¹⁰ He describes that the bottom of a *crible* can for example be made of parchment or other types of animal skin.¹¹



Fig. 4 A woman is sifting flour over an open chest. *Régime du Corps*, ca. 1440-1450, Rouen, France, Pierpont Morgan Library MS M.0165 fol 65r.

⁹ In the case of this image of Elizabeth I the materials in which the holes are drilled seems to be wood.

¹⁰ Fougeroux D'Angerville, *Le Criblier, Suite Du Parcheminier*, (Paris: Desaint, Saillant & Nyon, 1772).

¹¹ Fougeroux d'Angerville, *Le Criblier*, 1, 9.

2. The sieve as a tool

The second category of sources contains images that show all different sorts of trades and professions. Images of sieves can be found in paintings, prints and drawings that depict daily life



Fig. 5 Woman in a kitchen or farm setting with all sorts of utensils. A sieve is depicted in the lower left corner/middle. Anonymous, *Farm interior*, ca. 1640-1660, 59,6x83,8cm, oil on panel.

and feature scenes like a kitchen or bakery. Here, the sieves are either shown in use by for instance a cook or baker [Fig. 4: *Régime du Corps*], or they function as a piece of scenery [Fig. 5: *Woman in kitchen*]. Similar to this are images that are found in books that show different trades and professions, for example the *Nürnberger Hausbücher*.¹² The sieve maker's trade has not been included in these books, but

nevertheless sieves are depicted in images that show other professions [Fig. 6: *Nürnberger Hausbücher, miller*]. Related to this are images from for example the eighteenth century *Encyclopédie, ou dictionnaire raisonné des sciences, des arts et des métiers*, by Diderot and d'Alembert.¹³ Again, the craft of sieve makers has not been included in the encyclopedia, but other entries discuss sieves as the tools used in other professions. Sieves are mentioned more than once, and images of sieves can be found several times, for example in the entries about mineralogy, agriculture and *fayancerie* [Fig. 7 and 8: Diderot, *Encyclopédie*].¹⁴ In all of these cases, sieves are

¹² These books portray the people that were living in two houses of the Twelve Brothers foundation in Nuremberg from the fifteenth to the nineteenth century. Every page depicts one of the residents at work. All kinds of crafts and professions are illustrated.. See for more information and the entire collection of images: "Die Hausbücher der Nürnberger Zwölfbrüderstiftungen," accessed March 23, 2016, <http://www.nuernberger-hausbuecher.de/>.

¹³ *Encyclopédie, ou dictionnaire raisonné des sciences, des arts et des métiers, etc.*, eds. Denis Diderot and Jean le Rond d'Alembert. University of Chicago: ARTFL Encyclopédie Project (Spring 2013 Edition), Robert Morrissey (ed), accessed March 23, 2016, <http://encyclopedia.uchicago.edu/>.

¹⁴ "Encyclopédie, volume: Agriculture et Economie Rustique, Batteur en Grange," accessed March 23, 2016, <http://artflsrv02.uchicago.edu/cgi-bin/philologic/getobject.pl?c.17:13.encyclopedia0513> ;

depicted in their actual nature of tools used in various professions and do not have any symbolic meaning like is the case in the previous category.

When it comes to written text about sieves, recipes and descriptions on performing a certain profession can also be placed in this category. However, these are not very useful within this



Fig 6. A miller with a sieve depicted in the lower left corner. *Nürnberger Hausbücher*, 1656, 30,6x20,3cm, Tempera on paper, Amb. 317b.2° Folio 133 verso (Mendel II).

research, because they only name them as tools you should use and do not specify their appearance or construction in any way. These recipes and descriptions can nevertheless help when it comes to terminology and are useful to distinguish certain types of sieves and their specific functions from others.

The images in this category are useful when it comes to how and by whom the sieves were used and in what setting they could be expected. Yet, these images are not about the utensils specifically, so often the depiction of the sieves is not very detailed. The sieves featured in the encyclopedia, however, are more helpful in this research. The nature of this source and its drawings (the primary goal of the encyclopedia is to inform the reader and to give a factual description and drawing of the topics discussed) make it possible to get a detailed and true-to-life rendering

of what sieves looked like at that time. Therefore this is a useful and reliable source for information about the appearance of sieves.

