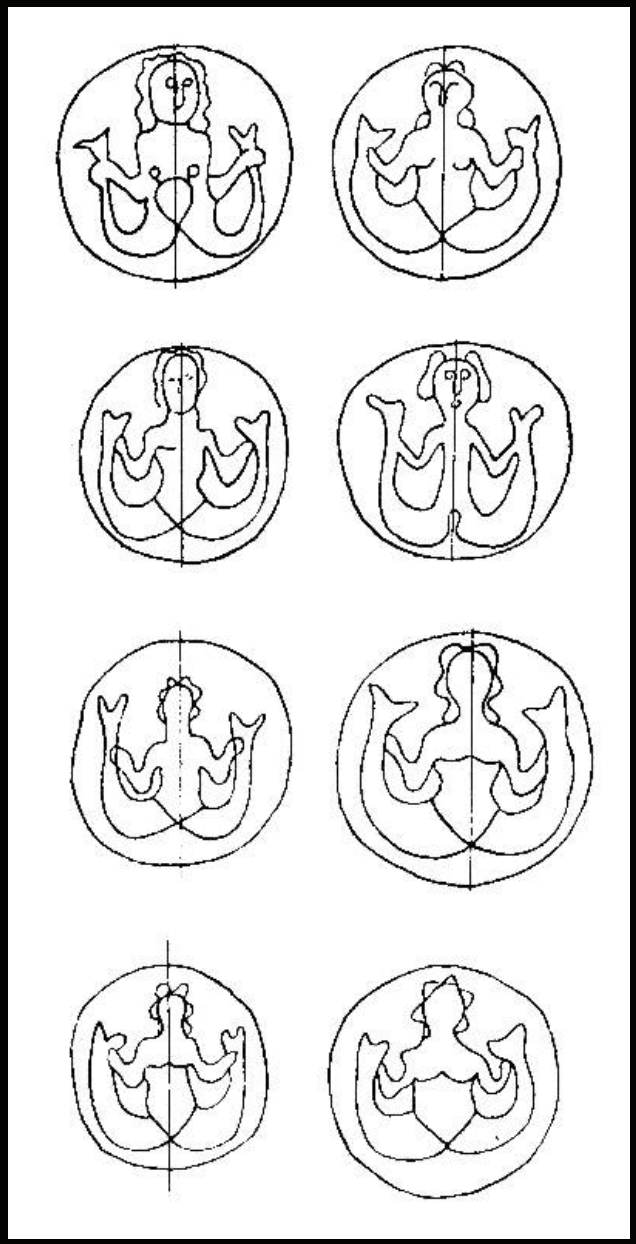
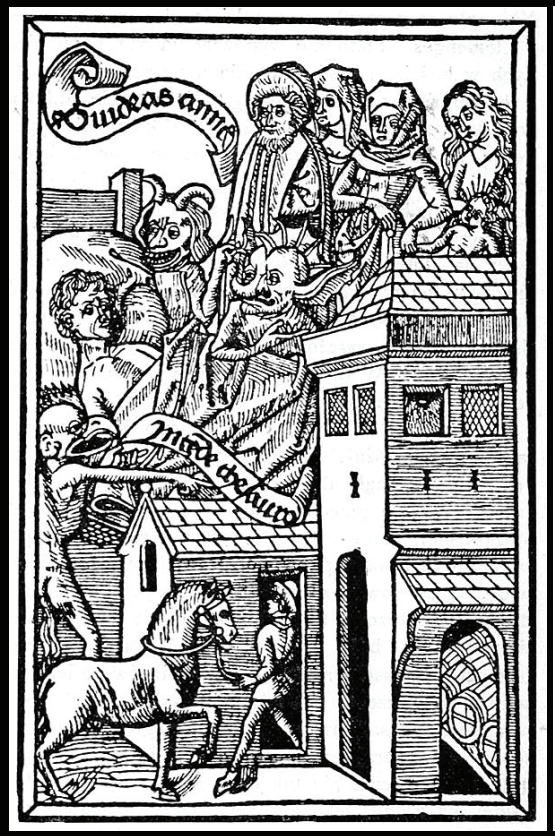
History of Graphic Design
Lecture Two
Professor Eckler

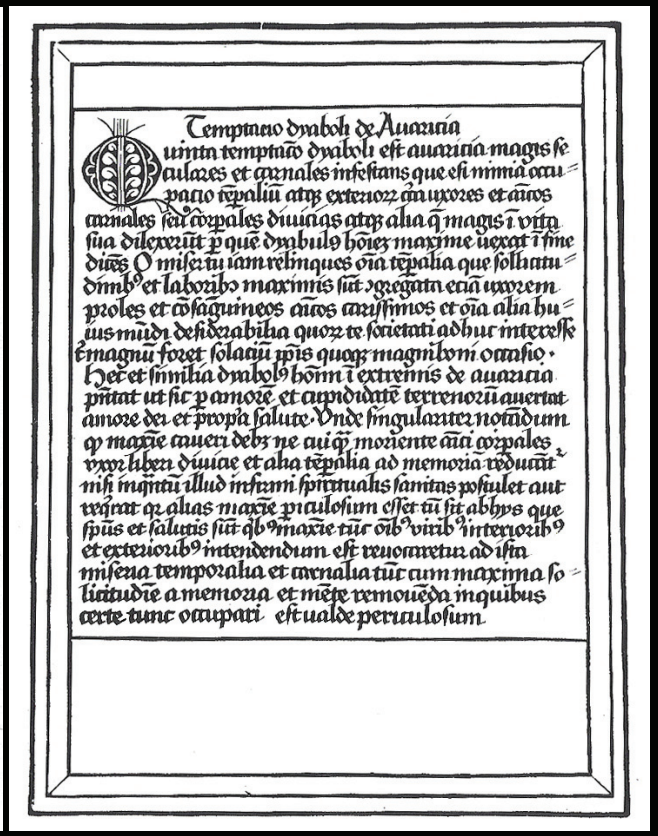
French watermark designs, fifteenth century. These mermaid designs were produced by bent wire attached to the mold used in making paper.



Jack of Diamonds, woodblock playing card, c. 1400. The flat, stylized design conventions of playing cards have changed little in over five hundred years.

Pages from the *Ars Moriendi*. A montage juxtaposes the deathbed scene with the subject's estate. One demon urges, "Provide for your friends," while the other advises, "Attend to your treasures."

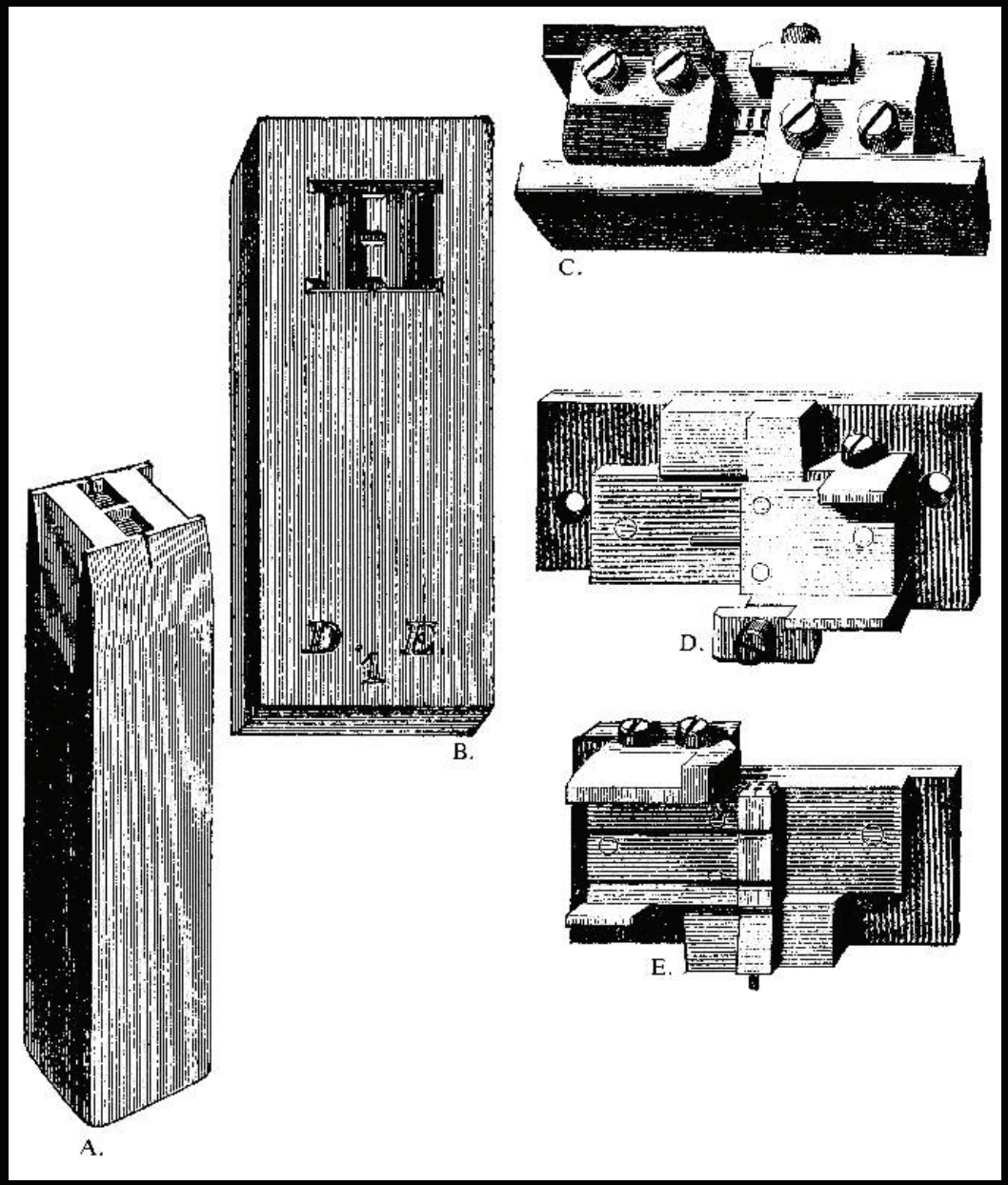




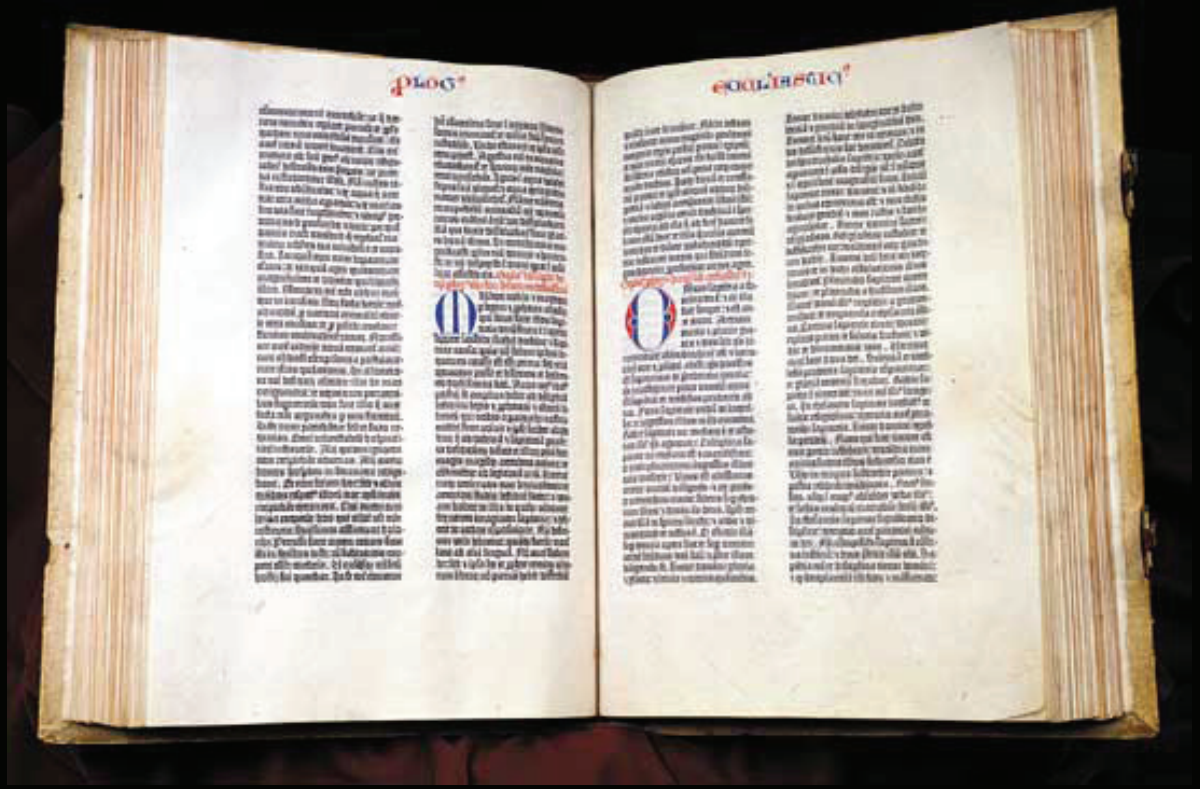
Temptacio dyaboli de Auaricia

Quinta temptacio dyaboli est auaricia magis se
culares et carnales infestans que est nimia occu
pacio tẽpaliũ atq; exteriorũ cũ uxores et aĩcos
carnales seu corpales diuicias atq; alia q̃ magis ĩ vita
sua dilexerũt p quẽ dyabulꝰ hoĩez maxime uexat ĩ fine
dicẽs O miser tu iam relinques oĩa tẽpalia que sollicitu
dinibꝰ et laboribꝰ maximis sũt ꝯgregata etiã uxorem
proles et cõsãguineos aĩcos carissimos et oĩa alia hu
ius mũdi desiderabilia quorũ te societati adhuc interesse
t magnũ foret solaciũ ꝑpis quoq; magni boni occasio.
Hec et similia dyabolꝰ hoĩm ĩ extremis de auaricia
p̃ntat ut sic p amorẽ et cupiditatẽ terrenorũ auertat
amore dei et propria salute. Vnde singulariter notãdum
q maxĩe caueri debz ne aliq̃ moriente aĩci corpales
vxor liberi diuicie et alia tẽpalia ad memoriã reducãt
nisi inq̃ntũ illud infirmi spiritualis sanitas postulet aut
requirat qr alias maxĩe periculosum esset tũ sit ab hys que
spũs et salutis sũt q̃bꝰ maxĩe tũc oĩbꝰ viribꝰ interioribꝰ
et exterioribꝰ intendendum est reuocaretur ad ista
miseria temporalia et carnalia tũc cum maxima so
licitudĩe a memoria et mẽte remouẽda in quibus
certe tunc occupari est ualde periculosum

These early-nineteenth-century engravings illustrate Gutenberg's system for casting type.



