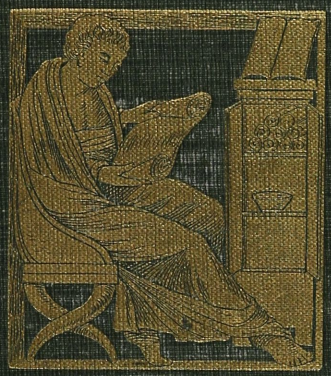
PC
9366
.J 64

LATIN MANVSCRIPTS

HAROLD W. JOHNSTON



THE
JOHNS
HOPKINS
UNIVERSITY
LIBRARY
Founded
1876

BEQUEATHED BY
SAMUEL GRANT OLIPHANT, 1864-1936
FELLOW IN SANSKRIT, 1904-1906; PH. D. 1906;
JOHNSTON SCHOLAR, 1906-1907.

INTER-COLLEGIATE

LATIN SERIES

UNDER THE EDITORIAL SUPERVISION OF

HAROLD W. JOHNSTON, PH. D.

PROFESSOR OF LATIN IN THE UNIVERSITY OF INDIANA

LATIN MANUSCRIPTS

BY

HAROLD W. JOHNSTON

CHICAGO
SCOTT, FORESMAN & COMPANY
1897

The Inter-Collegiate Latin Series

LATIN MANUSCRIPTS

AN ELEMENTARY INTRODUCTION TO THE
USE OF CRITICAL EDITIONS FOR

HIGH SCHOOL AND COLLEGE CLASSES

BY
HAROLD W. JOHNSTON, PH. D.
PROFESSOR OF LATIN IN THE UNIVERSITY OF INDIANA

CHICAGO
SCOTT, FORESMAN & COMPANY
1897

Copyright, 1897, by
SCOTT, FORESMAN & CO.,
CHICAGO, ILL.

BEQUEST OF SAMUEL GRANT OLIPHANT
1937

Replace worn copy

PRESS OF ROGERS & SMITH CO., CHICAGO.

TO

EDWARD B. CLAPP,

PROFESSOR OF GREEK

IN THE UNIVERSITY OF CALIFORNIA.

PREFACE.

DURING the last session of the Summer School of Indiana University I gave a course of lectures to the Teachers' Class on Paleography, Hermeneutics and Criticism. My attention was then called to the fact that even in secondary schools many questions relating to Paleography and Criticism are asked by pupils who find different texts of the same author used in the same class. Some of their text books, too, go so far as to give and discuss various readings of difficult passages, as does Greenough's Cæsar, for example. A wish was therefore expressed by several teachers of Latin that a manual might be published for the use of High Schools, answering the more common questions of this sort. In response to their wish I have prepared this volume. It gives a mere outline of the subjects of which it treats in broad strokes, but contains, I hope, all that students in High Schools and in the lower classes of Colleges will need in order to understand the critical notes found in the text books commonly used by these classes. For University use it should be supplemented by lectures upon the several authors of the sort admirably illustrated by Mr. W. M. Lindsay's *Introduction to Latin Textual Emendation, Based on the Text of Plautus* (New York, 1896).

The elementary nature of this manual excludes references to authorities, but I must mention some of the most important which were used in the preparation of the lectures from which these chapters are condensed. On ancient books the standard work is Birt's *Das antike Buchwesen* (Berlin, 1882). On the book trade in antiquity there are Haenny's *Schriftsteller und Buchhändler im alten Rom* (Leipzig, 1885), and (to be used cautiously) Putnam's *Authors and their Public in Ancient Times* (New York, 1894). On Paleography Thompson's *Handbook of Greek and Latin Palaeography* (New

York, 1893) is the best modern work; to supplement it the best collection of fac-similes of Latin manuscripts is, perhaps, Chatelain's *Paléographie des Classiques Latins* (Paris, 1884, fol.). On Criticism there is a valuable article by Friedrich Blass in Iwan Müller's *Handbuch* (Vol. I, Munich, 1892). For the use of young students teachers will find good material for parallel reading in Gow's *Companion to School Classics* (New York, 1888), from which I have drawn several paragraphs, and in the Dictionaries of Antiquities, under the words *charta*, *codex*, *liber*, *papyrus*, *volumen*, etc.

The illustrations are from the works mentioned above, and from Schreiber's *Atlas* and Baumeister's *Denkmäler*.

The plates are from Chatelain, except that of the Codex Romanus of Catullus, which was furnished by its discoverer, Professor William Gardner Hale, of the University of Chicago.

Besides owing to Professor Hale the privilege of first publishing a fac-simile of a page of the most important Latin manuscript discovered in many years, I am under obligations to Professor Edouard Baillot and Mr. Charles H. Beeson, of this University, and to Dr. Edward Capps, of the University of Chicago, for assistance generously given me.

H. W. JOHNSTON.

INDIANA UNIVERSITY,
Feb. 5, 1897.

TABLE OF CONTENTS.

I. THE HISTORY OF THE MANUSCRIPTS, §§ 1–89.

PAGE

THE MAKING OF THE MANUSCRIPTS, §§ 1–24 13

Writing Materials, § 2. Paper and Vellum, § 3. Papyrus, §§ 4–13. Pens and Ink, § 5. Rolls, §§ 6–8. Reading the Rolls, § 9. Size of the Rolls, §§ 10–11. Preservation of the Rolls, § 12. Parchment, §§ 13–24. Instruments for Writing, § 15. Books (Codices), §§ 16, 17. Odd Forms, § 18. Size of the Books, § 19. Parchment *vs.* Papyrus, §§ 20, 21. Tardy Use of Parchment, § 22. Age of Parchment Books, § 24.

THE PUBLICATION AND DISTRIBUTION OF BOOKS, §§ 25–41 27

The Authors, § 25. Copyright, §§ 26, 27. Plays, § 28. Uncommercial Publications, §§ 29, 30. Commercial Publications, § 31. Process of Publication, § 32. Dictation, § 33. Rapidity of Publication, § 34. Cost of the Books, § 35. Stichometry, § 36. Correctors, §§ 37–39. Titles, §§ 40, 41.