These images confirm what was already determined using images from the first category. The engravings from the encyclopedia can add to this that in most cases multiple plies of wood were used to make up the rim of the sieve. The bottom half of the rim consists of a double layer of wood. It also becomes clear that the sieve cloth is not situated at the bottom of the sieve, but somewhere in the middle. The description that accompanies the *agriculture* engraving confirms that in addition to a woven cloth there is also a sieve bottom with holes pierced in it.¹⁵

"Encyclopédie, volume: Minéralogie, Fabrique des Poudres," accessed March 23, 2016, <http://artflsrv02.uchicago.edu/cgi-bin/philologic/getobject.pl?c.22:73.encyclopedie0513> ;

"Encyclopédie, volume: Fayancerie," accessed March 23, 2016, <http://artflsrv02.uchicago.edu/cgi-bin/philologic/getobject.pl?c.20:20.encyclopedie0513>.

¹⁵ Sieve nr. 15 in the engraving is described as: '*Crible à mains, instrument percé de petits trous par lesquels on fait passer en le remuant circulairement, le grain plus nettoyé qu'il n'a pû l'être par le van.*' "Encyclopédie, volume: Agriculture et Economie Rustique, Batteur en Grange," accessed March 23, 2016, <http://artflsrv02.uchicago.edu/cgi-bin/philologic/getobject.pl?c.17:13.encyclopedie0513>