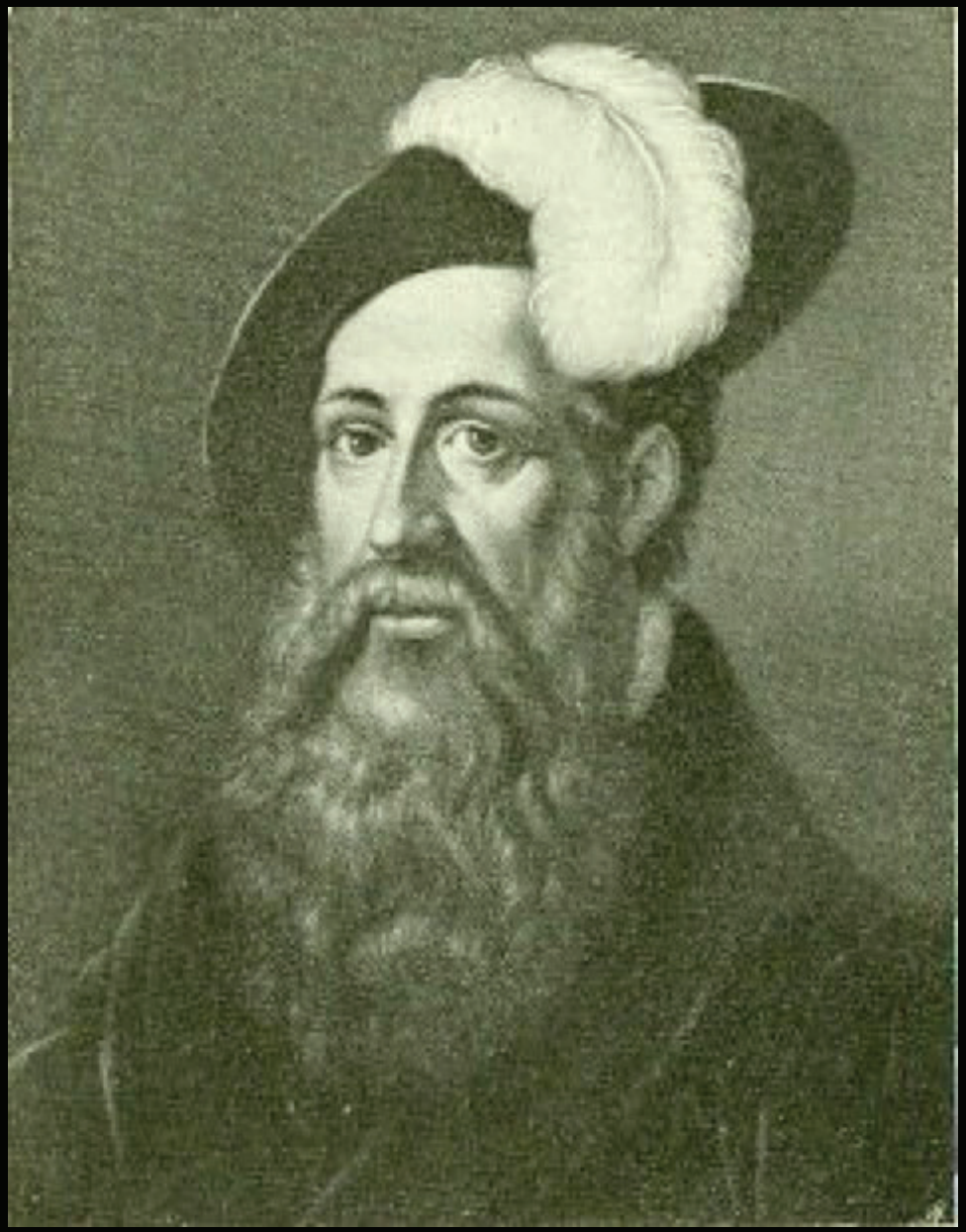
Johann Gutenberg, pages from the *42-Line Bible*, 1450-55. The superb typographic legibility and texture, generous margins, and excellent presswork make this first printed book a canon of quality that has seldom been surpassed. An illuminator added the red and blue headers, initials, and text by hand.



Johann Gutenberg, pages from the *42-Line Bible*, 1450-55.

A reproduction of Gutenberg's press.

Johann Fust



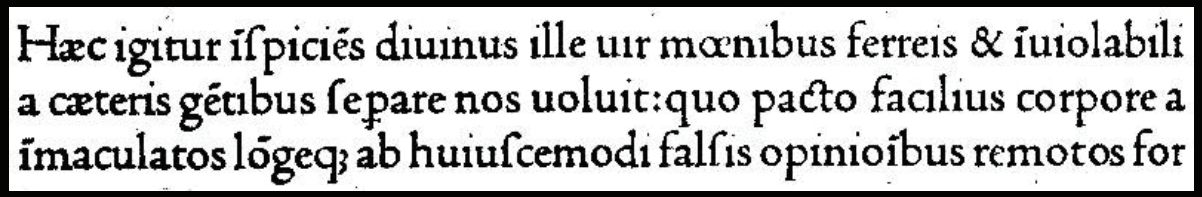
Venice.

Attributed to Nicolas Jenson, mark for the Society of Venetian Printers, 1481. One of man's oldest symbols, the orb-and-cross motif is found in a chamber of Cheops's pyramid at Giza, where it was hewn into stone as a quarry mark.

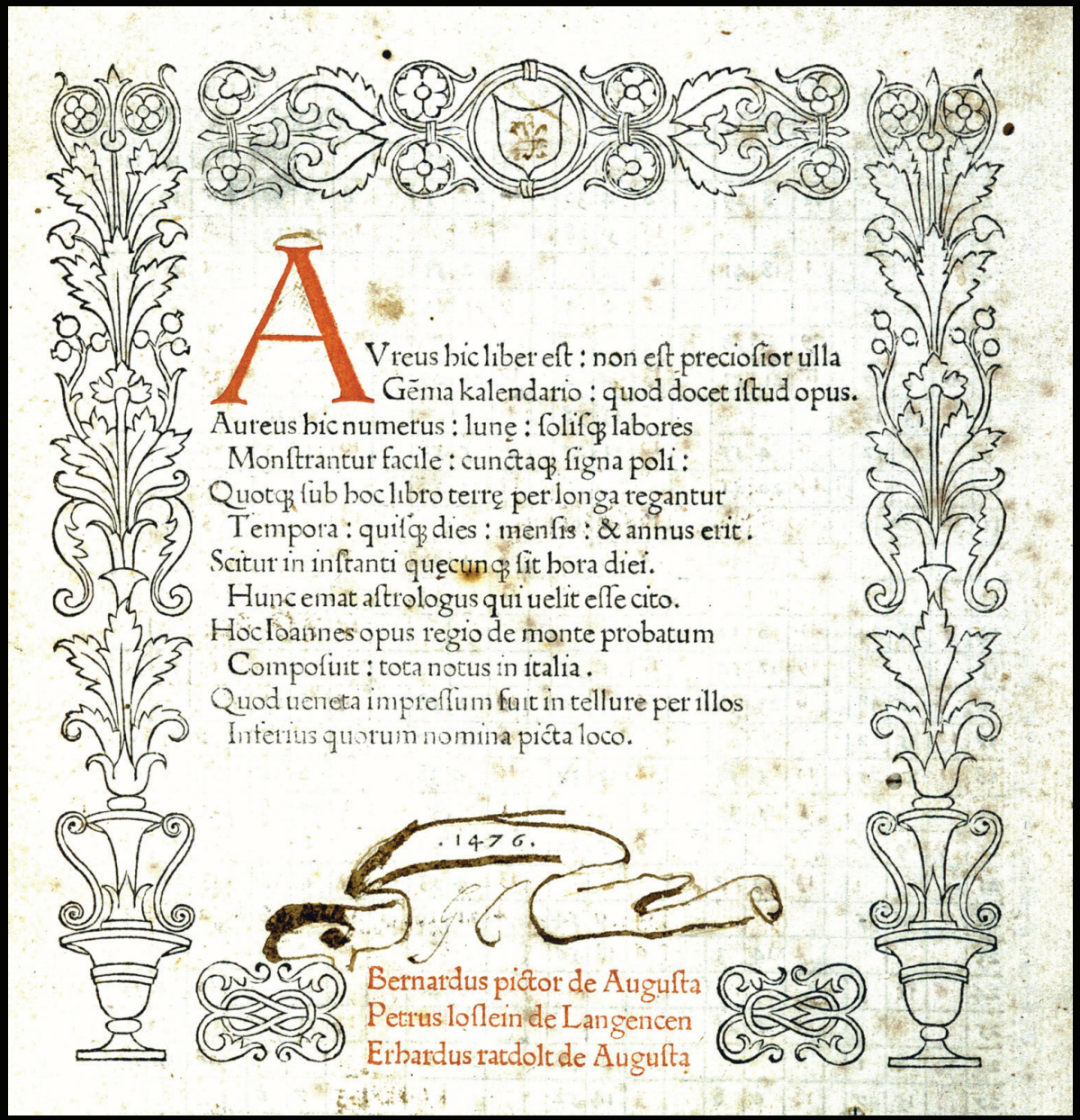
Nicolas Jenson 1420-1480

Jenson's typographer's mark

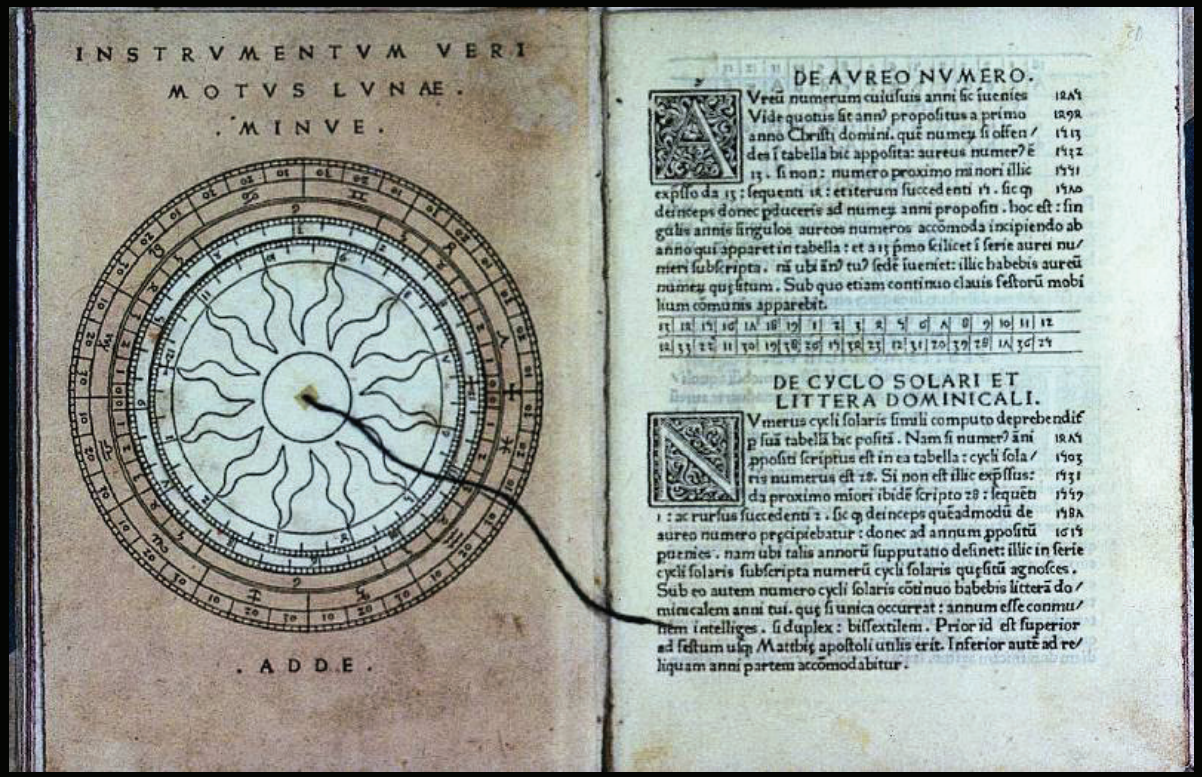
Nicolas Jenson, typography from Eusebius's *De Praeparatione Evangelica*, 1470. A new standard of excellence was established with wider letterforms, lighter tone, and a more even texture of black strokes on the white ground.


Hæc igitur ſpiciēs diuinus ille uir mœnibus ferreis & ĩuiolabili
a cæteris gētibus ſepare nos uoluit: quo pacto facilius corpore a
ĩmaculatos lōgeq; ab huiuſcemodi falſis opinioĩbus remotos for

Erhard Ratdolt, Peter Loeslein, and Bernhard Maier, title page for *Calendarium*, by Regiomontanus, 1476. The title and author are identified in verse describing the book. The date and printers' names in Latin appear below.



Erhard Ratdolt, Peter Loeslein, and Bernhard Maier, pages from *Calendarium*, by Regiomontanus, 1476. The two top circles are printed on heavy paper, cut out, and mounted over the larger woodcut with tape and a string.



DE AVREO NVMERO.

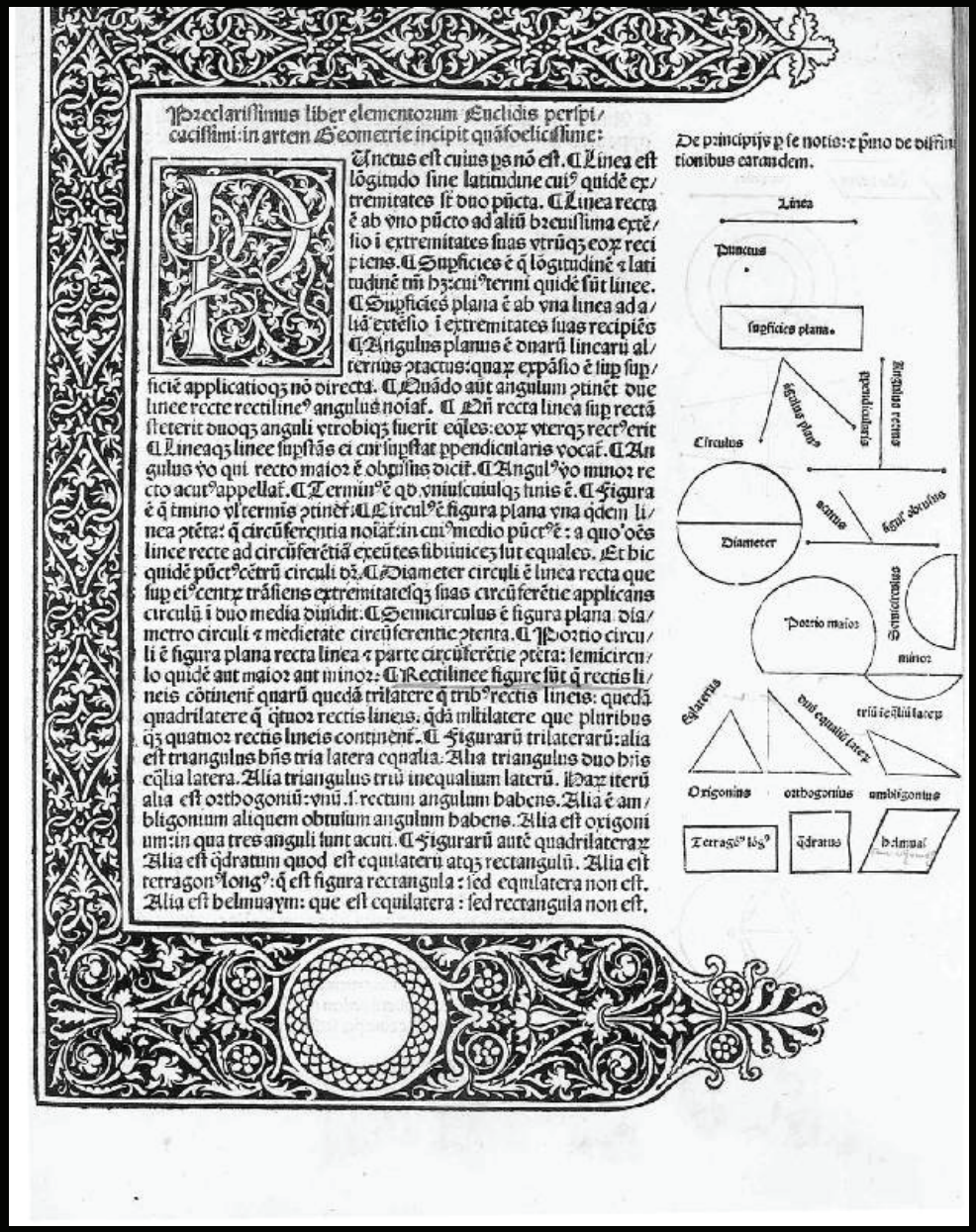
Vreū numerum cuiuſuis anni ſic ſuenies
Vide quotus ſit ann? propoſitus a primo
anno Chriſti domini. quē numer? ſi offen/
des ſ tabella hic appoſita: aureus numer? ē
13. ſi non: numero proximo minori illic
expſſo da 13: ſequenti 14: et iterum ſuccedenti 15. ſic q̄
deinceps donec pduceris ad numer? anni propoſiti. hoc eſt: ſin
gulis annis ſinguloſ aureos numeros accōmoda incipiendo ab
anno qui apparet in tabella: et a 13 ꝓmo ſcilicet ſ ſerie aurei nu/
meri ſubſcripta. nā ubi ān? tu? ſedē ſueniet: illic habebis aureū
numer? quæſitum. Sub quo etiam continuo clauis feſtorū mobi
lium communis apparebit.