THE TRANSMISSION OF THE BOOKS, §§ 42–67 35

Period Covered, § 42. Period of the Decline, § 43. Public Libraries, § 44. Schools and Universities, § 45. The Classics, § 46. Scholia, §§ 47, 48. Glosses, § 49. The Grammarians, § 50. Opposition to Christianity, § 51. Subscriptions, § 52. Their Value, § 53. Summary, § 54. Lost Works, § 55. The Dark Ages, § 56. Indifference to Learning, § 57. The Church, § 58, 59. The Revival of Learning, §§ 60, 61. Invention of Printing, § 62. Summary, § 63. Editiones Principes, § 64. Ancient Manuscripts, §§ 65–67.

THE KEEPING OF THE MANUSCRIPTS, §§ 68–89 48

Care of the Manuscripts, § 68. Naming of the Manuscripts, §§ 69, 70. Descriptions, § 71. Important Libraries, §§ 72–80. Index to Collections, §§ 78–80. Symbols for the Manuscripts, §§ 81–83. First and Second Hands, §§ 84, 85. Collation of the Manuscripts, §§ 86–87. Uncollated Manuscripts, § 88. Critical Editions, § 89.

II. THE SCIENCE OF PALEOGRAPHY, §§ 90–149.

STYLES OF WRITING, §§ 91–115 61

Scope of the Science, §§ 91, 92. Uses of Paleography, §§ 93, 94. Ancient Forms of Letters, §§ 95, 96. National Hands, § 97. The Majuscules,

§§ 98–107. Capitals, § 100. Specimens: Square, § 102. Rustic, § 103. Uncials and Half-uncials, §§ 104, 105. Specimens: Uncials, § 106. Half-uncials, § 107. The Minuscules, §§ 108–114. Specimens, § 113. Abbreviations, § 114. Summary, § 115.

THE ERRORS OF THE SCRIBES, §§ 116–149 79

The Codex, §§ 116–118. Faulty Copies, § 119. The Classification of Errors, § 120. Unavoidable Errors, §§ 121–124. Intentional Errors, §§ 125–127. Accidental Errors, §§ 128–146. Errors of the Eye, §§ 129–136. Dittography, § 133. Lipography (Haplography), § 134. Skipping, §§ 135–136. Errors of the Memory, §§ 137–141. Transposition, §§ 138, 139. Substitution, § 140. Omissions and Additions, § 141. Errors of the Judgment, §§ 142–146. Wrong Division of Words, §§ 143, 144. Wrong Punctuation, § 145. Interpolation, § 146. Uncertain Sources of Errors, §§ 147–149.

III. THE SCIENCE OF CRITICISM, §§ 150–208.

METHODS AND TERMINOLOGY OF CRITICISM, §§ 150–160 95

Subdivisions of the Science, § 151. The Critical Doubt, §§ 152, 153. Causes of Doubt, §§ 154–158. Kinds of Criticism, § 159. Criterion, § 160.

TEXTUAL CRITICISM, §§ 161–193 100

Apparatus Criticus, § 162. The Manuscripts, § 163. Examination of the Manuscripts, §§ 164, 165. Possible Results, §§ 166–169. Stemmata, §§ 170–172. Uses of the Stemmata, § 172. Ancient Translations, §§ 173–174. Ancient Commentaries, §§ 175, 176. Citations, § 177. Imitations, 178. Use of the Apparatus, §§ 179–187. Relative Worth of Manuscripts, §§ 183–185. Test of Worth, §§ 186, 187. Conjectural Emendation, §§ 188–193. Criticism and Conjecture, §§ 190, 191. Limits of Emendation, § 192. Opposing Views, § 194.

INDIVIDUAL CRITICISM, §§ 194–208 114

Purpose of Individual Criticism, § 195. External Evidence: Manuscripts, § 196. Ancient Writers, §§ 197, 198. Internal Evidence: Historical, § 199. Individuality, § 200. Language and Style, §§ 201, 202. Forgeries, § 203. Tests of Proposed Authors, § 204. Illustration of Proof, §§ 205, 206. Summary, § §207, 208.

DESCRIPTION OF PLATES, §§ 209–224 125

INDEX 132

I.

The History of the Manuscripts.

THE MAKING OF THE MANUSCRIPTS.

THE PUBLICATION AND DISTRIBUTION OF BOOKS.

THE TRANSMISSION OF THE BOOKS.

THE KEEPING OF THE MANUSCRIPTS.

The History of the Manuscripts.

THE MAKING OF THE MANUSCRIPTS.

MANUSCRIPTS and books were formerly studied as a part of Paleography, and were so treated by scholars until very recent times. At the present time separate treatment is given to this subject, although even now it may scarcely be regarded as a distinct branch, or discipline, of Philology. Under this head we have to consider the materials for writing, so far as these have to do with works of formal literature, the manufacture, distribution and sale of books, their destruction and preservation in the dark ages, and their present condition and keeping. 1

WRITING MATERIALS.—We are concerned now with those materials only, by the aid of which the literature of classical antiquity, chiefly Roman, was published to the world and afterwards transmitted to us. Almost all the substances for receiving writing known to the ancients were used at one time or another, for one purpose or another, by the Romans. Some of these were merely the makeshifts of rude antiquity and antedated all real literature, as, *e. g.*, bark and leaves of trees, skins or tanned hides of animals, and pieces of linen cloth: all these are mentioned in works of literature, but none were used to receive them. Others, such as stone, metal tablets, coins, etc., have preserved inscriptions of great importance to the study of antiquity and therefore of great interest to philologists, but belong rather to Epigraphy and Numismatics than to our present subject. Of more general use than any of these were the tablets covered with wax, which are mentioned so frequently by Cicero, and were used as late as the fourteenth century; even these are excluded, however, by our definition, as they were at best used for merely the rough drafts of literary compositions. For the publication of works of literature in classical times 2

the one recognized material was Papyrus, and for their further transmission to our times Parchment alone need be considered.

