The collective gathering of text pages is called a “text” or a “text block.” Text blocks are held together in various ways, such as with sewing thread, glue, or staples.

**Stapled books:**
You will see books from the 19th and 20th centuries which look to all appearances like a signature-sewn volume that upon closer inspection can be seen to be held together not by thread but by staples passing through the signatures onto a woven spine lining. This style of sewing uses a machine to apply the staples. If the book does not need to be resewn, it is crucial not to disrupt the spine lining through which the staples pass; harming this lining could lead to the signatures falling out of the book.

Another style of stapled books has the staples passing straight down through the stack of pages along the spine edge of the text. This style is called side stapled or saddle stapled, and the pages themselves are usually single sheets, though sometimes you will see stapled books that were printed in signatures.
**Sewing through-the-fold or “Signature Sewing”:**

In the pre-industrialized era, text sewing was largely done through the folds of signatures with that sewing structure being supported by cords or tapes held steady during the sewing process by a sewing frame. Linen or cotton thread has been used for sewing, with linen being the strongest and most lasting.

**The folding of signatures:**

Text pages in signature-style are made from large printed sheets laid out by the printer so as to fold into a signature where the pages come in the right order and correct side up.
<table>
<thead>
<tr>
<th>Name</th>
<th>Sheet (inches)</th>
<th>Folio (Fol)</th>
<th>Quarto (4to)</th>
<th>Octavo (8vo)</th>
<th>Sextodeimo (16mo)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Imperial</td>
<td>30 x 22</td>
<td>22 x 15</td>
<td>15 x 11</td>
<td>11 x 7 ½</td>
<td>7 ½ x 5 ½</td>
</tr>
<tr>
<td>Double-Crown</td>
<td>30 x 20</td>
<td>20 x 15</td>
<td>15 x 10</td>
<td>10 x 7 ½</td>
<td>7 ½ x 5</td>
</tr>
<tr>
<td>Royal</td>
<td>25 x 20</td>
<td>20 x 12 ½</td>
<td>12 ½ x 10</td>
<td>10 x 6 ½</td>
<td>6 ½ x 5</td>
</tr>
<tr>
<td>Medium</td>
<td>24 x 19</td>
<td>19 x 12</td>
<td>12 x 9 ½</td>
<td>9 ½ x 6</td>
<td>6 x 4 ¼</td>
</tr>
<tr>
<td>Demy</td>
<td>22 ½ x 17 ½</td>
<td>17 ½ x 11 ¼</td>
<td>11 ¼ x 8 ¾</td>
<td>8 ¾ x 5 ¾</td>
<td>5 ¾ x 4 ¼</td>
</tr>
<tr>
<td>Crown</td>
<td>20 x 15</td>
<td>15 x 10</td>
<td>10 x 7 ½</td>
<td>7 ½ x 5</td>
<td>5 x 3 ¼</td>
</tr>
<tr>
<td>Foolscap</td>
<td>17 x 13 ½</td>
<td>13 ½ x 8 ¾</td>
<td>8 ½ x 6 ¾</td>
<td>6 ¾ x 4 ¼</td>
<td>4 ¼ x 3 ¾</td>
</tr>
</tbody>
</table>

Folio: formed by folding the standard sheet once so that two leaves are produced.

Quarto: a second fold across the folio produces four leaves.

Octavo: a quarto folded again gives eight leaves.

Sexto-decimo: an octavo folded gives sixteen leaves.

The terms folio, quarto, octavo, sexto-decimo refer to the number of times the sheet has been folded, not to the size of folded leaf.

The size of the original sheet is placed first when size must be indicated: Crown Quarto (Cr. 4to) measures 10" x 7 ½" while a Royal Quarto (Roy. 4to) is 12 ½" x 10".

Another illustration of folding
Uncut pages:

Due to the folding involved, there are inevitably some pages that are not open on the head or fore edge until the book is trimmed prior to being bound. This is true unless the book is a folio or an elephant folio, where the page is only folded once after printing. Trimming of texts (which usually results in opening all the unopened pages by shearing off the folds) was done originally with the plough and later with the guillotine (the guillotine was introduced as a bookbinding tool in the 1840s). For dealers and collectors, those pages that were not cut open at the time the book was originally bound (due to not enough being trimmed off the page edges) can be an asset for the book. Great consideration must be given prior to opening pages with a paper knife (a dullish knife that separates the paper rather than cuts it). It is worth noting that some books are purposely designed to contain uncut pages so as to enhance their collectible nature.

If you see a section of a signature-sewn book that is protruding forward at the fore edge, this section is called a "start." One or more starts may indicate a problem with the stability of the sewing, so it is a good idea to investigate further to see if the sewing is broken. If the sewing is broken, the book needs some manner of resewing. If the thread is rotted, it's advisable to resew the book completely. Sometimes a sewing thread is broken not because the original thread is rotted but because the book met with an accident (such as being dropped). In the latter situation it is often possible to repair the break in the sewing without resewing the whole text. Starts can also be present when the sewing is not broken or otherwise significantly damaged. In such a case, new spine linings can sometimes correct the problem and help the signature sit back in position.
Perfect binding:
Perfect binding is a method by which single sheets of text can be turned into a text. The pages are attached to one another by a layer of adhesive applied to the spine edge of the text block. The earliest example of this kind of page attachment is seen in the 1830s where the adhesive used was gutta percha (a resin). In the 1870s rubber began to be used in the same way, but this was not very effective and its use was soon discontinued. Plastics developed during and after World War II continue to be used to hold single sheets together. In general, this is not a very lasting way to create a text, although the introduction of the “double fan adhesive” method of gluing was a significant improvement in perfect binding. In this technique, glue applied by a machine extends down between the pages as much as 3/16” and the pages are glued to each other as well as being glued along the spine edge. A majority of the books made today have their pages held in by some form of perfect binding.

Stab sewing:
In this method, the stitching thread stabs down through the text. A variety of sewing patterns can be used, with two typical stitches being the blanket stitch and the saddle stitch. Stab sewing is often seen with a text made of single sheets. But just as with the side stapling method described earlier, you will occasionally see pages folded up into signatures that are sewn by the stab sewing method. This situation is mostly seen in some early publisher’s bindings where the publisher left the real sewing job to the binders who would later resew the text in signatures and then rebind the book for the purchaser.

A Bit of Papermaking History

Baghdad was a major paper making center by 800 CE while Western Europe didn’t start making paper until the 1200s CE. Mechanized paper making began in the late 1790s in France with the development of the first paper-making machine. Paper-making machinery was in place in the United States by the early 1820s. In 1860 the majority of all U.S. paper was machine made.