13	12	13	10	11	18	19	1	2	3	4	5	6	7	8	9	10	11	12						
12	33	22	11	30	19	38	20	19	38	23	12	31	20	39	28	17	36	25						

DE CYCLO SOLARI ET LITTERA DOMINICALI.

Vmerus cycli ſolaris ſimili computo deprehendiſ
p ſuā tabellā hic poſitā. Nam ſi numer? ān
ppoſiti ſcriptus eſt in ea tabella: cycli ſola/
ris numerus eſt 28. Si non eſt illic exp̄ſſus:
da proximo minori ibidē ſcripto 28: ſequēti
1: ac rurſus ſuccedenti 2. ſic q̄ deinceps quēadmodū de
aureo numero p̄cipiebatur: donec ad annum ppoſitū
peruenies. nam ubi talis annorū ſupputatio deſinet: illic in ſerie
cycli ſolaris ſubſcripta numerū cycli ſolaris quæſitū agnoſces.
Sub eo autem numero cycli ſolaris cōtinuo habebis litterā do/
minicalem anni tui. quę ſi unica occurrat: annum eſſe commu/
nem intelliges. ſi duplex: biſſextilem. Prior id eſt ſuperior
ad feſtum uſq̄ Matthię apoſtoli utilis erit. Inferior autē ad re/
liquam anni partem accōmodabitur.

Erhard Ratdolt, Peter Loeslein, and Bernhard Maier, title page for Euclid's *Geometriae Elementa*, 1482. A dazzling white-on-black design brackets the text, and incredibly fine line diagrams in the wide margin visually define Euclid's terms.

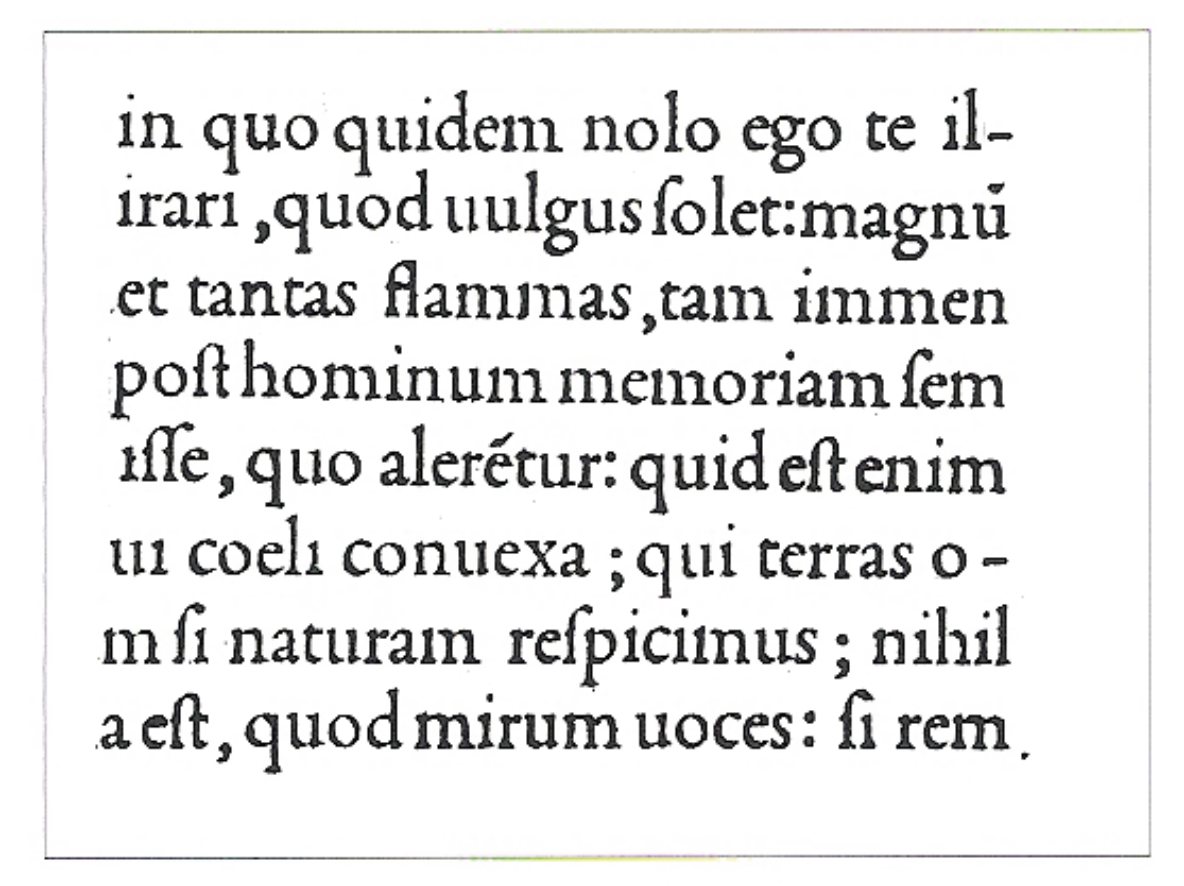


Preclarissimus liber elementorum Euclidis perspi/
cacissimi: in artem Geometrie incipit quãfoelicissime:

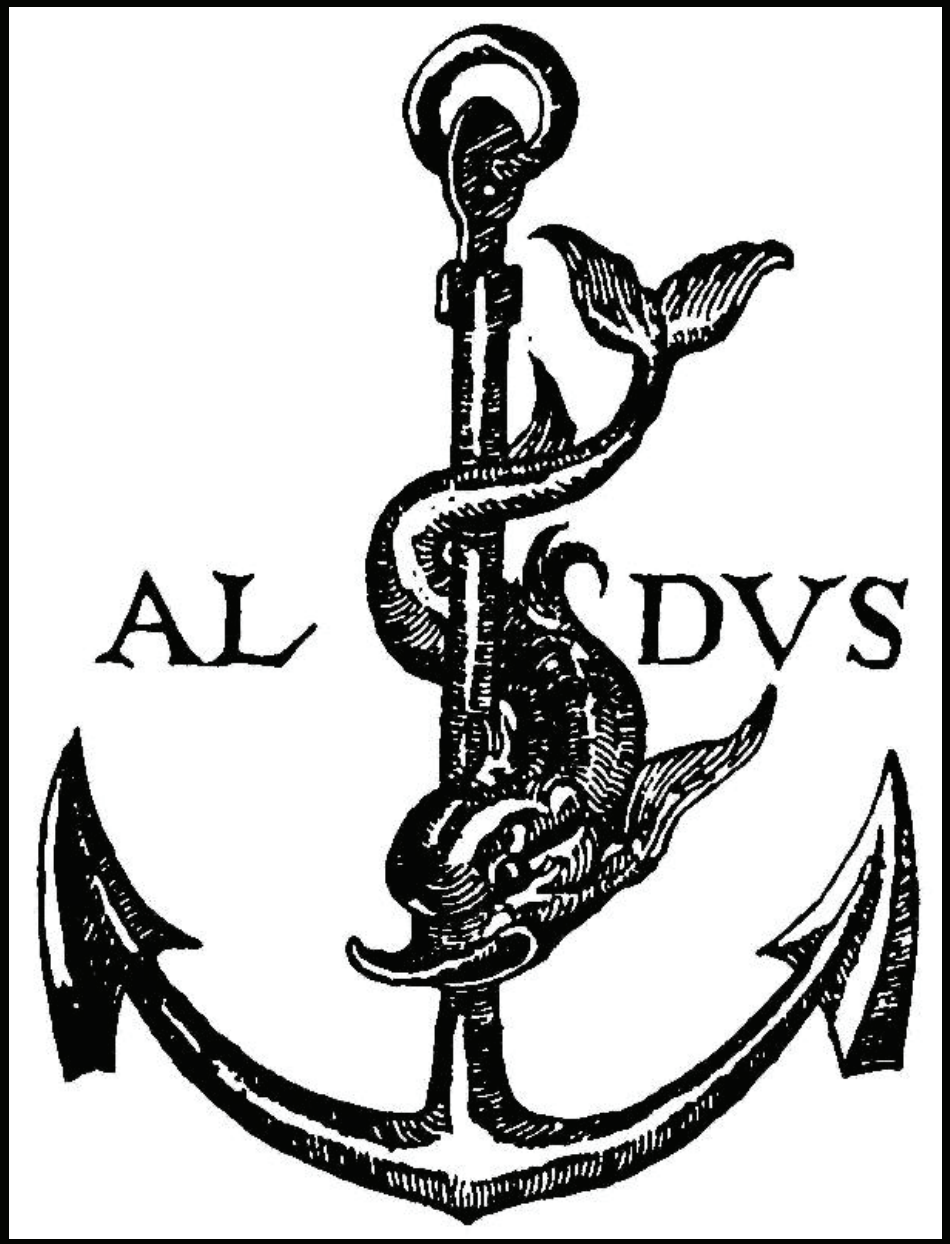
Punctus est cuius ps nõ est. ¶ Linea est lõgitudo sine latitudine cui⁹ quidẽ ex/tremitates sũt duo pũcta. ¶ Linea recta ẽ ab vno pũcto ad alĩ breuissima extẽ/sio i extremitates suas vtrũq3 eox recipiens. ¶ Superficies ẽ q̃ lõgitudinẽ ⁊ latitudinẽ tm̃ hz:cui⁹ termini quidẽ sũt linee. ¶ Superficies plana ẽ ab vna linea ad a/liã extẽsio i extremitates suas recipiẽs ¶ Angulus planus ẽ onarũ linearũ al/ternus ꝓtactus: quax expãsio ẽ sup sup/ficiẽ applicatioq3 nõ directa. ¶ Quãdo aũt angulum ꝓtinẽt due linee recte rectilineũ angulũ noiaf. ¶ Dñi recta linea sup rectã sẽ eterit duoq3 anguli vtrobiq3 fuerit eq̃les: eox vterq3 rect⁹ erit ¶ Lineaq3 linee supstãs ei cui supstat ppendicularis vocaf. ¶ Angulus vo qui recto maior ẽ obtusus dicit. ¶ Angul⁹ vo minor recto acut⁹ appellaf. ¶ Termin⁹ ẽ qd vniuscuiuslq3 finis ẽ. ¶ Figura ẽ q̃ timno vl termis ꝓtinẽt: ¶ Circul⁹ ẽ figura plana vna q̃dem li/nea ꝓtẽta: q̃ circũferentia noiaf: in cui⁹ medio pũct⁹ ẽ: a quo' oẽs linee recte ad circũferẽtiã exeũtes sibiinicez sut equales. Et hic quidẽ pũct⁹ cẽtrũ circuli dr. ¶ Diameter circuli ẽ linea recta que sup ei⁹ centx trãsiens extremitatesq3 suas circũferẽtie applicans circulũ i duo media diuidit. ¶ Semicirculus ẽ figura plana dia/metro circuli ⁊ medietate circũferentie ꝓtenta. ¶ Portio circu/li ẽ figura plana recta linea ⁊ parte circũferẽtie ꝓtẽta: hemicircu/lo quidẽ aut maior aut minor: ¶ Rectilinee figure sũt q̃ rectis li/neis cõtinenf quarũ quedã trilatere q̃ trib⁹ rectis lineis: quedã quadrilatere q̃ q̃tuor rectis lineis. q̃dã multilatere que pluribus q3 quatuor rectis lineis continenf. ¶ Figurarũ trilaterarũ: alia est triangulus hns tria latera eqnalia. Alia triangulus duo bris eq̃lia latera. Alia triangulus triũ inequalium laterũ. ¶ Dax iterũ alia est orthogoniũ: vnũ. s. rectum angulum habens. Alia ẽ am/bligonium aliquem obtusum angulum habens. Alia est origoni um: in qua tres anguli sunt acuti. ¶ Figurarũ aut quadrilaterax Alia est q̃dratum quod est equilaterũ atq3 rectangulũ. Alia est terragon⁹ long⁹: q̃ est figura rectangula: sed equilatera non est. Alia est belmuaym: que est equilatera: sed rectangula non est.

De principijs p se notis: ⁊ pmo de diffi/nitionibus earundem.

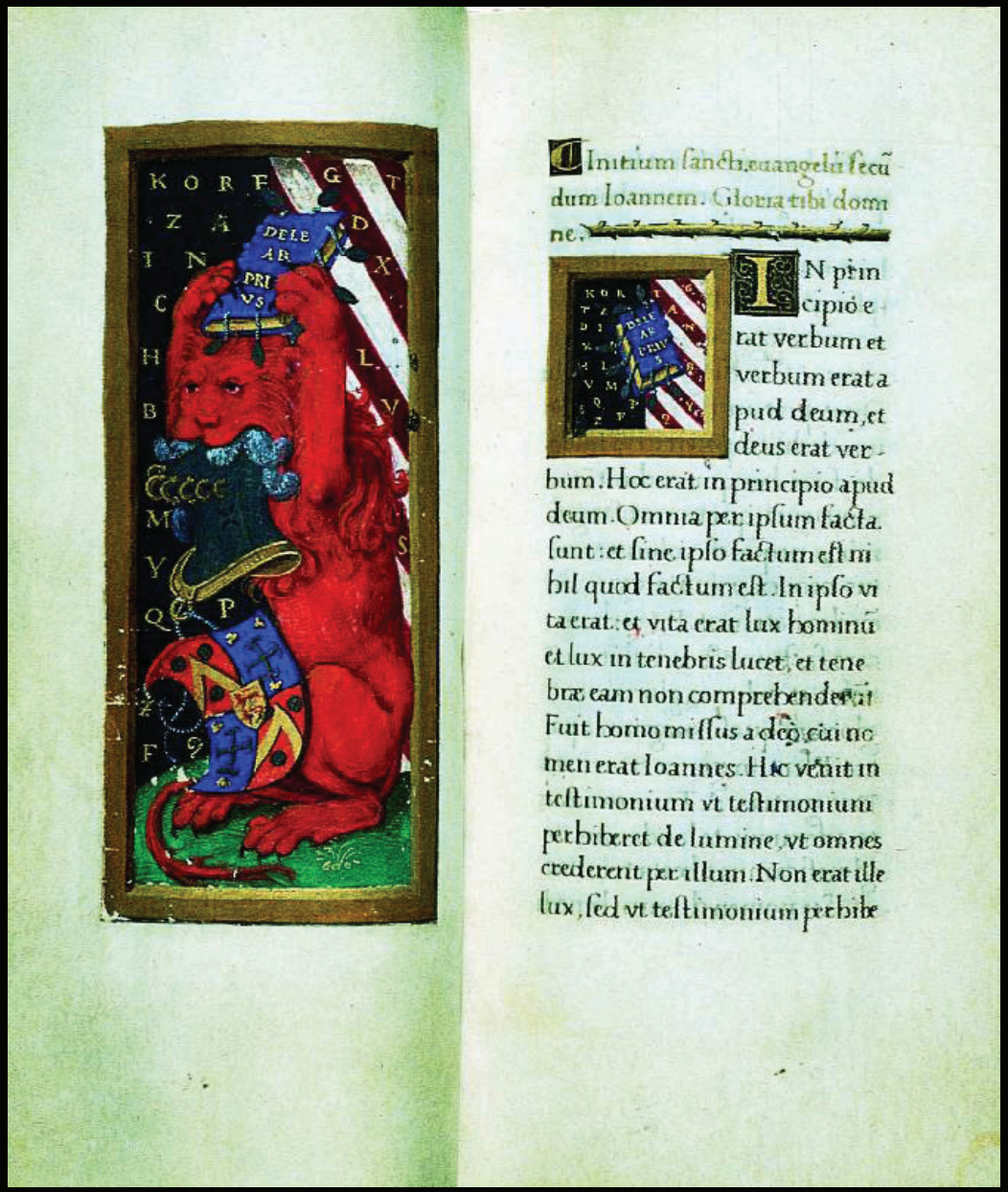
Aldus Mautius, from Pietro Bembo's *De Aetna*, 1495–96. As the model for Garamond in the sixteenth century, this typeface became the prototype for two centuries of European typographic design.


in quo quidem nolo ego te il-
irari ,quod uulgus ſolet:magnũ
et tantas flammas ,tam immen
poſt hominum memoriam ſem
iſſe, quo alerétur: quid eſt enim
ui coeli conuexa ; qui terras o-
m ſi naturam reſpiciimus ; nihil
a eſt, quod mirum uoces: ſi rem

Aldus Manutius, printer's trademark, c. 1500. The swiftest of sea creatures combines with an anchor to signify the epigram, "Make haste slowly."