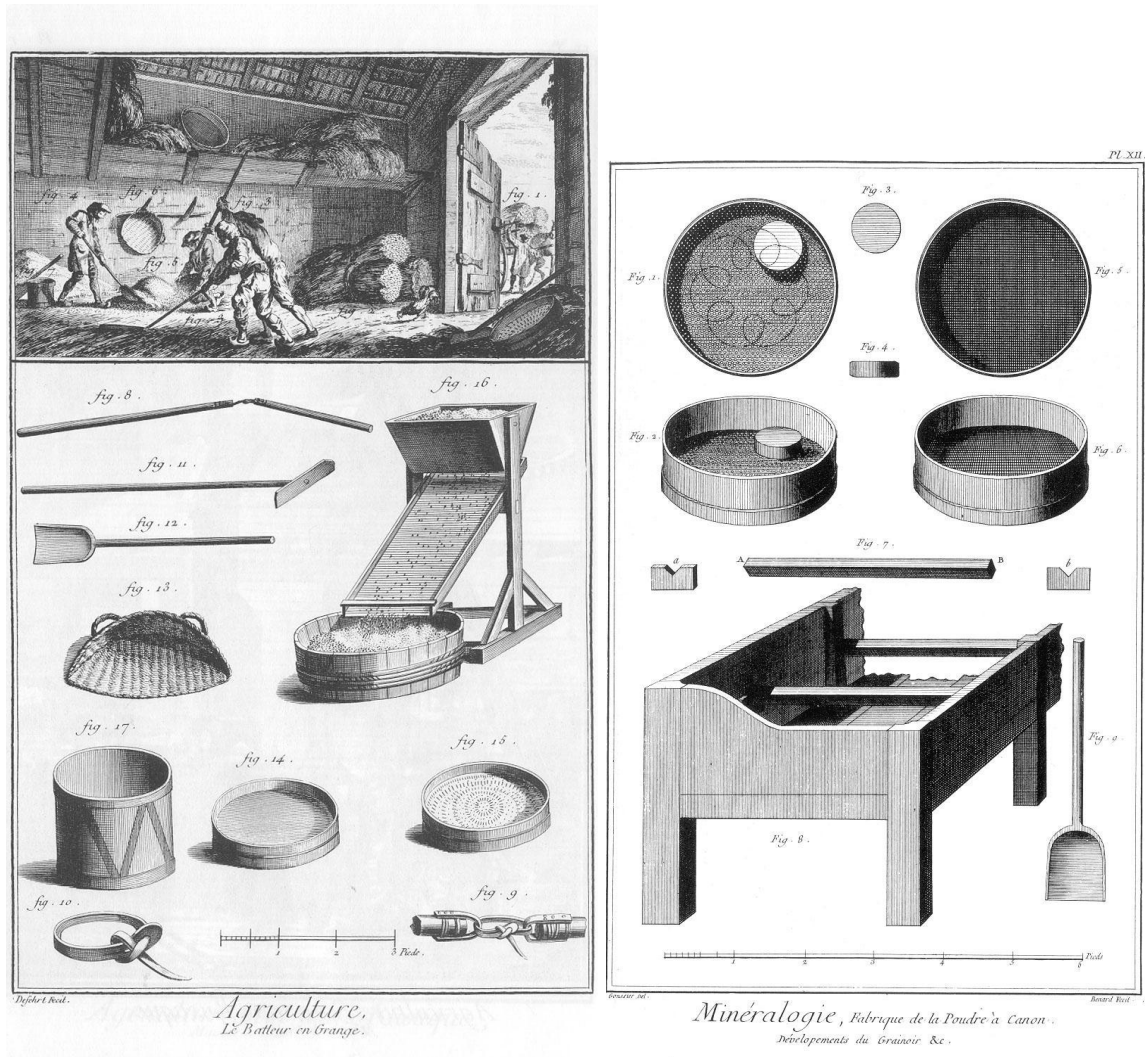


Fig. 7 and 8. Different types of sieves. Diderot, "Agriculture" and "Minéralogie," *Encyclopédie*, volume 6, 1768, ink on paper.

3. The sieve as product of the sieve maker

The last and also the most valuable sources are prints that depict the sieve maker's trade. This category is related to the previous one in the sense that it also features images from books of trades, however these images are specifically oriented to the sieve maker's trade. These images show the craftsmen in their shops, surrounded by all sorts of sieves and raw materials, while they are in the middle of making sieves. These images can provide a lot of information about the actual appearance of the sieves, the variety in shapes and sizes and especially about the production process. There are a few examples of such books that include the sieve maker's trade. The most well known one is the sixteenth century German book *Eygentliche Beschreibung aller Stände auff Erden, hoher und nidriger*,



Fig. 9. The sieve maker in his workshop. Jost Amman, *Der Sieber*, 1568, engraving on paper.

geistlicher und weltlicher, aller Künsten, Handwercken und Händeln.¹⁶ In this book from 1568, 133 woodcuts made by Jost Amman are accompanied by little poems written by Hans Sachs.¹⁷ The images show the craftsman in the middle of the production process, surrounded by his tools and materials and semi manufactured objects [Fig. 9: [Amman, Der Sieber](#)]. The emphasis in the prints and the text is on showing the production process from all angles; the text complements the prints by describing that part of the profession that is impossible to show in an illustration.¹⁸ Another, later, example of a similar book is that of the Dutch engravers Jan and Caspar Luycken; *Het Menselyk Bedryf*. This is a series of 100 engravings, made in 1694, showing the craftsmen in their shops [Fig. 10: [Jan and Caspar Luycken, De Seevemaker](#)].¹⁹ The etchings are again accompanied by a short poem, however in this series the poems are more like aphorisms with a moralistic tone.

A third important – yet even later – source in this category is the book *Neuer Orbis Pictus, oder Schauplatz der Natur und Kunst*.²⁰ This book is based on the *Orbis Pictus* written by Comenius in 1658.²¹ This was the first illustrated

¹⁶ Hans Sachs and Jost Amman, *Eygentliche Beschreibung aller Stände auff Erden, hoher und nidriger, geistlicher und weltlicher, aller Künsten, Handwercken und Händeln...* (Frankfurt am Mayn: Feyerabend, 1568).

¹⁷ Boone, Marc, *Le Verbe, L'image Et Les Représentations De La Société Urbaine Au Moyen-Age: Actes Du Colloque International Tenu À Marche-en-Famenne Du 24 Au 27 Octobre 2001* (Antwerpen: Garant, 2002), 119-120.

¹⁸ Boone, *Le Verbe*, 122.