3 PAPER AND VELLUM.—While parchment (vellum) was known to the classical writers, and perhaps used to a limited extent instead of the bulky tablets, and while papyrus (paper) was occasionally used for works of literature until the seventh century and for correspondence until the thirteenth century, their general relation to each other is correctly given above: papyrus was the standard commercial material at the time when the classics were written, and the tough parchment, upon which these works were copied centuries after their authors had passed away, has preserved these works to us, and is the material of the manuscripts with which modern scholars work. To Cæsar and Cicero, for example, a parchment book would have been as great a curiosity as are to us the papyrus rolls that have lived through the centuries. This distinction is of great importance to the further study of this subject.

4 PAPYRUS.—The manufacture of papyrus from the reed of the same name, which was known to the Egyptians from very ancient times, reached its height in that country under the earlier Ptolemies (third century B. C.), and was improved and perfected in Rome. Ennius (239–170 B. C.) is the earliest Roman writer to mention the material and is supposed to have been the first to use it for literary purposes. The papyrus reed has a jointed stem of triangular shape, five or six inches in diameter, and grows to a height of six or eight feet. The paper (*charta*) was made of the pith by a process substantially as follows: Strips of the pith as long as the joints would permit were cut as thin as possible and arranged side by side, as closely as possible, upon a board. Across these at right angles other strips were laid in the same manner, with perhaps a coating of paste or gum between the two layers. The strips were then thoroughly soaked in water, and pressed or

hammered into a substance not unlike our paper. After this substance had been dried, and bleached in the sun to a yellowish color, the sheets were rid by scraping of any irregular or rough places that remained, and were trimmed into uniform sizes depending, of course, upon the length of the strips of pith which com-

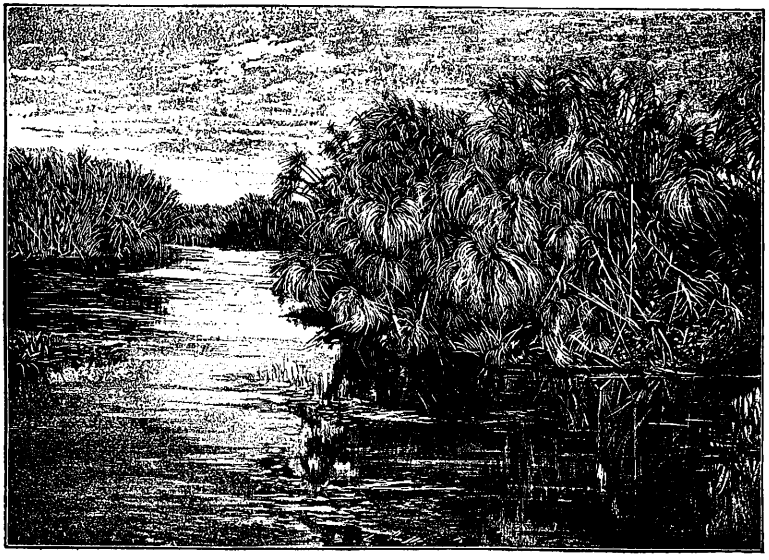


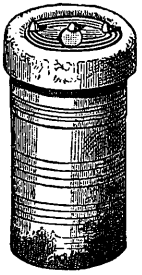
FIG. 1. PAPYRUS PLANTS.

posed them. According to Pliny (23–79, A. D.) the quality of the sheets, which were sold under eight or nine special names, varied with their width. Sheets of the best quality were about ten inches wide, while the inferior sorts decreased to a width of six inches or less. The height of the sheets varied from seven and a half inches to twelve or thirteen.

PENS AND INK.—Only the upper surface of the sheet was com- 5
monly written upon, the surface, that is, formed by the horizontal layer of strips, and these, showing even after the process of manu-

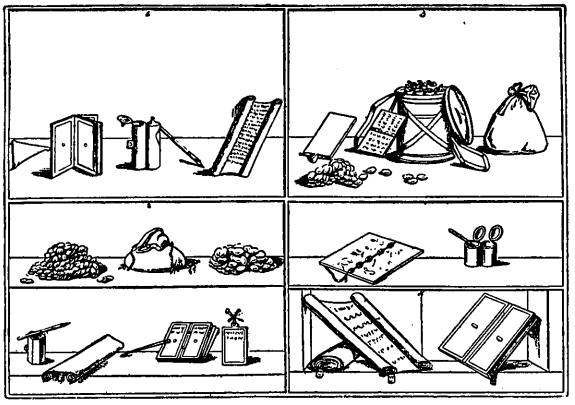
INKSTANDS.

PENS, PEN-CASE AND CRAYON HOLDERS.



INKSTAND.

BRONZE STILUS.



VARIOUS WRITING MATERIALS FROM WALL PAINTINGS.

FIG. 2. INSTRUMENTS USED IN WRITING.

II. Cicero: *Schedae Vaticanae, Saec. IV–V.*

facture, served to guide the pen of the writer. The pen (*calamus* or *calamus scriptorius*) was made of a reed, and was shaped to a coarse point and cleft with a knife much as our quill-pens used to be. Quill-pens are first mentioned by Isidorus († 636 A. D.), a bishop of Seville, and cannot have been known to the classic writers. Metal pens, of one piece with the holders, were also used in ancient times, but cannot be accurately dated. The ink (*atramentum*) for papyrus was made of soot mixed with glue and thinned with water or vinegar. It was more like paint than ink, and was easily removed when fresh with a damp sponge which the writer kept by him for the correction of mistakes. Even when the ink had become dry and hard it could be washed (not scraped) away sufficiently to fit the sheet for use a second time. A sheet thus used a second time was called a palimpsest (cf. *liber palimpsestus* below), but its use was a mark of poverty or niggardliness (Cic. Fam. VII, 18). Of course the reverse side of *chartæ*, which had served their purpose, was often used for scratch paper, as old letters and envelopes are used to-day, and rare instances are known of the original writing covering both sides of the sheet.