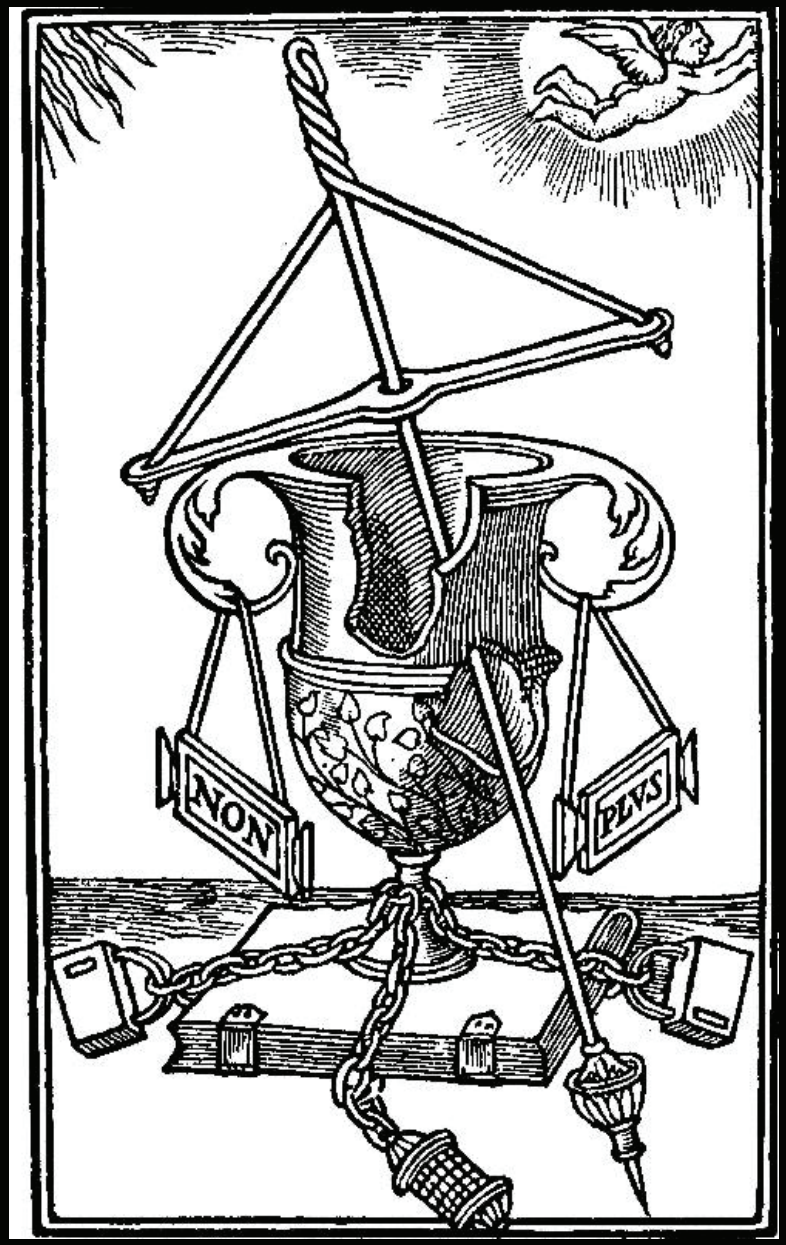
Geoffroy Tory, pages from the manuscript book *Les heures de Jean Lallemant*, 1506. The armorial frontispiece and forty vignettes have orderly rows of the Latin alphabet's twenty?three letterforms over a blue field with red and white stripes.



In initium ſancti euangelii ſecũ
dum Ioannem. Gloria tibi domi
ne.

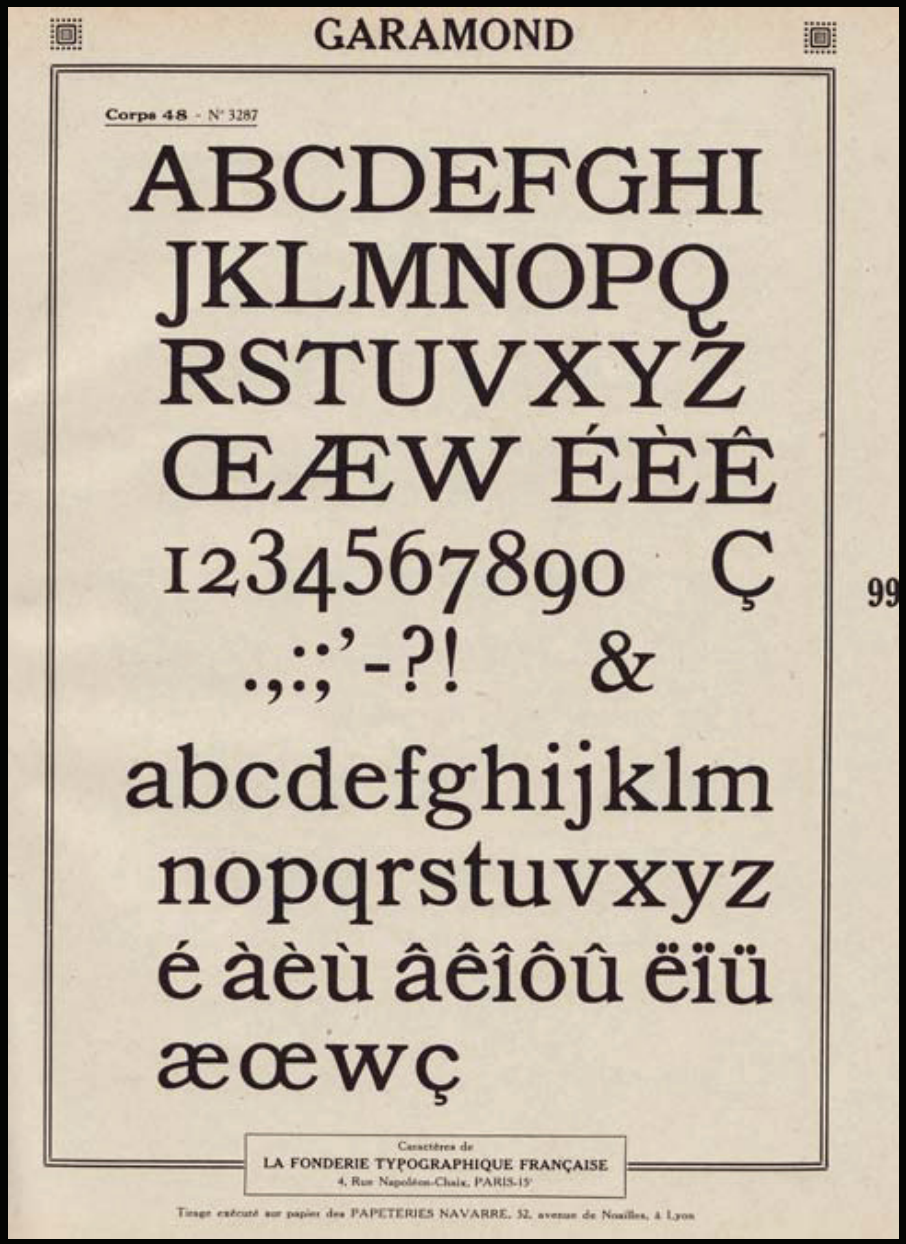
IN prin
cipio e
rat verbum et
verbum erat a
pud deum, et
deus erat ver
bum. Hoc erat in principio apud
deum. Omnia per ipſum facta
ſunt: et ſine ipſo factum eſt ni
hil quod factum eſt. In ipſo vi
ta erat: et vita erat lux hominũ
et lux in tenebris lucet, et tene
bræ eam non comprehenderũt
Fuit homo miſſus a deo, cui no
men erat Ioannes. Hic venit in
teſtimonium vt teſtimonium
perhiberet de lumine, vt omnes
crederent per illum. Non erat ille
lux, ſed vt teſtimonium perhibe

Geoffroy Tory, pot cassé emblem, 1524. Later, Tory explained that the broken jar symbolized one's body, the toret or auger symbolized fate, and the book held shut by three padlocked chains signified the book of a life after it is shut by death.

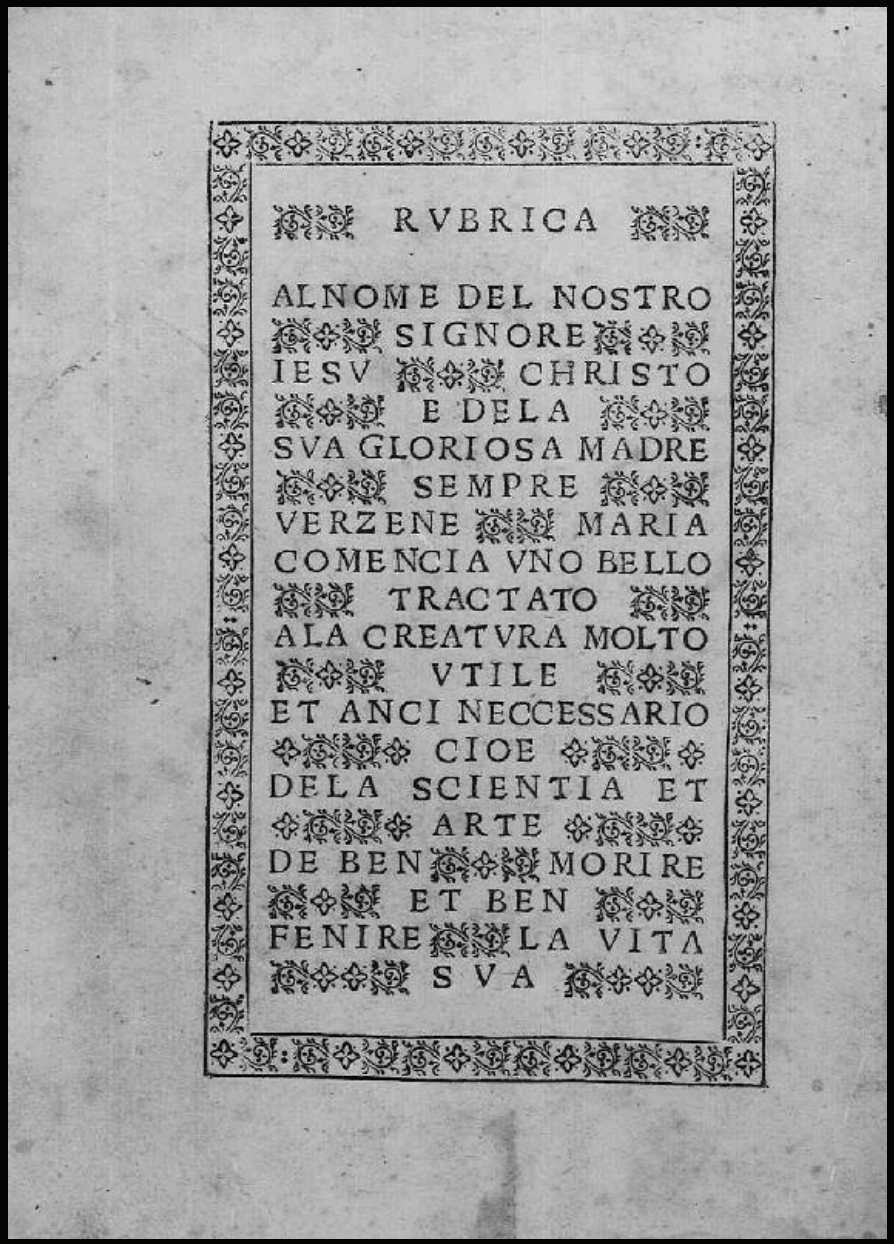


Geoffroy Tory, capital from a series of criblé initials, c. 1526. Engraved for Robert Estienne, this alphabet of roman capitals brought elegance and “color” to the pages of books printed at Estienne’s press.

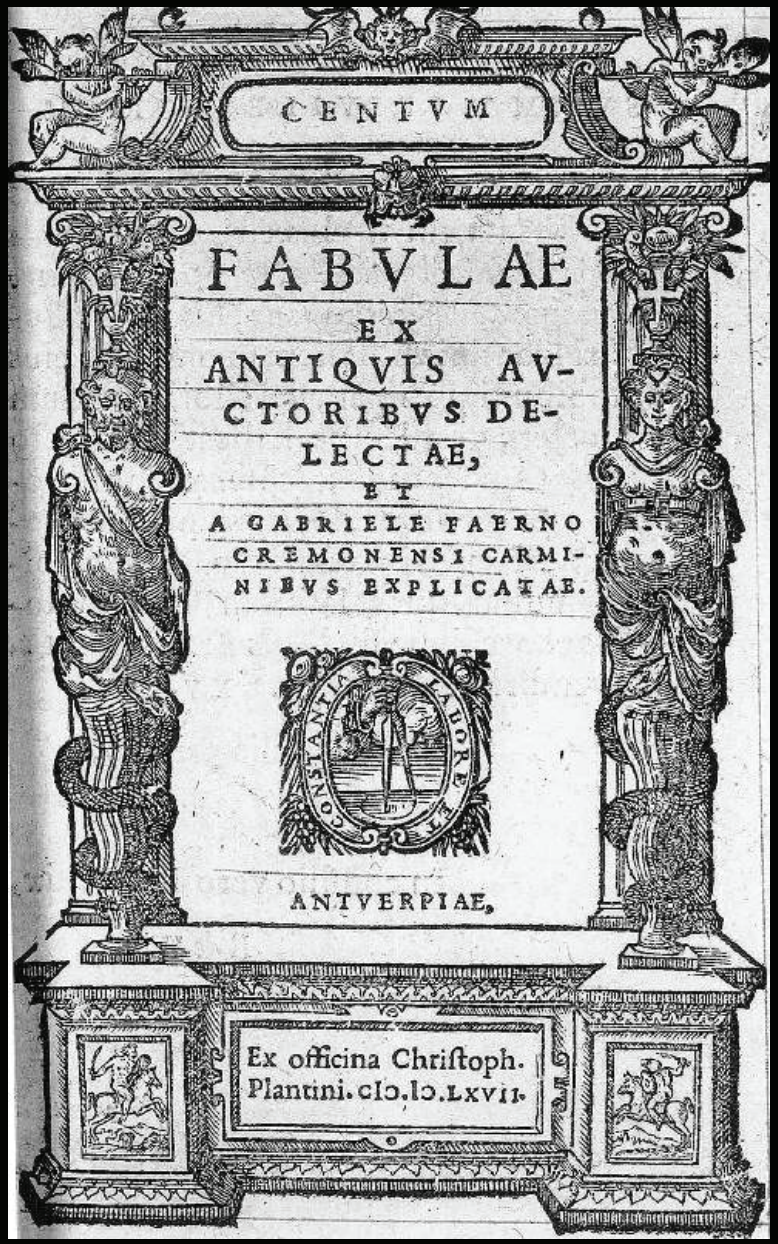
Claude Garamond, the great French typefounder of the sixteenth century, immortalized here by the Fonderie Typographique Française around 1920.