¹⁹ Jan Luycken and Caspar Lucken, *Spiegel van het menselyk bedrijf* (Amsterdam, 1694), accessed March 23, 2016, <https://www.rijksmuseum.nl/en/search/objects?q=zeefmaker&p=1&ps=12&ii=0#/RP-P-1936-466,0> ; For information on different versions of this etching (there is also a German version of the same print, made by Christoph Weigel) see: "Jan and Casper Luyken, book illustrators," accessed March 23, 2016, http://www.geheugenvannederland.nl/?/en/collecties/jan_en_casper_luyken/casper_luyken.

²⁰ *Schauplatz Der Natur Und Der Künste in Vier Sprachen, Deutsch, Lateinisch, Französisch, Und Italienisch ... Spectacle De La Nature Et Des Arts En Quatre Langues, Savoir Allemand, Latin, Franqois Et Italien* (Wien: J. Kurzbock, 1782) ; J. E. Gailer. *Neuer Orbis Pictus Für Die Jugend, Oder Schauplatz Der Natur, Der Kunst Und Des Menschenlebens in 316 Lithographirten Abbildungen Mit Genauer Erklärung in Deutscher, Lateinischer und Französischer Sprache* (Stuttgart: F.C. Löffelund Und Sohn, 1832).

²¹ "The Project Gutenberg Ebook of the *Orbis Pictus*, by John Amos Comenius," accessed March 23, 2016, <http://www.gutenberg.org/files/28299/28299-h/28299-h.htm>.

encyclopedia-like book for children.²² There are many editions of the *Neuer Orbis Pictus*, some of which include an engraving about sieve makers. Two different engravings can be found, one in the edition of 1782 [Fig. 11: *Schauplatz der Natur*, 1782] and one in the edition of 1832 [Fig. 12: *Schauplatz der Natur*, 1832]. These images are accompanied by a longer text about the profession (in some editions in four different languages).

In addition to images that show the sieve maker's trade, there are also descriptions that discuss this topic, though dating from the nineteenth century. One of them is the French book *Nouveau manuel complet du tonnelier et du boisselier: suivi de l'art de faire des cribles, tamis, soufflets, formes et sabots*.²³ Another is the German book *Schauplatz der Kunste und Handwerke* from 1843.²⁴ These both discuss what the sieve maker's craft involves, but the German book gives a more detailed description of the production process of sieves; almost like a manual.

Closer inspection of the engravings of the sieve maker's workshop brings us further into the production process, but does not necessarily give us more clarity. In fig. 11 the different stages of making a sieve are displayed. On the left the weaving of a cloth on a weaving loom is shown. This indicates that a rectangular cloth is woven before it is attached to the cylindrical frame (instead of weaving in a circular shape in the frame).²⁵ This engraving also shows that it was common to make



Fig. 10. The sieve maker in his workshop. Jan and Caspar Luycken, *De Seevemaker*, 1694, 13,9x8cm, etching on paper, Rijksmuseum.

²² Ibidem; See: Anke Te Heesen. *The World in a Box: The Story of an Eighteenth-century Picture Encyclopedia* (Chicago: University of Chicago Press, 2002), 81.

²³ A. O. Paulin-Désormeaux, *Nouveau manuel complet du tonnelier et du boisselier : suivi de l'art de faire des cribles, tamis, soufflets, formes et sabots* (Paris: Roret, 1838), accessed March 23, 2016, <http://gallica.bnf.fr/ark:/12148/bpt6k6274638c/f262.item.r=tamis>.

²⁴ Carl Schmied. *Die Korb- U. Strohlechkunst Und Die Siebmacherei, Oder Vollständige Anleitung, Alle Korbgattungen, ..., Zu Machen ...* Vol. 77. *Neuer Schauplatz Der Künste Und Handwerke* (Weimar: Voigt, 1843), accessed March 23, 2016, <http://digital.slub-dresden.de/id338530363>.