BOOKS.—A single sheet of papyrus might serve for a very 6
brief document, such as a short letter, but for literary purposes many such sheets would be necessary. These were not fastened side by side into a book, as are the separate sheets in our books, or numbered and placed loosely together, as we arrange them in our letters or manuscripts. The papyrus book was really a roll as its Latin name (*volumen*) implies, made up of the necessary number of sheets glued together at the sides (not at the tops), with the lines upon each sheet running parallel with the length of the roll, and with each sheet forming a column perpendicular to the length of the roll. It was necessary, therefore, to leave on the side of the sheet as it was written a broad margin, and these

margins overlapping each other and glued together made a thick blank space (*i. e.*, a double thickness of papyrus) between the
7 columns. When the sheets had been securely glued together in their proper order, a thin slip of wood was glued to the left edge, or margin, of the first sheet, and a second like slip (*umbilicus*) was attached in the same way to the right edge of the last sheet, much as a wall map is mounted at the present time. The *volumen* was then rolled tightly around the wood attached to the last sheet, the top and bottom (*frontes*) of the roll were trimmed smoothly and polished with pumice stone, and the roll was rubbed with cedar oil to protect it from worms and moths. For purposes of ornament the *frontes* were sometimes painted black, and knobs, often painted or gilded, were added to the *umbilicus* upon which the volume was rolled, or the *umbilicus* itself was made long enough to project beyond the *frontes* and was carved at its extremities into horns (*cornua*). Even illustrations were not unknown; at least a portrait of the author sometimes graced the first page of the roll, and it is barely possible that the portraits found in late manuscripts may be copies of these and entitled to
8 more respect than is usually paid them. To the top of the roll, that is, to the top of one of the sheets (probably the last), was attached a slip of parchment (*titulus*) upon which was written the title of the work with the name of the author. For each roll a parchment case was made, cylindrical in form, into which the roll was slipped from the top, and above which the *titulus* was visible. If a work was divided into several volumes (see below) the rolls were put together in bundles (*fasces*) in a cylindrical wooden box (*capsa* or *scrinium*) with a cover, like a modern hat box, in such a way that the *tituli* were visible when the cover was removed.

FIG. 3. CASE FOR ROLLS (CAPSA).

READING THE ROLLS.—When a volume was consulted the roll was held in both hands and unrolled column by column with the right hand, while the left rolled up upon the other slip of wood the part that was already read. When the reader had finished, it was customary to roll the volume tightly upon the *umbilicus* by holding the roll beneath the chin and turning with both hands. In the case of a long roll this turning backwards and forwards must have required much time and patience, and at the same time must have sadly worn the roll itself. These considerations bring us naturally to the size of the rolls. 9

FIG. 4. READING A ROLL.

SIZE OF THE ROLLS.—Theoretically there was no necessary limit to the number of sheets that could be glued together, and consequently none to the size, or length, of the roll: all depended upon the taste or caprice of the writer. We should suppose that the author would naturally take as many sheets as were necessary to contain his work and make them into one roll, and this was undoubtedly the early custom. So we find that in ancient Egypt rolls were put together of more than one hundred and fifty feet in length, that in Greece the complete works of Homer and Thucydides were written upon single rolls (that for Thucydides according to careful calculation must have been fully two hundred and forty feet long), and that in Rome the Odyssey of Livius Andronicus (third century B. C.) was originally contained in one roll. Such rolls were found in the course of time to be inconvenient to read and liable to break and tear from their own bulk. The Alexandrian scholars (about the third century B. C.) were the first to devise a better plan, and introduced the fashion of dividing literary works of considerable length into two or more parts, or 10 11

"books," each of which was written upon a separate roll. So sensible a plan was sure to be followed in time by authors generally, but its adoption was compelled, or at least hastened, by an innovation on the part of the manufacturers of papyrus, who began to sell their product not in single sheets, but in ready-made rolls of convenient lengths. These rolls varied in length according to the style of compositions for which they were intended: rolls intended, *e. g.*, for poems and collections of letters were shorter than those intended to receive historical and scientific works. Of the former the roll would receive about one thousand lines, of the latter about twice as much. Authors had now to adapt their works more or less to an arbitrary standard, sometimes perhaps to the detriment of the quality of their writings (Martial I, 16), and some ancient works were divided for republication into "books" which had not been so divided by their authors, *e. g.*, Herodotus, Thucydides and Xenophon among the Greeks and Nævius (Suet. De Gram. 2) among the Romans.

12 PRESERVATION OF THE ROLLS.—The number of papyrus rolls preserved to us is quite considerable, although none of them contain any complete Latin work of importance and most of them are in a badly damaged and fragmentary condition. There are large collections, owned by the state, in London, Paris, Berlin, Naples and Vienna. Most of them came from Egypt, but many were found in 1752 in the ruins of Herculaneum so badly burned that they were taken at first for charcoal and have not yet been fully deciphered. Of all that are preserved to us the oldest is at Paris, and was written fully twenty-five hundred years before Christ, while the most important perhaps is one containing a copy of Aristotle's Constitution of Athens, a work which had been totally lost for over a thousand years. This roll came into the possession of the British Museum in 1890, and contained the accounts of a farm bailiff, or steward, in Egypt, rendered in the reign of

Vespasian, 78–79 A. D. On the back of this worthless document some unknown scholar had written, or caused to be written, a copy of this work of Aristotle for his own use. This recovery of a lost classic of such traditional fame is one of the most notable events of the sort of the nineteenth century, and gives new hope of regaining from the tombs of Egypt other works of Greek and Roman writers, which scholars have given up as lost forever. Should this hope be realized parchment may have to yield to papyrus its claim to the honor of preserving to us the literature of classical antiquity (§ 3).