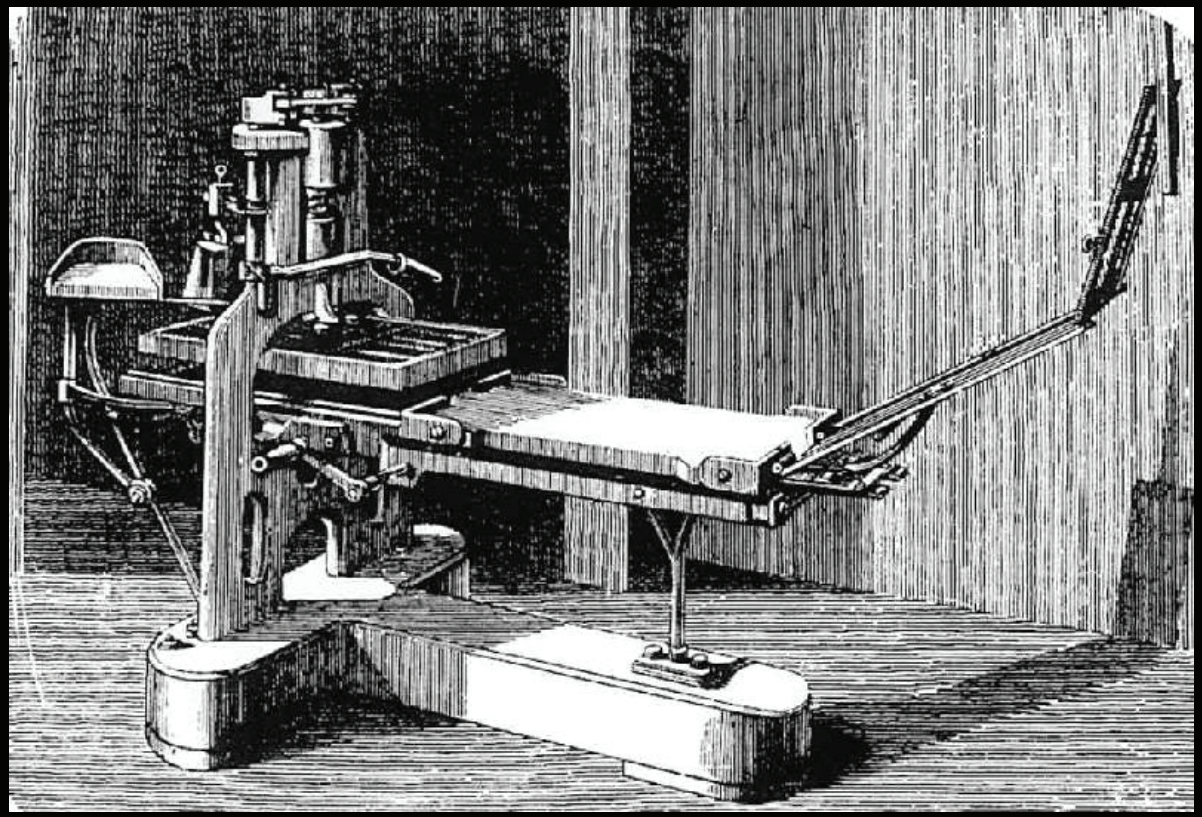
Giovanni and Alberto Alvise, title page from *Ars Moriendi*, 1478. The vocabulary of graphic design possibilities was expanded by the design and casting of metal decorative ornaments that could be composed as part of the page along with type.



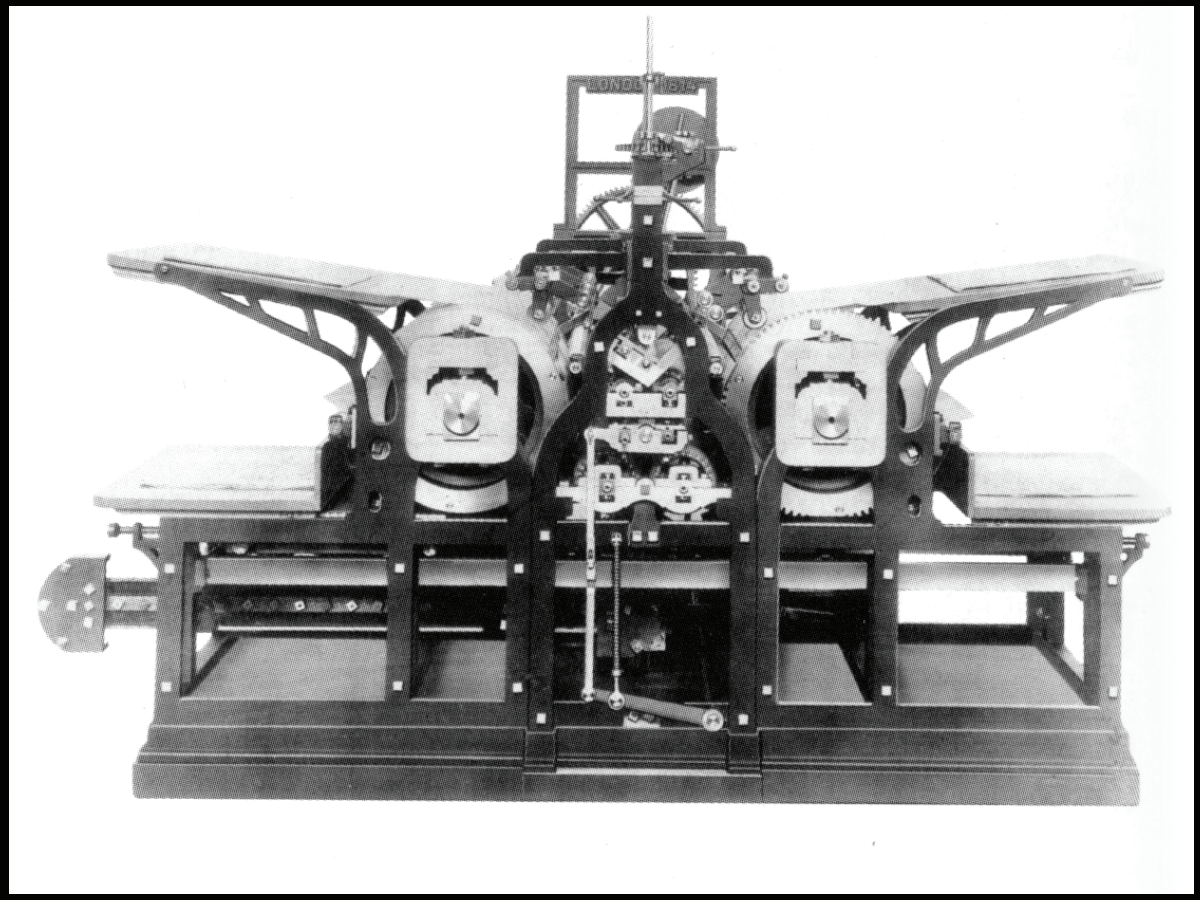
Christophe Plantin, title page for *Centvm fabvlae ex antiqvis (A Hundred Old Stories)*, by Gabriello Faerno, 1567. Dignified and architectural, this title page is typical of the Plantin house style.



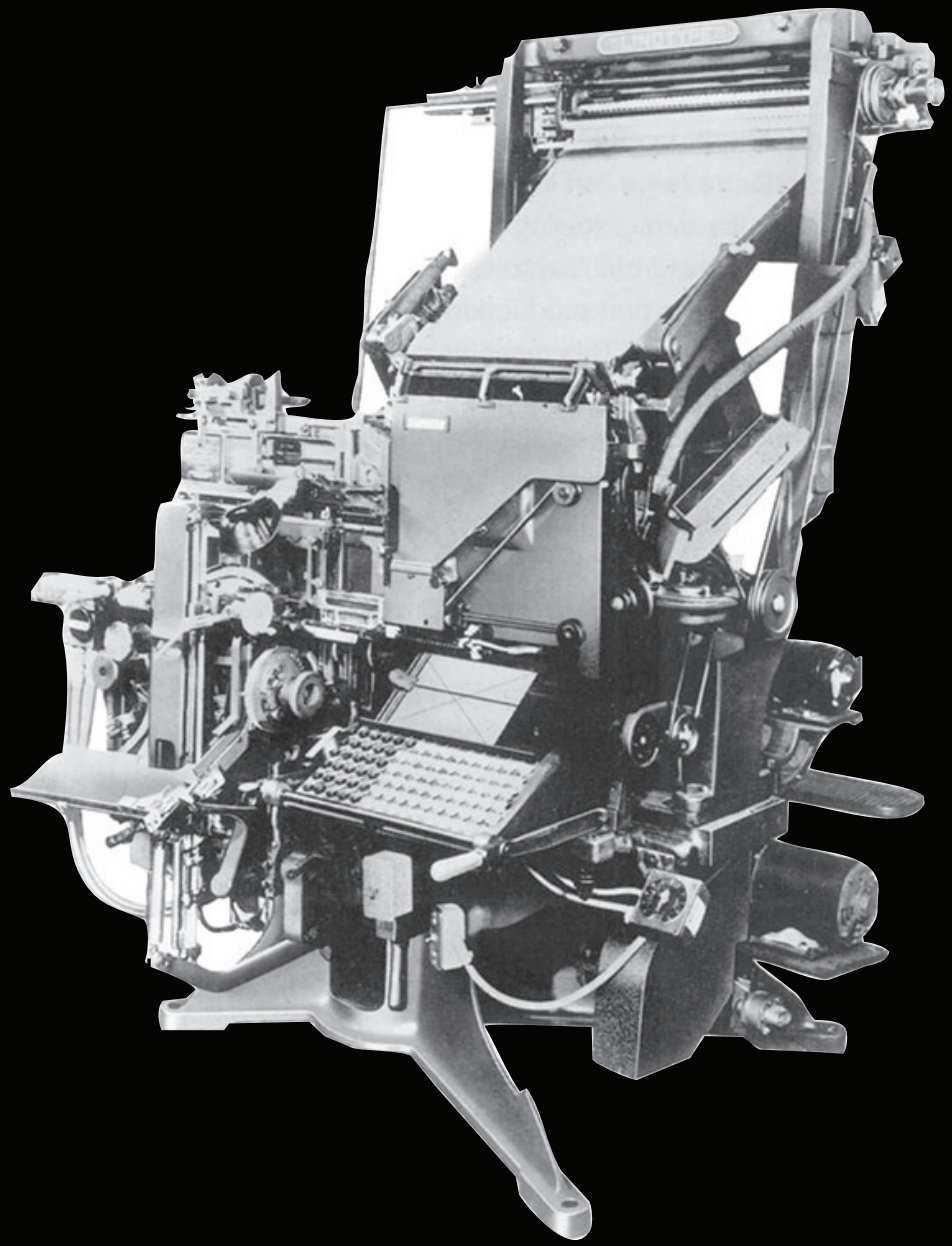
This engraved illustration depicts the printing press of all-iron parts invented in England by Charles, third Earl of Stanhope.



The first steam-powered cylinder press, 1814. Koenig's invention caused the speed of printing to skyrocket, while its price dropped considerably.

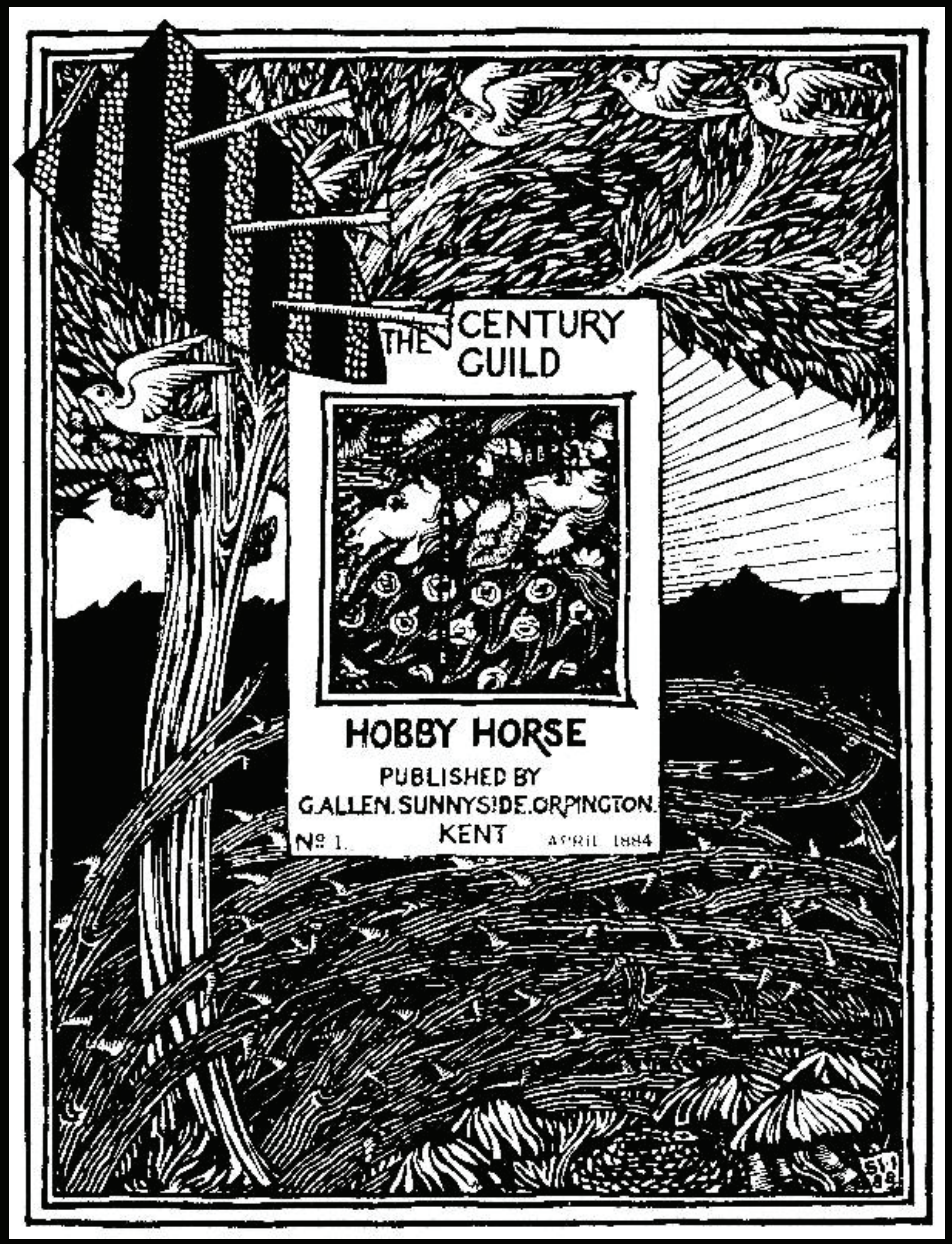


The Model 5 Linotype became the workhorse of typesetting, with keyboards and matrixes available in over a thousand languages.