²⁵ The accompanying text doesn't give an explanation. This text only discusses for what purposes what material is used to weave the bottom of the sieve (flexible wood, iron, brass or horsehair). See: *Schauplatz* 1782, 34.

different sizes of sieves. The same can be concluded from fig. 12, however this craftsman is, in contrast to the previous picture, clearly weaving inside the sieve. This shows that there were probably more ways to construct a sieve.²⁶ These engravings can also teach us something about the unprocessed materials and tools that were used. However, these are not very clearly distinguishable and identifiable. The picture from 'Eygentliche Beschreibung aller Stände auff Erden' [fig. 9] shows more of the construction. It

demonstrates that the wooden rims were secured with some sort of pins (dowels?) and it also shows the braided cord in the middle of the rim clearer. Fig. 10 indicates that the material that the

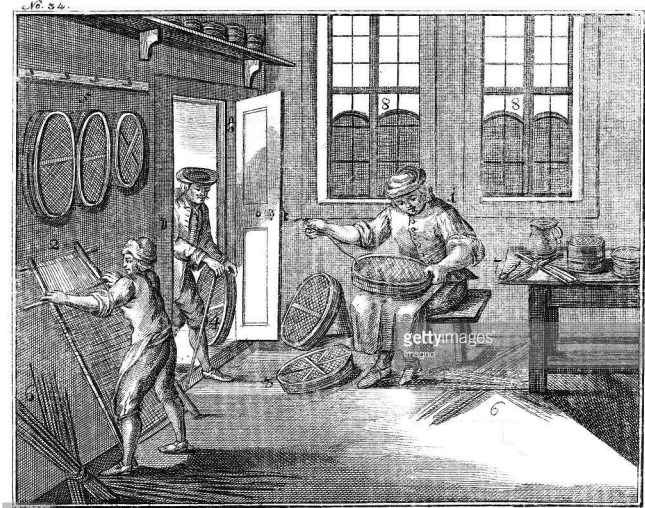


Fig. 11. Sieve makers in their workshop. *Schauplatz der Natur*, 1782, engraving on paper.

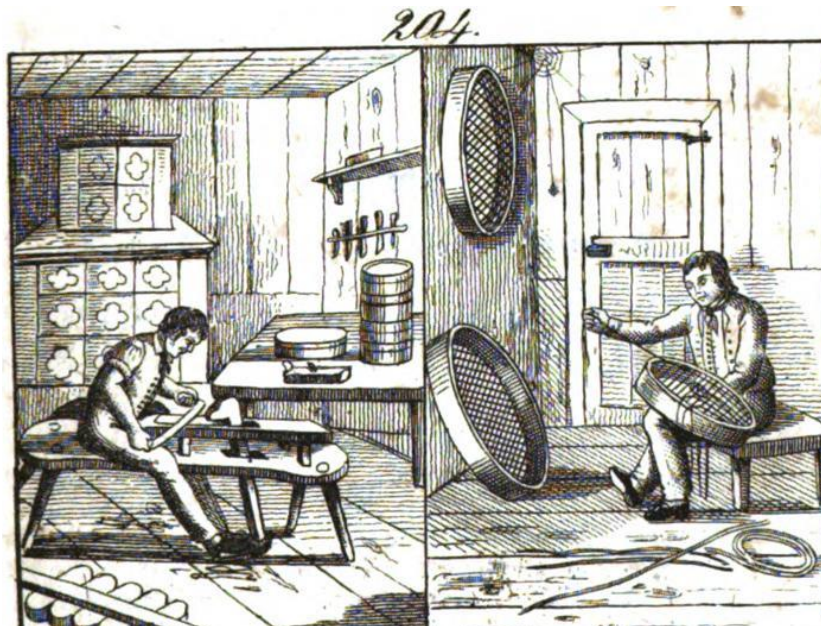


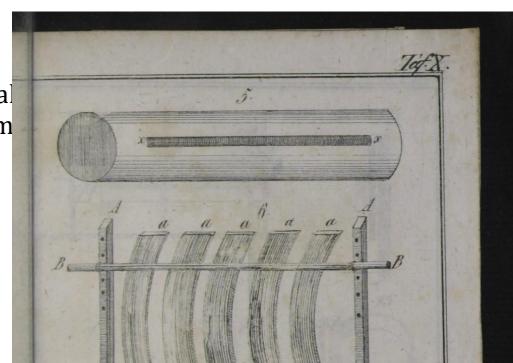
Fig. 12. Sieve makers in their workshop. *Schauplatz der Natur*, 1832, engraving on paper.

man with the hat in the middle holds in his hands, is twisted around the outside of the rim by the man next to him. In fig. 11 the man in the back is doing a similar job: finishing off the edges of the woven cloth by twisting something like reed or bast around it.