PARCHMENT OR VELLUM.—It has been remarked above (§ 2) 13
that the use of skins or hides to receive writing was not unknown to the Romans before the dawn of literature: we are told by Dionysius († 7 B. C.) that the treaty between Tarquinius Superbus and the people of Gabii (Livy I, 54) was written upon a leather covered shield. The revival of this ancient material after papyrus had been introduced was due to an improvement in the treatment of the skins which made it possible to write on both sides of them. Pliny (23–79 A. D.) asserts upon the authority of Varro (116–28 B. C.) that this improvement was made in the reign of Eumenes II (197–159 B. C.), King of Pergamum in Asia Minor, and was due to the rivalry between the libraries at Alexandria and Pergamum. The King of Egypt, he says, tried to 14
embarrass the rival library by forbidding the exportation of papyrus, and the scholars of Pergamum were driven to invent a substitute. The story is untrue, but shows that in Varro's time Pergamum was noted for its parchment (*membrana*) and explains the name by which the material came to be known in much later times, *pergamena*, from which our own word parchment (see Webster) is derived. Parchment was known to the Romans at an earlier date even than Varro's story would imply, but was used merely for temporary purposes side by side with the wax-tablets,

because the form (see below) was more convenient than the papyrus roll, and the writing could be easily and repeatedly erased.

15 INSTRUMENTS FOR WRITING. — The parchment, unlike the papyrus (§ 5), had to be ruled to insure straight lines. For this purpose the position of the lines was marked with a pair of dividers by means of punctures on both sides of the page, and the lines were drawn with the aid of a ruler and a bodkin (*stilus*). Sufficient pressure was put upon the *stilus* to cause the line to show through upon the reverse side (where it would be raised above the surface), and to save the trouble of repeated measurements and rulings several sheets were often laid one upon another and all ruled at once. The pen was the same as for papyrus, but the smoother surface of the parchment made it possible to use a sharper point, and as a result to make finer strokes and get more letters into a line. The ink for papyrus was not suitable for parchment, and recourse was had to gallnuts, which contain tannin, and are still used for making inks and dyes. Vitriol was added in later times and heat applied (*encaustum*, whence the Italian *inchiostro*, French *enque*, *encre*, and English *ink*). Various colors were manufactured, of which black was used for ordinary purposes, and for ornament red and gold. The parchment *tituli* (§ 8) for papyrus rolls were in red.

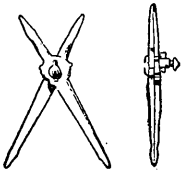


FIG. 5. DIVIDERS FROM POMPEII.

16 PARCHMENT BOOKS.—As the parchment could be written upon on both sides, the sheets were put together as are the sheets of paper in modern books. This form resembled that of the wooden tablets covered with wax, and hence the parchment book received the same name, *codex* (originally, "a block of wood"). The sheets were of various sizes, but the most common dimensions were such as to give a page of what we now call quarto size, being about as wide as long. As the flesh side of the parchment

was almost white and the hair side a light yellow, care was used in arranging the sheets. Ordinarily the book was made up of quires of eight leaves (sixteen pages), composed of four folded sheets. The first of the four sheets was laid with the flesh side

FIG. 4. BOOKCASE AND WRITING MATERIALS.

down, upon it the second with the hair side down, the third as the first and the fourth as the second. These were then folded down the middle, and the quire was ready for ruling as explained above. When a quire was arranged in this way the colors of every two adjacent pages would be the same, no matter

where the book was opened, and the loss of a sheet would
17 be at once detected by a difference in the color. The sheets were sometimes arranged in quires of three, five and even ten sheets. The quires composing a book were lettered consecutively to assist their arrangement in the proper order, and sometimes the pages of the several quires were numbered. The writing was done after the quire was put together, vertical lines being ruled upon the page to keep the horizontal lines of the same length and to insure a uniform margin. The writing sometimes ran across the full page, exclusive of these margins, but was more frequently arranged in narrow columns, usually two to the page, but sometimes three or even four. When the work was finished the quires were stitched or glued together, and the book thus formed, if intended to be preserved, was protected by a covering of the same material, not unlike our own flexible bindings.

18 Odd Forms.—Mention is made occasionally by good authorities of parchment books put up in rolls like papyrus, and conversely we know that papyrus sheets were sometimes stitched or glued together in codex form, strengthened in rare instances by the insertion of parchment leaves. Such arrangements were probably merely the caprice of the writer, and are not to be considered even a passing fashion.

19 Size of the Codex.—The parchment was so thin and light that a single codex could contain the complete works of an author, or even of several authors, that in papyrus form had to be divided into several rolls: all of Vergil, *e. g.*, made a codex of very convenient size, and Catullus is commonly joined with some other author or authors.

20 Parchment vs. Papyrus.—The superiority of parchment over papyrus is obvious: it was more durable and did not become frayed at the edges; both sides were available; more words could be written in a line of the same length; works of large compass could be comprised within a codex of moderate size; the codex could be read more easily and consulted more conveniently, with

no time to be lost in rolling it up and restoring it to its cover; besides, as it would lie open of itself, the hands of the reader were free to copy from one codex to another, if he pleased, without assistance.

Despite these numerous and manifest advantages, parchment 21
was slow to supersede papyrus. In classical times it was used merely for accounts, notes, letters, etc. Martial (40–102 A. D.) is the first to mention parchment copies of works of literature, and even his words (XIV, 184, 186, 188, 190, 192) are not decisive in the opinion of certain scholars. The fates seem to have decreed that papyrus should be the perishable material for pagan literature, and parchment reserved for the Christian world. We find, as a matter of fact, that Bibles were early written in the codex form, and that the works of bishops and saints were soon spread upon the same material. The great law books, following upon the compilations of Theodosius and Justinian, demanded a more convenient form than the *volumen*, and seem to have been published from the first as codices. The law and the gospel! Next came what we call the great classics, that is, the choicest works of Greek and Roman literature, and from the third century of our era parchment was the favorite for current publications. By the seventh century papyrus had practically retired from the field (§ 3).