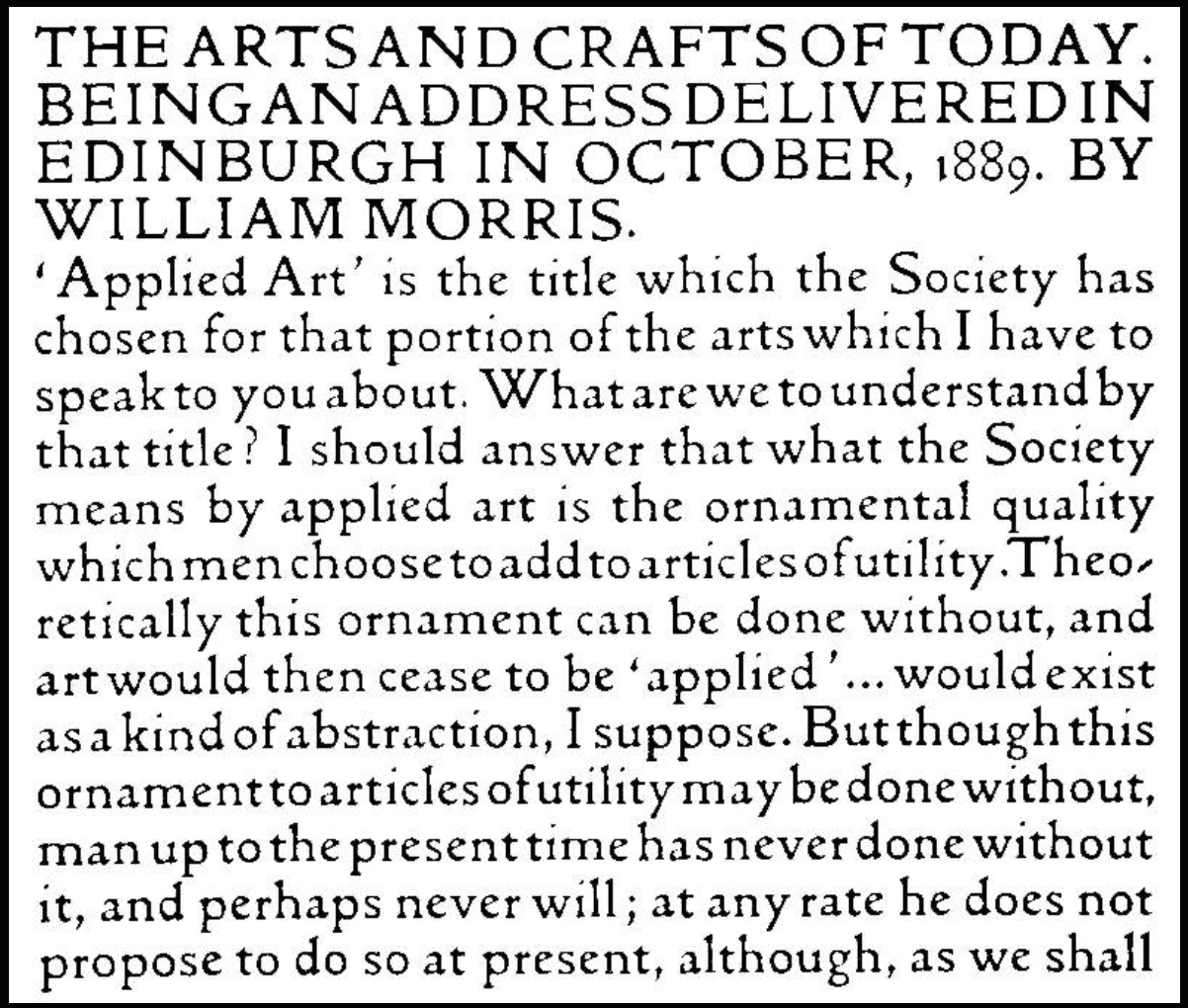
William Morris

Selwyn Image, title page to The Century Guild *Hobby Horse*, 1884. Packing it with detail, Image designed a "page within a page" that reflects the medieval preoccupation of the Arts and Crafts movement.



Selwyn Image, woodcut from *The Hobby Horse*, 1886. The potential of shape and pattern as visual means to express thought and feeling is realized in this graphic elegy for illustrator/engraver Arthur Burgess.

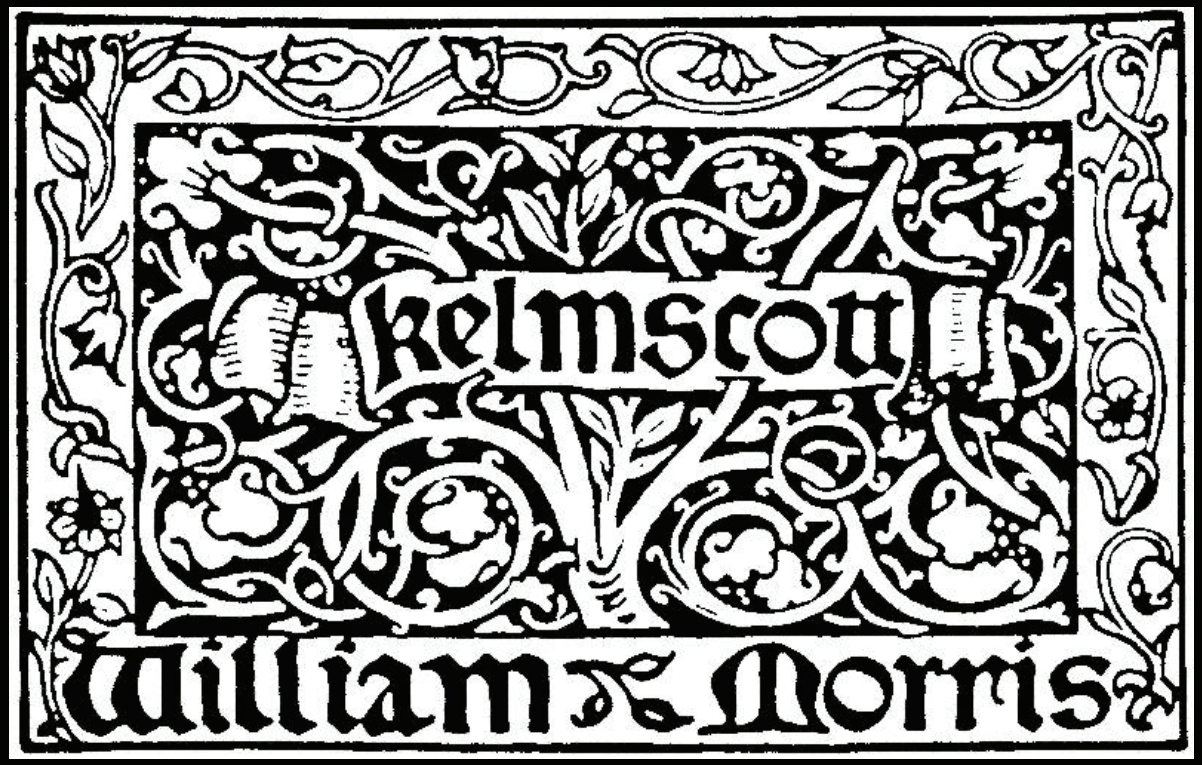
William Morris, Golden typeface, 1888-90. This font inspired renewed interest in Venetian and Old Style typography.



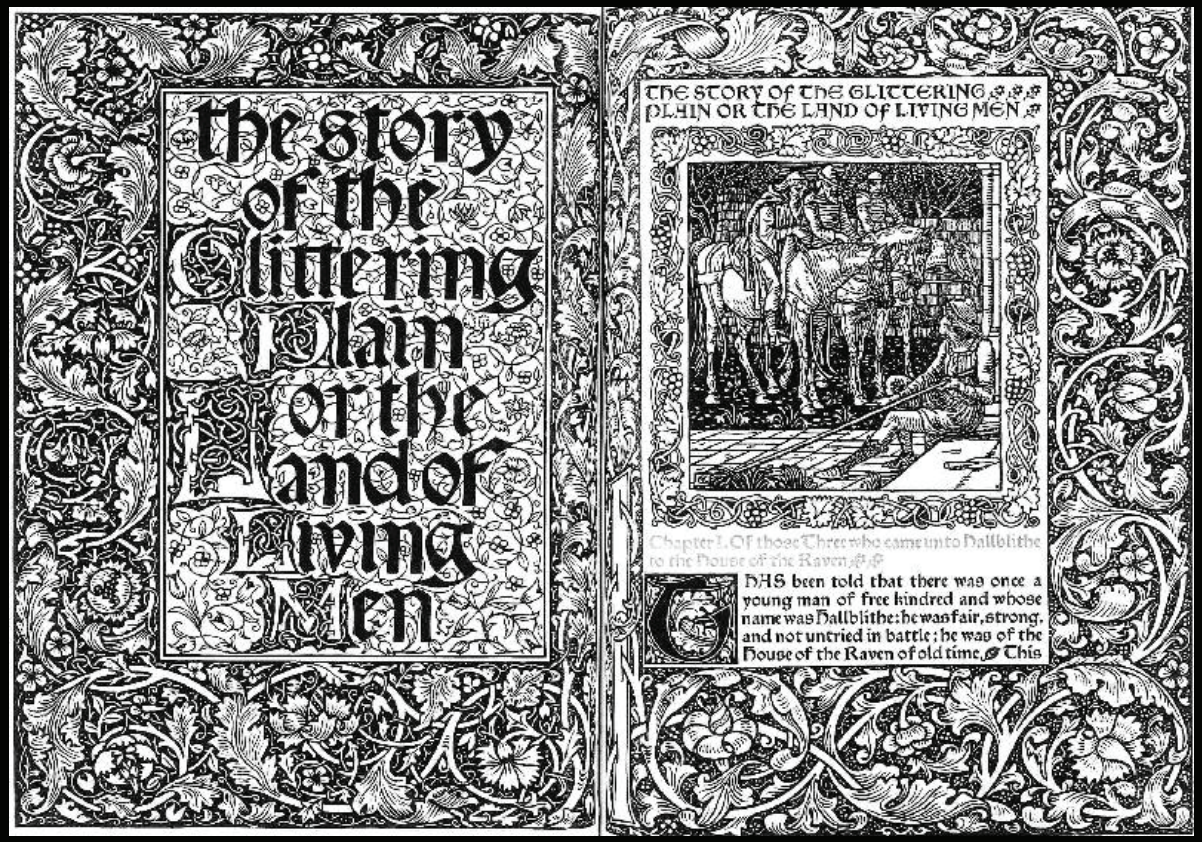
THE ARTS AND CRAFTS OF TODAY.
BEING AN ADDRESS DELIVERED IN EDINBURGH IN OCTOBER, 1889. BY WILLIAM MORRIS.

'Applied Art' is the title which the Society has chosen for that portion of the arts which I have to speak to you about. What are we to understand by that title? I should answer that what the Society means by applied art is the ornamental quality which men choose to add to articles of utility. Theoretically this ornament can be done without, and art would then cease to be 'applied'... would exist as a kind of abstraction, I suppose. But though this ornament to articles of utility may be done without, man up to the present time has never done without it, and perhaps never will; at any rate he does not propose to do so at present, although, as we shall

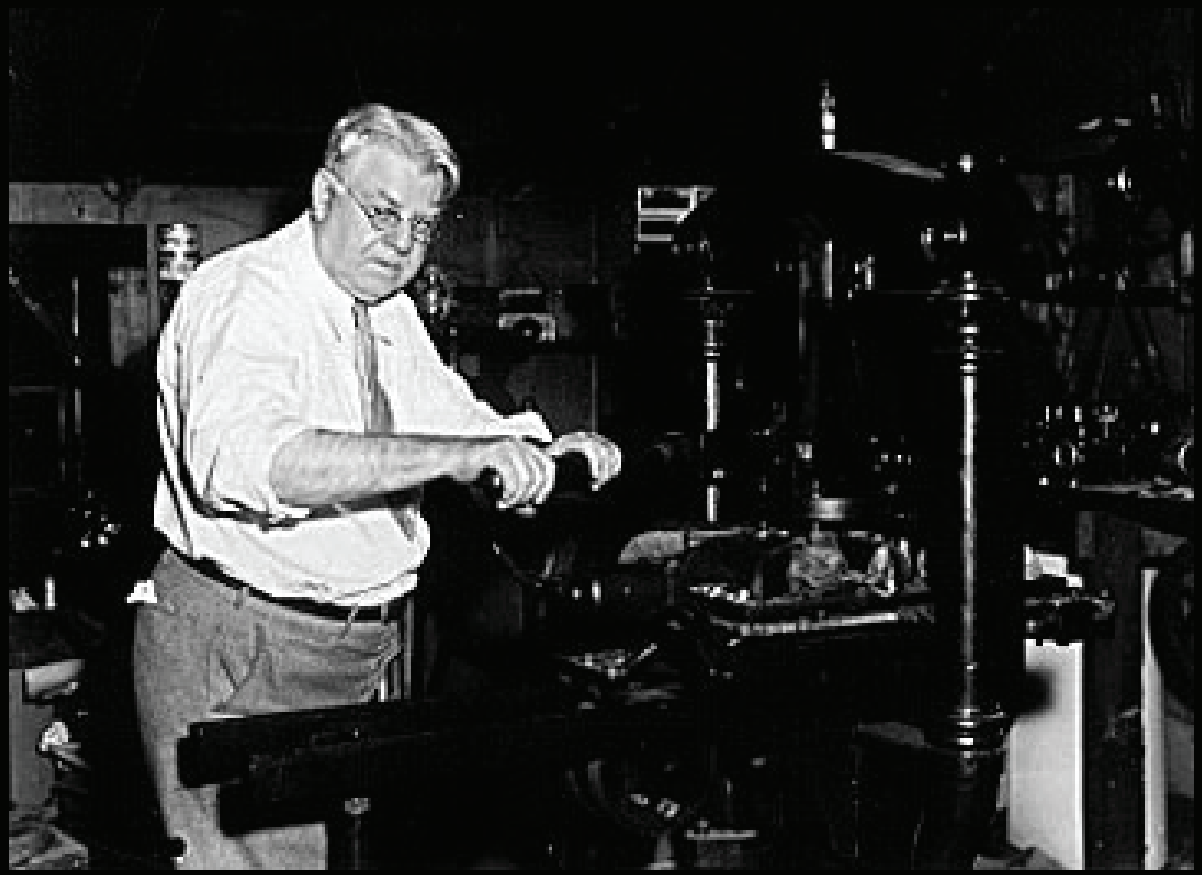
William Morris, trademark for the Kelmscott Press, 1892.



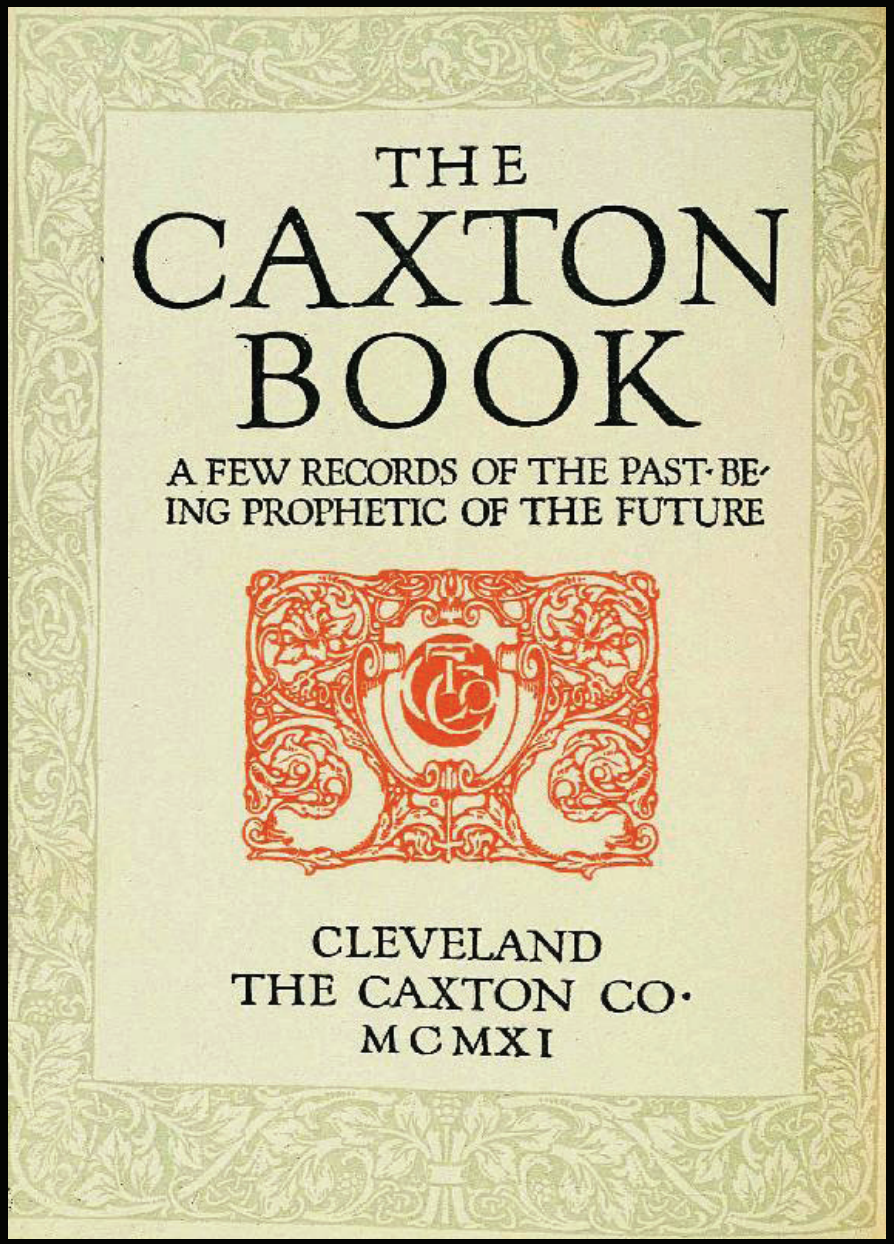
William Morris (designer) and Walter Crane (illustrator), title-page spread for *The Story of the Glittering Plain*, 1894. Operating on his compulsion to ornament the total space, Morris created a luminous range of contrasting values.