These four engravings provide some additional information, although they are hard to read. They do not make clear what parts of the

production process the sieve maker is exactly responsible for. Based on the text accompanying fig. 12, the sieve maker does process the wood that is used for the rim himself, but he doesn't weave the

²⁶ Probably the way of construction depended also on the material plant material to weave (instead of for example silk), using a loom pieces or threads instead of one continuous yarn.



horsehair fabric himself.²⁷ Conversely, fig. 11 does show someone weaving (though it is not clear with what materials) and in the German book *Schauplatz der Künste und Handwerke* is written that the rims are often not made by the sieve makers, but by woodworkers.²⁸ It also shows a picture of how the strips of wood are delivered in bundles at the sieve maker's shop [[Fig. 13: Strips of wood and tools](#)]. What the exact job of the sieve maker involved, seems dependent on the time and place.

One element that doesn't become entirely clear from the images is the finishing off of the woven cloth on the outside of the rims. As said before, fig. 10 and 11 show this act, however the actual practical execution remains vague when examining these sources. *Schauplatz der Künste und Handwerke* does give some clarity on the topic of securing the cloth to the frame.²⁹ The cloth is wetted and cut into the right size. The cloth is placed over one strip of wood (the bottom rim), then another strip (a narrower upper rim) is slid over it to tighten the cloth. The cloth that is sticking out is then made into some sort of edge or hem and wrapped with bast. The wooden strips are then secured using dowels.³⁰

To see this construction up close, an antique twentieth century sieve was bought for the reconstruction.³¹ After disassembling the sieve the construction became clear immediately and turned out to be the same as is described in *Schauplatz der Künste und Handwerke* [[Fig. 14](#) and [15: Dismantled antique sieve](#)].³² The woven horsehair cloth is divided in bundles that are rolled around a thicker rope. This is then covered with some sort of reed.

Fig 13. Strips of already processed wood and woodworker's tools. *Schauplatz der Künste und Handwerke*, 1843, print on paper.



er often made little wooden boxes as well. This can be seen -359.

ood is used. It is cut and split longitudinally with special green when it is processed. Then the strips of wood are

heated and bended in a hoop-shape with a roller. Schmied, *Die Korb- U. Strohflechtkunst*, 188-190.

²⁹ Schmied, *Die Korb- U. Strohflechtkunst*, 196.

³⁰ Ibidem.

³¹ The model of the sieve is similar to all the sieves depicted in the images discussed. Judging from all of the images and descriptions and the continuity displayed there, it can be concluded that there hasn't been much change over the years in the appearance and construction of sieves. This is why for the reconstruction of the recipe in BnF Ms. Fr. 640 an antique sieve was bought to take a closer look at the construction.

³² Schmied, *Die Korb- U. Strohflechtkunst*, 196.



Fig. 14 and 15. Dismantled antique sieve. The top rim has been removed. Right: close up of the horsehair cloth.

Conclusion

After examining all sorts of images it becomes clear that the depicted sieves have the same overall shape and appearance, regardless of the century or country the images are made in. All types of sources are useful when one wants to know what sieves have looked like over the centuries. When, however, one really wants to examine the construction of a sieve, the conclusion has to be drawn that a lot of images lack detail and trueness-to-life. Only the engravings that show the sieve maker in its workshop can help us out here. They show the unprocessed materials, the various components that make up the sieve and the several stages that are part of the production process of sieves. When it comes to descriptions, again only the last category in this annotation is really useful.

This makes clear that it is hard to tell from pictures how a specific part of a historic tool was made when one wants to reconstruct it. In the case of the sieves, the possibility to dismantle a real object, in the form of an antique sieve, to examine construction turned out very valuable.

To make the research into sieves more complete, further research could be done into the so-called *cribles*; the sieves that have a bottom with holes pierced in it. It would be interesting to examine why sometimes it was chosen to make the bottom of a sieve in that way, instead of weaving a cloth and if the two types of sieves were used for different purposes.

