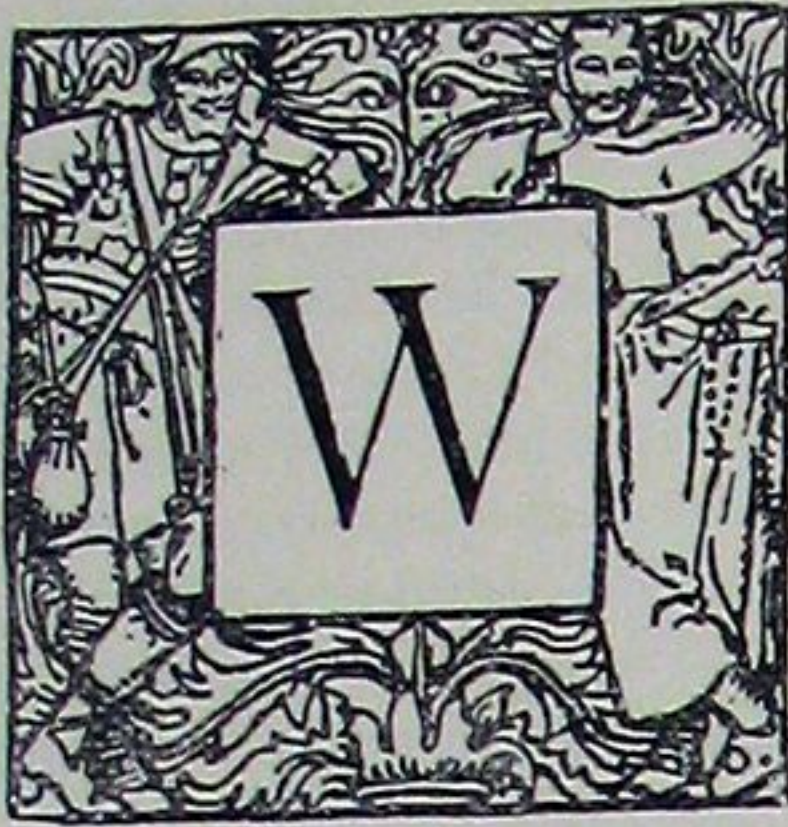


## Thread and Wire Stitching.



WHETHER book sewing is accomplished by hand or machine it imposes upon practical craftsmen the nicest judgment. No other part of the technique of binding probably is so necessary to the outward aspect and the utility of the whole work as proper stitching. It is important to here emphasise that word *proper*, because while nothing should be slighted in the details of bookmaking, most of all must there be no want of discrimination or exactness when the sheets of a volume are collated in sequent forms after folding, and are then made ready for the later manual or mechanical processes.

However the sewing is done it should invariably be well done, even for what is commonly spoken of as a cheap job. In these days of mountains of presswork, an ordinary railway excursion pamphlet, a book sale or art exhibition catalogue, the usual yearly reports of corporations, beneficial societies, social coteries and other associations, with paper covered literature of every kind of text and widely differing complexion, are better printed than were the most valued philosophies, scientific treatises, historical records and belles-lettres of any former age.

They are, as a matter of progress and inventiveness, more rapidly sewed, but not as a rule so firmly bound as the costlier and scarcer books which were meant to withstand the wear and tear of those cultured, constant users who, old fashioned in their thoughtful intelligence, most implicitly believed that books were meant to be read and re-read, that knowledge was actually power, that wise reading made a full man, and that any volume regarded by men equally intelligent with themselves as worth printing was certainly worth putting into a durable and convenient shape.

Judgment is required ("great judgment," enunciates an employing binder of contemporary reputation) to keep the swelling of a book down to that medium which is essential to form a good backing groove and no more. To do this it is from time to time necessary that the sheets shall be lightly tapped with the wooden or bone folding stick. To avoid drawing the kettle stitch too close and too tightly at fastening, care must be exercised, or else the top and bottom of the collated book will be discernibly thinner than its middle portion at the shelf back.

"Two sheets on" is a common procedure when the sections of the book which is being sewed are thin or in half-sheets. Especially convenient as well as practicable is this method if the volume itself is extra thick. After the needle is passed by hand from the kettle stitch to the first band of the first sheet and then out, another sheet is placed on top of the first and the needle is inserted at the first band and brought out at the second band. Again the needle is run through

the first sheet and in at the second band, then out at the third band.

In that way the two sections are treated as one. Of course only half as much thread will be used in the back. With books which have their top margins trimmed, it is necessary to open each sheet cautiously up to the back prior to putting it on the press. The centre may not otherwise be caught. Two or more sheets will therefore be found detached after the book is bound.

Overcasting for strength is also necessary with the first and last sections of every volume. Single leaf books must be overcast, and each section thereof treated as the section of an ordinary volume, the only variation being that a stout paper lining should be put on the back of the book before covering up, so that it cannot bulge or rise.

Subsequent to the sewing of the book it is released from the press or sheet clamps by merely slackening the screws which tighten the beam. This easily detaches the sewing cord from the keys and lay cords. It may be left at its full length until the end papers are about to be put on. Then it must be cut down to about three inches.

Wire-sewing machines for book and pamphlet work, although yet regarded as expensive innovations, have recently been so modified, and such a variety of them has been presented, that these automatic stitchers can now be purchased at less than £10 for a small size, while the more complex machines cost as high as eighteen or twenty times that amount.

There is a popular medium machine, unadaptable for library bindings of standard works or the finer editions of new publications, but it is excellent for a stationer's usual run of sheet threading. It is said that it will work a collation of  $1\frac{1}{4}$  inches thickness, stabbing very close to the folded edges of folded sheets. Having this advantage, it is particularly serviceable for binding thick, narrow-margined "time table" work or similar collations, where there is no space to spare at the back of the book.

This machine operates from the reel with wire graded for eight numbers from 25 down to 18. It is equally serviceable for stitching through the fold on saddle back work. So strongly is it made that major thicknesses are firmly clenched. The adjustment to vary thicknesses is quite simple, and the entire routine labour with it is so easy that dumb indeed must be the boy or girl who cannot be entrusted with it after a few days' practical instruction. Four thousand stitches an hour can reasonably be expected from it. Even a greater number can be made under favourable conditions as to paper and wire. A more intricate automaton by the same patentee and manufacturer is wire fed from spools by small steel rollers. At each revolution these rollers supply the little U shaped staples with which all handlers of wire tightened books are more or less acquainted. Each turn of the machine makes as many of the staples as each sheet of the collated book requires in sewing.

These U bent wirelets are forced through the sections from the inside of the folds. Then as the tapes stretch and are held by clasps directly opposite to each staple bender and inserter, the legs of the U's