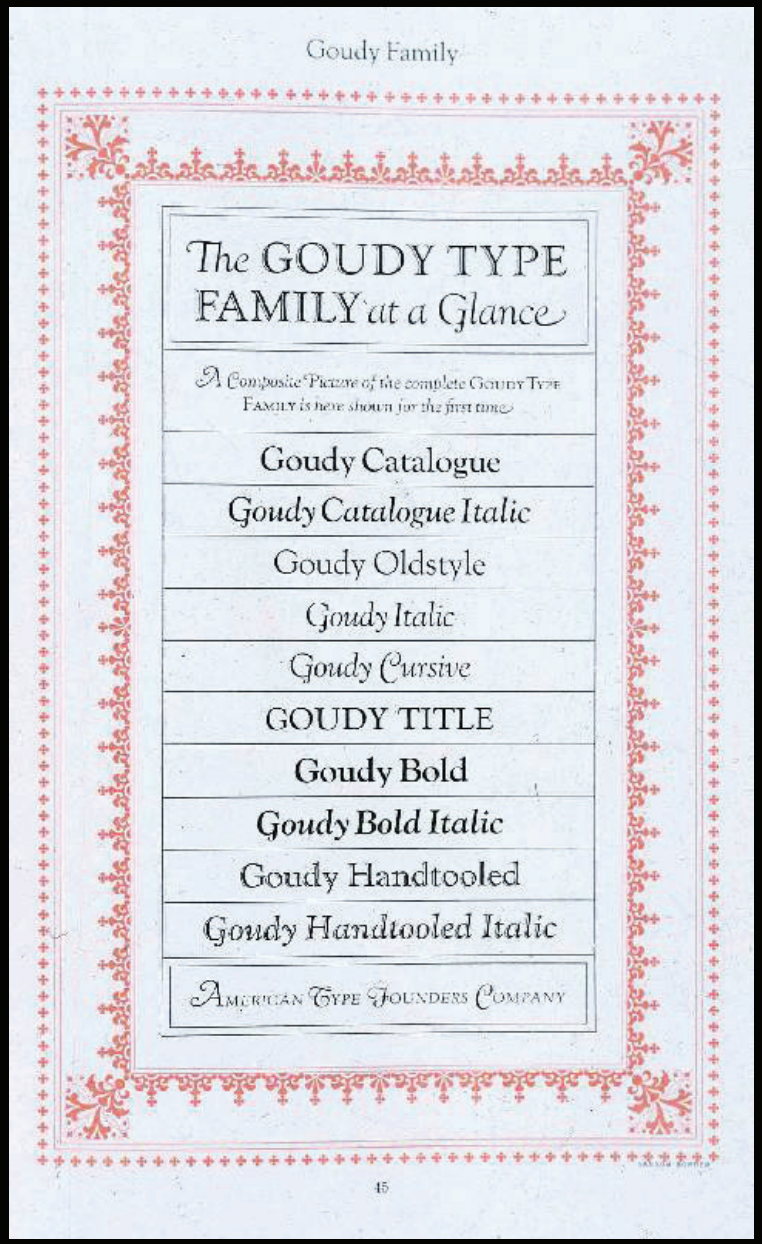
Frederic W. Goudy



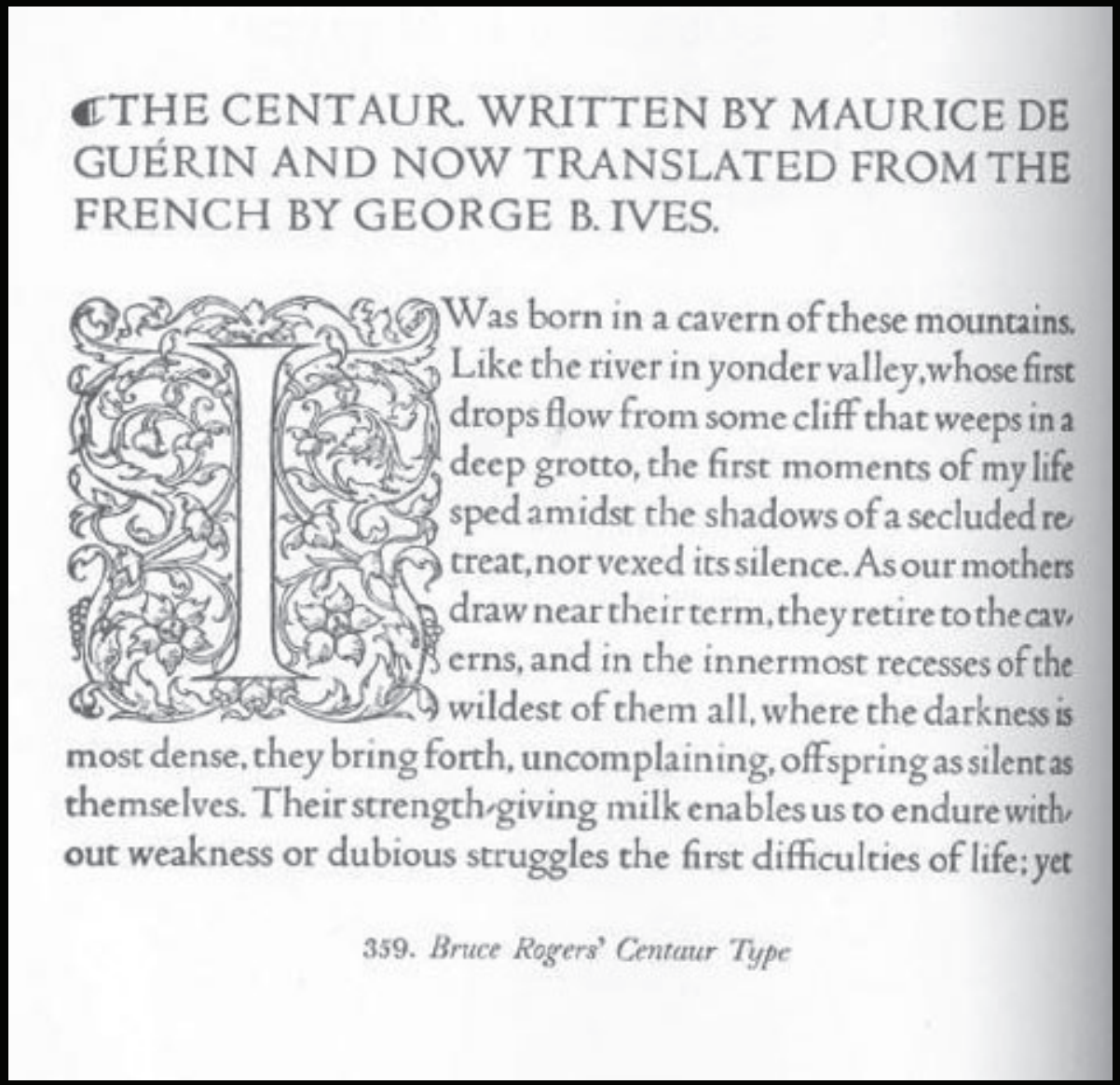
Frederic W. Goudy, booklet cover, 1911. The ideals of the Arts and Crafts movement were actualized in printing for commerce.



Page 45 from American Type Founders' Specimen Book and Catalogue 1923 presented the Goudy series of Old Style fonts, including fonts designed by others.



Bruce Rogers, page from *The Centaur,* by Maurice de Guerin, 1915. The headpiece, initial, and page layout echo the wonderful graphic designs of the French Renaissance.



THE CENTAUR. WRITTEN BY MAURICE DE GUÉRIN AND NOW TRANSLATED FROM THE FRENCH BY GEORGE B. IVES.

I Was born in a cavern of these mountains. Like the river in yonder valley, whose first drops flow from some cliff that weeps in a deep grotto, the first moments of my life sped amidst the shadows of a secluded retreat, nor vexed its silence. As our mothers draw near their term, they retire to the caverns, and in the innermost recesses of the wildest of them all, where the darkness is most dense, they bring forth, uncomplaining, offspring as silent as themselves. Their strength-giving milk enables us to endure without weakness or dubious struggles the first difficulties of life; yet

359. *Bruce Rogers' Centaur Type*

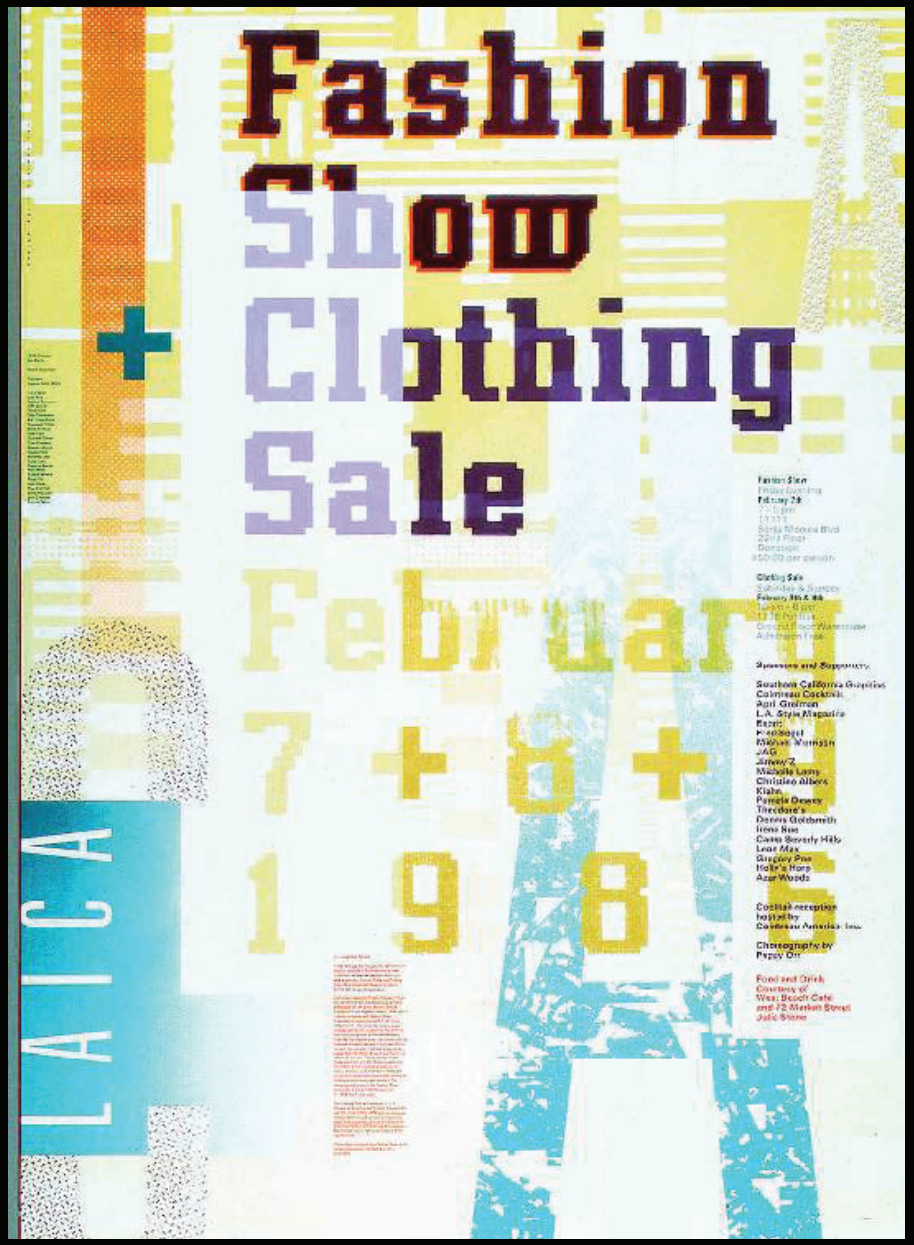
The first mouse, a small wooden box on steel wheels, was invented by scientist Douglas C. Engelbart in the 1960s at the federal government's Augmentation Research Center

Underside of the first mouse.

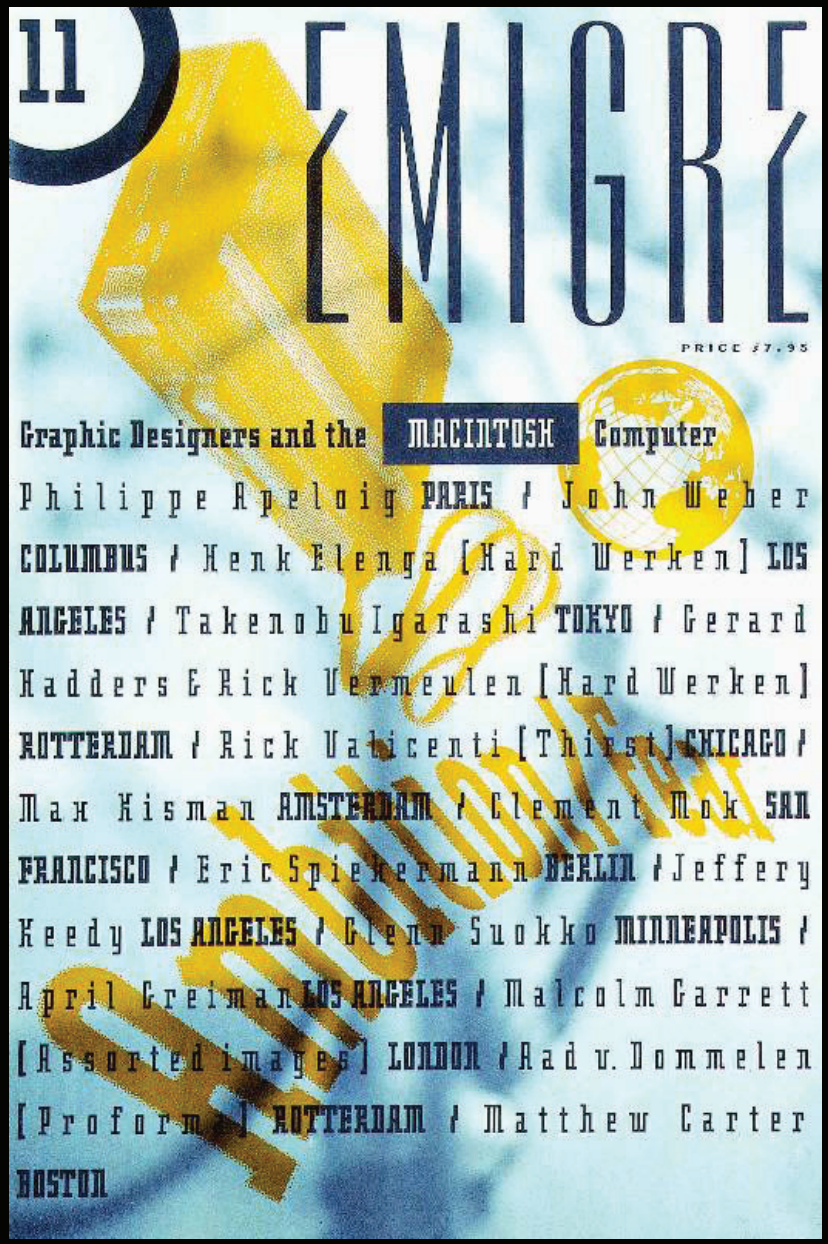
The Macintosh, 1984.