References

Boone, Marc. *Le Verbe, L'image Et Les Représentations De La Société Urbaine Au Moyen-Age: Actes Du Colloque International Tenu À Marche-en-Famenne Du 24 Au 27 Octobre 2001*. Antwerpen: Garant, 2002.

Encyclopédie, ou dictionnaire raisonné des sciences, des arts et des métiers, etc., eds. Denis Diderot and Jean le Rond d'Alembert. University of Chicago: ARTFL Encyclopédie Project (Spring 2013 Edition), Robert Morrissey (ed). Accessed March 23, 2016, <http://encyclopedia.uchicago.edu/>.

Fougeroux D'Angerville. *Le Crible, Suite Du Parcheminier*. Paris: Desaint, Saillant & Nyon, 1772.

Gailer, J. E. *Neuer Orbis Pictus Für Die Jugend, Oder Schauplatz Der Natur, Der Kunst Und Des Menschenlebens in 316 Lithographirten Abbildungen Mit Genauer Erklärung in Deutscher, Lateinischer und Französischer Sprache*. Stuttgart: F.C. Löflund Und Sohn, 1832.

Heesen, Anke te, *The World in a Box: The Story of an Eighteenth-century Picture Encyclopedia*. Chicago: University of Chicago Press, 2002.

Luycken, Jan and Caspar Lucken. *Spiegel van het menselyk bedrijf*. Amsterdam, 1694.

Montrose, Louis. *The Subject of Elizabeth: Authority, Gender, and Representation*. Chicago: University of Chicago press, 2006.

Paulin-Désormeaux, A.O. *Nouveau manuel complet du tonnelier et du boisselier : suivi de l'art de faire des cribles, tamis, soufflets, formes et sabots*. Paris: Roret, 1838. Accessed March 23, 2016, <http://gallica.bnf.fr/ark:/12148/bpt6k6274638c/f262.item.r=tamis>.

Sachs, Hans and Jost Amman. *Eygentliche Beschreibung aller Stände auff Erden, hoher und nidriger, geistlicher und weltlicher, aller Künsten, Handwercken und Händeln...* Frankfurt am Mayn: Feyerabend, 1568.

Schauplatz Der Natur Und Der Künste in Vier Sprachen, Deutsch, Lateinisch, Französisch, Und Italienisch ... Spectacle De La Nature Et Des Arts En Quatre Langues, Savoir Allemand, Latin, Francais Et Italien. Wien: J. Kurzboeck, 1782.

Schmied, Carl. *Die Korb- U. Strohflechtkunst Und Die Siebmacherei, Oder Vollständige Anleitung, Alle Korb-gattungen, ..., Zu Machen ...* Vol. 77. *Neuer Schauplatz Der Künste Und Handwerke*. Weimar: Voigt, 1843. Accessed March 23, 2016, <http://digital.slub-dresden.de/id338530363>.

List of images

Fig 1. Quentin Metsys the Younger, *The Siena Sieve Portrait*, 1583, oil on panel. Pinacoteca Nazionale de Siena.

Source:

https://commons.wikimedia.org/wiki/File:Metsys_Elizabeth_I_The_Sieve_Portrait_c1583.jpg.

Accessed March 23, 2016.

Fig 2. The groom is sifted in a giant sieve. Adriaen van de Venne, *Allegory of Marriage*, 1630-1632, 54x76cm, pen on paper.

Source: <https://rkd.nl/nl/explore/images/68051>. Accessed March 23, 2016.

Fig. 3. St. Benedict and the broken sieve. The sieve is depicted in the lower right corner. Hieronymus Wierix, *St. Benedict of Nursia*, 1563-1619, 16,2x12,2cm, engraving on paper, Rijksmuseum.

Source: <https://www.rijksmuseum.nl/nl/collectie/RP-P-1904-120>. Accessed March 23, 2016.

Fig. 4. A woman is sifting flour over an open chest. *Régime du Corps*, ca. 1440-1450, Rouen, France, Pierpont Morgan Library MS M.0165 fol 65r.

Source: <http://ica.themorgan.org/manuscript/page/35/77081>. Accessed March 23, 2016.

Fig. 5 Woman in a kitchen or farm setting with all sorts of utensils. A sieve is depicted in the lower left corner/middle. Anonymous, *Farm interior*, ca. 1640-1660, 59,6x83,8cm, oil on panel.

