

Imposition

Imposition is the collecting together of all the elements to be printed at the same time on a sheet, positioning them, and locking them together into the metal frame (chase) ready to put into the press for printing.

The process requires an accurately flat surface, strong enough to resist distorting under the weight of the lead type in use—which can be 50kg or more for a large job. Originally, imposing was done on a large flat slab of stone, but latterly a machined piece of cast iron was used. The compositor in charge (usually the most senior one) was known as the *stone hand*.

Artistically, the stone hand is trying to ensure that the margins and spaces between the various elements in the design (the *layout*) of the finished print are both practical and pleasing: they affect both legibility and the visual balance of the design.

Technically, he is trying to lock all the parts together properly so that the assemblage (the *forme*) can be lifted, moved, and worked in the press, without any part of it coming loose or falling out. He is also trying to position everything so that no parts will be hit by parts of the press (eg. metal fingers that hold the paper in place by the edges).

And finally, he is trying to make the printing surface of the forme absolutely level, so that it will print evenly in the press.

Furniture

Furniture

Furniture is the spacing material put round the various columns of type, borders and pictures that are being printed. If this sheet was being printed letterpress, the brown strips would be the pieces of furniture. They could be wood, metal (lead or aluminium alloy), or plastic (special resin plastics resistant to head & chemicals were developed). They were made in sizes to match the type, multiples of pica ems in widths and lengths.

The placing is important: in order to hold everything in place properly, the columns are compressed by expanding the quoins, and the furniture must be placed to allow the pressure to be applied evenly and to all areas. In the layout shown here, the three quoins at the top of the columns would be tightened to apply pressure down the columns, and then the two at the side would be adjusted to apply pressure across the page. The furniture is arranged with this in mind: short pieces over the columns will slide down as the column is compressed. Note, though, that the pressure either way should not be too great or it will prevent the other direction's force be properly applied: the top quoins would be tightened until firm, the side ones then likewise, and then both lots tightened slightly more.

In this process, any item that does not fit properly will cause a problem: a line of type too short will not receive pressure sideways, and be loose, one too long will jam the furniture too far out, and leave adjacent lines too loose. Likewise, a single letter of the wrong size, or a piece of dirt somewhere, will cause uneven locking.

Quoins

Quoins (pronounced 'coins') are the wedges that apply the pressure to the forme. Originally simple pairs of wooden wedges were used, placed facing in opposite directions, and hammered into place with a forked metal rod (a *shooting stick*) and a mallet. The same word is used for wedges in masonry and naval gunnery (with the old cannons aimed by pushing a quoin/wedge under the end of the gun).



In the nineteenth century, various metal versions were invented, the commonest being the Hempel, shown above, which copied the wood in metal, but had teeth along the top of the angled edges, allowing a key to be put in, moving & tightening the wedges by turning the key. The Wickersham version shown round this poster lasted into the twentieth century and used a two-faced wedge pointing upwards between two larger pieces. A bolt from above was threaded into the wedge, and turning the bolt pulled the wedge up, forcing the side pieces apart. The bolt had a square hole to fit the T-shaped key used.

Quoin

Chase