Zuzana Licko & Rudy Vanderlans

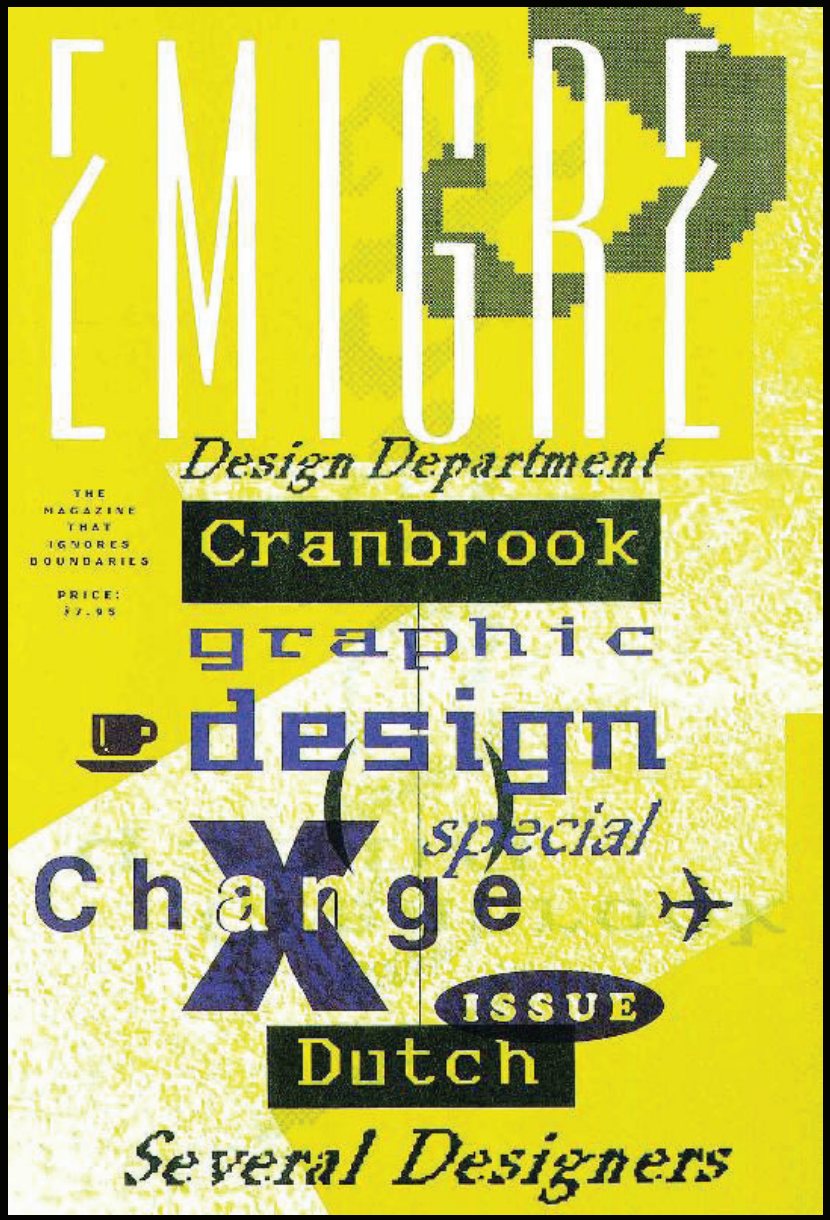
April Greiman, poster for the Los Angeles Institute of Contemporary Art, 1986. Computer output, printed as layers of lavender, blue-gray, red-orange, and tan, overlap and combine into an even fuller palette of color.



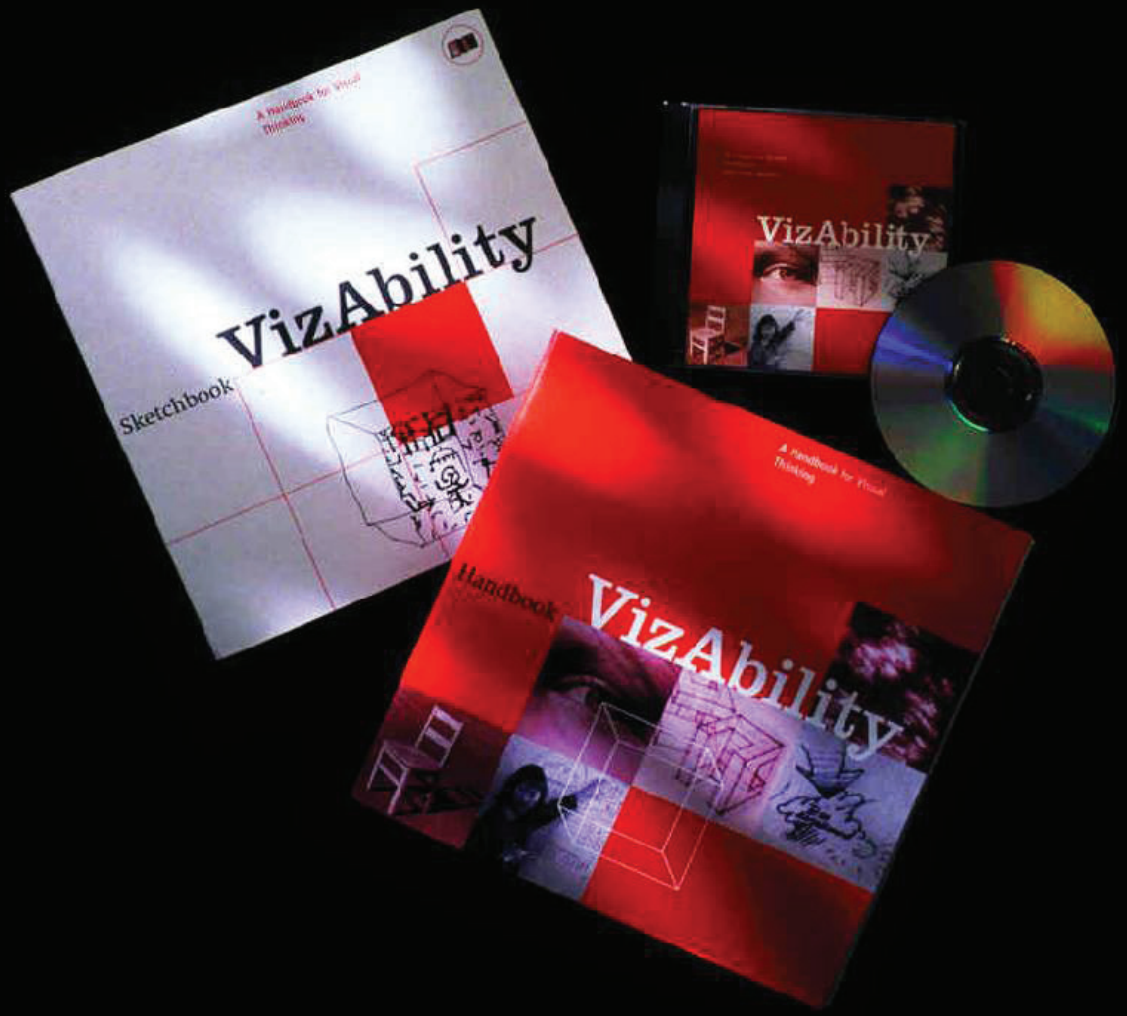
Rudy VanderLans, cover for *Emigre 11* magazine, 1989. Three levels of visual information are layered in dimensional space.



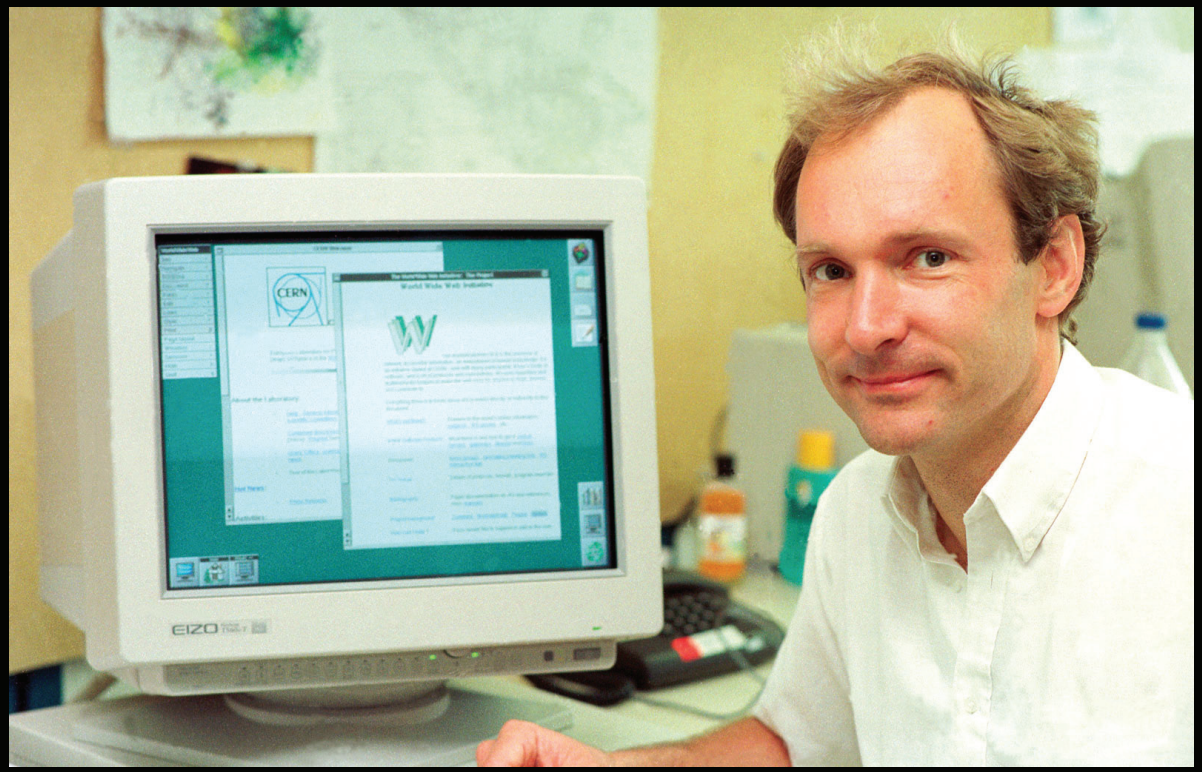
Glenn A. Suokko (designer) and Emigre Graphics, cover for Emigre 10 magazine, 1989. Traditional typographic syntax yielded to an experiment in unconventional information sequencing for a special issue about a graphic design exchange between the Cranbrook and Dutch designers.



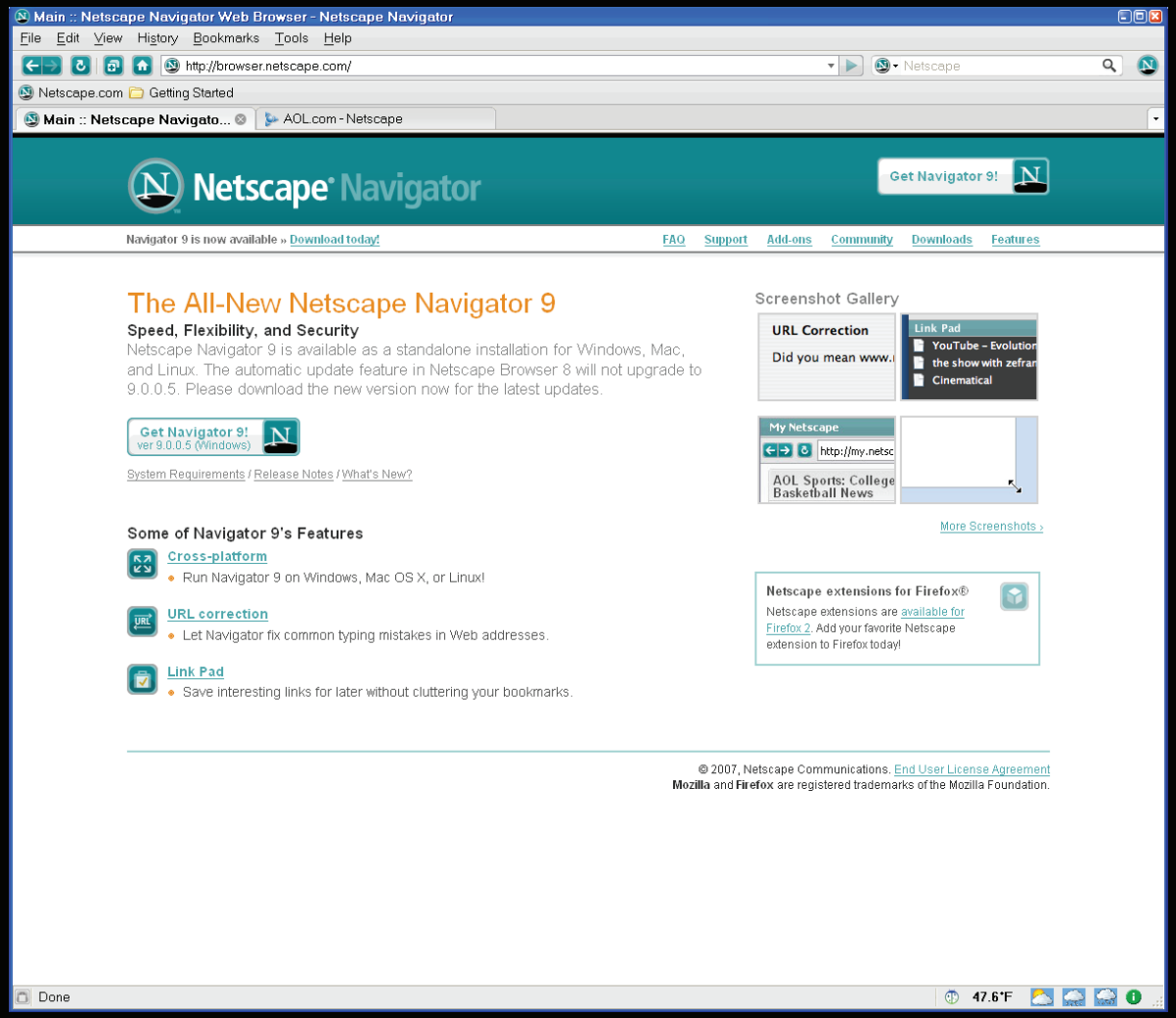
Bill Hill and Terry Irwin (creative directors) and Jeff Zwerner (designer), MetaDesign San Francisco (design firm), VizAbility Interactive CD-ROM, 1995. A coordinated design system unifies booklets, packaging, and screen design.



Tim Berners-Lee



Marc Andreessen's first major commercial graphical browser released in 1994.



Jessica Helfand, Discovery Channel website.