Source:

https://rkd.nl/nl/explore/images/record?filters%5BRKD_algemene_trefwoorden%5D=zeef&query=&start=8. Accessed March 23, 2016.

Fig 6. *Nürnberg Hausbücher*, 1656, 30,6x20,3cm, Tempera on paper, Amb. 317b.2° Folio 133 verso (Mendel II).

Source: <http://www.nuernberger-hausbuecher.de/75-Amb-2-317b-133-v/data>. Accessed March 23, 2016.

Fig. 7. Diderot, "Agriculture" and "Minéralogie," *Encyclopédie*, volume 6, 1768, ink on paper.

Source: <http://artflsrv02.uchicago.edu/cgi-bin/philologic/getobject.pl?c.17:13.encyclopedia0513>.

Accessed March 23, 2016.

Fig. 8. Diderot, "Agriculture" and "Minéralogie," *Encyclopédie*, volume 6, 1768, ink on paper.

Source: <http://artflsrv02.uchicago.edu/cgi-bin/philologic/getobject.pl?c.22:73.encyclopedia0513>.

Accessed March 23, 2016.

Fig. 9. The sieve maker in his workshop. Jost Amman, *Der Sieber*, 1568, engraving on paper.

Source: Hans Sachs and Jost Amman, *Eygentliche Beschreibung aller Stände auff Erden, hoher und nidriger, geistlicher und weltlicher, aller Künsten, Handwercken und Händeln...* (Frankfurt am Mayn: Feyerabend, 1568). http://www.digitalis.uni-koeln.de/Amman/amman_index.html. Accessed March 23, 2016.

Fig. 10. The sieve maker in his workshop. Jan and Caspar Luycken, *De Seevemaker*, 1694, 13,9x8cm, etching on paper, Rijksmuseum.

Source:

<https://www.rijksmuseum.nl/en/search/objects?q=zeefmaker&p=1&ps=12&ii=0#/RP-P-1936-466,0>. Accessed March 23, 2016.

Fig. 11. Sieve makers in their workshop. *Schauplatz der Natur*, 1782, engraving on paper.

Source: *Schauplatz Der Natur Und Der Künste in Vier Sprachen, Deutsch, Lateinisch, Französisch, Und Italienisch ... Spectacle De La Nature Et Des Arts En Quatre Langues, Savoir Allemand, Latin, Francais Et Italien* (Wien: J. Kurzböck, 1782),

<https://books.google.nl/books?id=oAxZAAAAcAAJ&lpg=PT7&dq=schauplatz%20der%20natur%20und%20k%C3%BCnste%201782&pg=PT7#v=onepage&q=schauplatz%20der%20natur%20und%20k%C3%BCnste%201782&f=false>. Accessed March 23, 2016

Fig. 12. Sieve makers in their workshop. *Schauplatz der Natur*, 1832, engraving on paper.

Source: J. E. Gailer. *Neuer Orbis Pictus Für Die Jugend, Oder Schauplatz Der Natur, Der Kunst Und Des Menschenlebens in 316 Lithographirten Abbildungen Mit Genauer Erklärung in Deutscher, Lateinischer und Französischer Sprache* (Stuttgart: F.C. Löflund Und Sohn, 1832),

https://books.google.co.uk/books/about/Neuer_Orbis_Pictus_f%C3%BCr_die_Jugend_oder.html?id=MAITAAAAIAAJ. Accessed March 23, 2016

Fig 13. Strips of already processed wood and woodworker's tools. *Schauplatz der Künste und Handwerke*, 1843, print on paper.

Source: Carl Schmied. *Die Korb- U. Strohflechtkunst Und Die Siebmacherei, Oder Vollständige Anleitung, Alle Korbgattungen, ..., Zu Machen ...* Vol. 77. *Neuer Schauplatz Der Künste Und Handwerke* (Weimar: Voigt, 1843), accessed March 23, 2016, <http://digital.slub-dresden.de/id338530363>.

Fig. 14. Dismantled antique sieve. Photo: Author.

Fig. 15. Close up of Dismantled antique sieve. Photo: Author.