TARDY USE.—The slowness of parchment to supplant papy- 22
rus is not satisfactorily accounted for by the natural conservatism of the Romans. It can be explained, perhaps, by supposing that parchment was much more expensive than papyrus, but no proof can be adduced to support this supposition. In fact, what little we know of the relative price of the two substances seems to indicate that papyrus was more expensive than parchment. The real reason is yet to be discovered.

PALIMPSESTS.—The word palimpsest has been explained already 23
(§ 5). It has also been remarked (§ 14) that parchment was used at first for note books and memoranda because the sheet could be cleaned easily and used repeatedly by washing off the writing

when it had served its purpose. This statement is true only of the inferior ink employed in earlier times. As the ink was gradually improved in course of time (§ 15), it became almost indelible, especially when fixed by age, and even rubbing and scraping, to say nothing of washing, failed to remove all traces of the earlier writing. In such cases the second copy was sometimes written between the lines of the older copy, and both writings may now be read under favorable circumstances. This fact is of great importance to scholars, as will be explained hereafter. A book thus rewritten is called *liber palimpsestus* or *codex rescriptus.*

24 AGE OF PARCHMENT BOOKS.—From the history of the introduction of parchment (§ 13) it will be understood that the oldest parchment books (*codices*) which we possess are of a very late date as compared with the papyrus rolls (*volumina*) which are still extant (§ 12). Our very oldest codices do not go back beyond the third or fourth century of our era, and very few are older than the ninth. This will be considered more fully hereafter.

III. Terence: *Bembinus, Saec. IV–V.*

THE PUBLICATION AND DISTRIBUTION OF BOOKS.

THE AUTHORS.—The men whose names are famous in the 25
history of Roman literature may be divided into two classes. Some were men of high position in society and in the state, to whom literature was but one form of a many sided activity: such men are Cæsar and Cicero and Sallust. Others are persons of distinctly inferior station, freedmen perhaps, or sons of freedmen, who won their bread by their pens: such persons are Terence and Vergil and Horace. One fact in regard to the authors of the second class forces itself at once upon our attention: Each is attached to some powerful friend, to whom he seems to owe all his material prosperity. This fact is the more striking, because the works of many authors of this class, of all of those whom we have directly mentioned, were widely read during their lifetime, and must have had a ready sale and considerable market value even then. We should expect such poets as Horace and Vergil to have had a generous income independent of the bounty of their patrons. It seems to have been otherwise.

COPYRIGHT.—The natural inference is that the author had 26
little pecuniary interest in the sale of his works. There is no direct evidence, *i. e.*, no statement in the works of such authors, to support this assertion, but there is none to controvert it. As each copy of a book was made by itself, page by page, with pen and ink, as no costly plant was necessary to multiply these copies, and no special skill, it is hard to see how the author could retain any control over the reproduction of a work when it had once got into circulation. Even in our day any one may make a manuscript copy, or any number of them, of any book which he is unable to buy, whether the author likes it or not. This seems

to have been the case in Rome, and this state of helplessness fully accounts for the dependence of the poet upon the patron, and the absence of any feeling of shame or degradation, on the
27 part of the dependent. The first copy of his book he could sell, or as many copies as he could make, or have made, before any left his possession, but these would at best be very few. That even this chance, poor as it was, was precarious is shown by the theft of Cicero's *De Finibus* (Att. XIII, 21, 4 and 5) in advance of publication. Worse than this, the hapless author had not even the privilege of deciding whether a book that he had written should be published or not: at least Ovid declares (Trist. I, 7) that he had intended to destroy his Metamorphoses, but the work was published from copies taken by his friends without his consent or knowledge. Cicero let the first draft of his Academica get out of his possession while he was considering a different form for the treatise, and the consequence was that two very different versions were circulated at the same time.

28 PLAYS.—The fact that a dramatist received pay when one of his plays was presented at the public games has nothing to do with the question of property rights in works of general literature. As a matter of fact the attacks made upon Terence by rival dramatists show that they were acquainted with his plays before they were put upon the stage, and justify the suggestion that they may have been in more or less general circulation for the purpose of private reading.

29 UNCOMMERCIAL PUBLICATION.—Every Roman of position kept in his employ several trained scribes (*librarii*), usually slaves or freedmen and often highly educated and accomplished, who served him as amanuenses, secretaries, etc. Under the Republic the author must have had his book copied by these *librarii*, either his own or his patron's. Many of these copies would be intended for dedication or presentation purposes, but some would find their way into the market. These were sold in book shops (*tabernæ librariæ*, Cic. Phil. II, 9, 21), which were set up in Rome long

before there was any organized publishing business. The first impulse toward such an enterprise may have been given by the bringing to Rome by Sulla and Lucullus of whole libraries from Greece and Asia Minor. It at once became the fashion to make large collections of books, and in Cicero's time no house was complete without a spacious library fully stocked with books, although the owner was often wholly ignorant of their contents. Cicero had great numbers of books not only in his house at Rome, but also at each of his half dozen country-seats. He was assisted in collecting them by his friend T. Pomponius Atticus, a man noted as much for his love of literature and learning as for his vast wealth **30** and far reaching business enterprises. He seems to have had a commission from Cicero to buy for him every book that could be bought, and to make copies of those that were valuable or rare. Atticus had numerous *librarii* (Nepos XXV, 13, 3), and these he employed also in making copies of Cicero's works and of such others as Cicero recommended to him. All these he sold to good advantage (Att. XIII, 12, 2), but the gain was merely incidental and by no means the object he had in view. His success, however, added to the constantly increasing demand for books, seems to have led to the establishment of the business upon a commercial basis, and in so far as this is true it is permissible, perhaps, to speak of Atticus as the first of Roman publishers.

COMMERCIAL PUBLICATION.—Under the Empire the business **31** seems to have reached large proportions almost at a stride. The publishers were at the same time wholesale and retail dealers in books. Their establishments were found in the most popular and generally frequented parts of Rome, were distinguished by the lists hanging by the door of books kept for sale, and soon became the resort of men of culture as well as of those who sought merely after the novel and the entertaining. Even under Augustus (29 B. C.–14 A. D.) the works of Roman authors were read not only

in Italy but also in the provinces, and even crossed the sea. Public libraries were established in many places, and in the schools the antiquated works that had been the text books for generations (*e. g.*, the Twelve Tables and the translation of Homer by Andronicus) began to give place to those of contemporary authors.

32 PROCESS OF PUBLICATION.—It is evident that the publisher had no more control over works once in circulation than the author had (§ 26), and he must therefore have relied upon the elegance, correctness and cheapness of his editions of the classics to insure their sale, and in the case of a new work upon the quickness with which he could supply the demand. The general process was something like this: The book to be copied, furnished by the author if a new work, bought or borrowed or hired (see below) if an old one, was read to the scribes, some of which were the slaves of the publisher and others perhaps hired for the occasion, but all trained copyists. Other slaves arranged the sheets in the proper order as fast as they were written, pasted them together (Cic. Att. IV, 4 b.), mounted them and supplied them with their parchment *tituli* and cases (see § 7). Errors were then corrected and the book was ready for sale.

33 DICTATION.—No ancient authority can be quoted in support of the statement that the books were copied from dictation, but this must have been the case in all large establishments. To say nothing of the fact that even private letters were usually dictated, and of the difficulty of managing the roll, which served for copy, while writing (§ 20), the slowness of the other method, if but few slaves were employed, and the impracticability of furnishing copy to a large number without great loss of time, seem enough to justify the statement. In later times, especially during the middle ages, the scribes worked independently.

34 RAPIDITY OF PUBLICATION.—Cicero tells us (Pro. Sulla, XIV, 42) that Roman senators could write fast enough to take down evidence *verbatim*, and the trained scribes must have far surpassed them in speed, even if the system of shorthand often mentioned

FELICES OPERVM QVI NTAMI FVGE PALLIDVS TIORCVS
FVMENI DESQVE SATAE TVMPARTVE RRANEE ANDO
COEVMQVE LAPETVMQVE CREAT SAEVOMQVE TYPHOEA
ET CONIVRATOS CAELVM RESCINDERE FRATRES
TERSVNI CONATI IN PONERE PELIO OSSAM
SCILICET ATQ OSSAE FRONDOSVM IN VERTERE OLYMPVM
TERPATER EXTRVCTOS DISIECIT FVLMINE MONTIS
SAEPTIMA POST DECIMAM FELIX ET PONERE VITEM
ET PRENSOS DOMITARE BOVES ET LICEATE LAE
ADDERE NONA FVGAE MELIOR CONTRARIA FVRTIS
MVLTA DEO GELIDA MELIVS SE NOCTE DEDERE
AVICVM SOLE NOVO TERRAS IN RORATE OVS
NOCTE LEVES MELIVS STIPVLAE NOCTE ARIDA PRATA
TONDENTVR NOCTIS LENTVS NON DEFICIT VMOR
ET QVIDAM SEROS HIBERNI DIVM INISIGNES
PERVIGILANT FERRO QVE FACES INSECATA ACVTO
INTERE A LONGVM CANTVS OLATA LABOREM
ARGVTO CONIVNX PERCVRRIT PECTINE TELAS
AVT DVLCIS MVSTI VVLCANO DECOQVIT VMOREM
ET TOLLIT SVNDAM TEPIDO DE SPVMATA FENI
AT RVBICVNDA CERES MEDIO SVCCIDIT VRAE SIV
ET MEDIO TOSTA AESTVT FRVTA REAERVGES
NVDVS ARA SERENVDVS HIEMEM SIGNAVA COLONO

I. VERGIL: *Palatinus, Saec. IV–V.*

by ancient authorities was not used for books intended for general circulation. Martial tells us (II, 1, 5) that his second book could be copied in an hour. It contains ninety-three epigrams amounting to five hundred and forty verses, which would make the scribe equal to nine verses to the minute. It is evident that a small edition, one, that is, not many times larger than the number of scribes employed, could be put upon the market much more quickly than it could be furnished now. When the demand was great and the edition large (Pliny, Ep. IV, 7, 2, mentions one of a thousand copies) the publisher would put none on sale until all were ready, thus preventing rival houses from using one of his books as copy. If he overestimated the demand, unsold copies could still be sent to the provinces (Hor. Ep. I, 20, 13) or as a last resort be used for wrapping paper (Mart. III, 2).

Cost of the Books.—The cost of the books varied, of course, **35** with their size and with the style in which they were issued. Martial's first book, containing eight hundred and twenty lines and covering twenty-nine pages in Teubner's text, was sold (Mart. I, 66; 117, 17) at thirty cents, fifty cents, and one dollar; his Xenia, containing two hundred and seventy-four verses and covering fourteen pages in Teubner's text, was sold (XIII, 3) at twenty cents, but cost the publisher less than ten. Such prices are hardly more than we pay now. Much would depend of course upon the demand, and very high prices were put upon particular copies. Gellius (II, 3, 5) mentions a copy of Vergil, supposed to be by his own hand, which had cost the owner over one hundred dollars, and copies whose correctness (see below) was attested by some good authority were also highly valued. The same circumstances would increase the price of modern books materially.

Stichometry.—The ancients did not measure their books, as **36** we do, by the pages, but by the verse in poetry and the line in prose, and the number contained in the work was written at the

end of the book. The Alexandrian librarians seem to have entered the number along with the title of the work in their catalogues, and to have marked the number of lines, at every fiftieth or hundredth line, in their copy of the book. This system of measurement was carefully employed by the publishers, and furnished an accurate standard by which to fix the price of the book and the wages of those scribes who were not slaves. For this purpose they selected the hexameter verse as the unit for poetry, and as its equivalent in prose a line of sixteen syllables or thirty-five letters. This standard line, were it actually written, would require one of the broader sheets mentioned above (§ 4), but such a sheet was not necessary and perhaps not usual. It was merely necessary to find the ratio of the line actually written to the standard line, for the scribes were careful to keep their lines of the same length, and the number of lines on the page constant, throughout the work upon which they were engaged. Frequently we find the number of lines written very much greater than the number registered at the end of the roll, because the page was too narrow to contain the standard line from which the registered number was calculated. We do not know the price paid for ordinary works of literature.

37 CORRECTORS.—The very rapidity with which the scribes worked would lead us to look for many mistakes in their copies, and from the earliest times authors and scholars have complained of their blunders. Cicero says (Q. Fr. III, 5, 6) that he knows not where to turn for books: they are written so badly and put upon the market with so many imperfections. He took every precaution to have his own books as free from errors as possible. His famous freedman, Tiro, read the copy carefully before it was sent to Atticus, and Atticus had each book examined and corrected before it passed out of his keeping. Even after the earlier copies were sent out he introduced improvements in the later editions at Cicero's suggestion.

Similar precautions were taken by at least the best commercial 38
houses. They had competent correctors in their employ, but as each copy had to be examined independently, the labor was far greater than that of the modern proof-reader, and the results much less satisfactory. Martial (II, 8) warns his readers that the errors which they may detect in his books are to be ascribed to the publisher, not to him, and elsewhere (VII, 11) he gives us to understand that authors corrected with their own hands the copies which they presented to their friends (cf. Gell. II, 3, 5). Quintilian prefaces his Institutions with a letter to his publisher, begging him to issue the work as free from blunders as he can, and Irenæus, bishop of Lyons, 177 A. D., urges that each copy of his work be compared with the original.

Persons buying books sometimes had them examined first by 39
a competent critic (Gell. V, 4, 2), or corrected by comparison with a copy known to be accurate. Such standard copies were not always to be had, but were consulted if possible to decide disputed readings (Gell. I, 7), and were sometimes hired for this purpose (Gell. XVIII, 5, 11) at large expense. It is beyond question that errors in the codices of later times, which have descended to us, are in some cases derived from blunders made at the time when the books were first published.

TITLES.—As in the papyrus roll the title was no part of the 40
work itself, but rather of the mounting (§ 8), so in the later parchment codex it was the ancient custom to write the title, together with the number of the lines (§ 36), at the end, instead of at the beginning where we should look for it. This must be explained, of course, from the standpoint of the scribe, who was concerned only with what he had written and how much, and left the purchaser to mark the volume or leave it unmarked at his pleasure. The manuscripts of the middle ages usually have the title both at the beginning and at the end of the book, frequently

adding a word of good omen (*feliciter*), or an expression of gratification at the conclusion of the task (see Plate VIII). These titles vary greatly in different manuscripts of the same work, sometimes even in the same manuscript, and suggest that the classic writers were far less anxious about getting good titles for their works than modern authors are, and may perhaps have pub-
1 lished them without any formal titles at all. Cicero refers to his essay on Old Age indifferently as the Cato Maior (Off. I, 42, 151) and De Senectute (Div. 2, 3). If Macrobius (Sat. I, 24, 11) is to be trusted, Vergil seems to have spoken of the Aeneid by its hero's name *Aeneas* (cf. Hamlet, Ivanhoe, etc.). Sallust's monograph on the Conspiracy of Catiline is called in the best manuscript *Bellum Catulinarium* at the beginning and *Bellum Catilinae* at the end. Quintilian (35–100 A. D.) calls it *Bellum Catilinae*, and so does Nonius (beginning of fourth cent.); Servius (end of fourth cent.) has the shorter title *Catilina* (cf. *Aeneas* and *Cato Maior* above), Priscian (sixth cent.) has *Bellum Catilinarium*, and in other ancient authorities we find *Historia Catilinae*. The best form nowadays is *Bellum Catilinae*, which is rapidly driving out the *De Coniuratione Catilinae Liber* of our school books, just as *Belli Gallici Liber I.* (*II.*, *III.*, etc.) is displacing the *Commentarius De Bello Gallico Primus* (*Secundus*, *Tertius*, etc.) familiar to us all. No title is absolutely certain.

imperarat ignib; significatione facta exceptis castellis eo concur
sum est pugnatum que ab hostib; ita acriter est. ut a uiris fostib; in ex
trema spes salutis in iniquo loco contra eos qui ex uallo turrib; que te
la iacerent pugnari debuit. cum in una uirtute omnis spes salutis
consisteret, occisis ad hominũ milib; quatuor. reliqui in oppidum
receduntur, post tridie eius diei refractis portis. cũ iam defendere
nemo. atq; intromissis militib; nostris. sectionẽ eius oppidi uniuer
sam caesar uendidit, ab his qui emerant. capitum numerus ad eũ rela
tus est. milium quinquaginta trium; eodem tempore. a publio crasso quem
cũ legione una miserat ad uenetos. unellos. osismos. curiosolitas. esu
uios. aulercos. rhedones. quae sunt maritimae ciuitates. oceanum
que attingunt certior factus est. omnes ea ciuitates in deditionẽ po
testatẽ que. p. r. se redactas; his reb; gestis. omni gallia pacata tan
ta huius belli ad barbaros oppinio perlata est. uti ab his nationib; quae
trans rhenũ incolerent. mitterentur legati ad caesarẽ. qui se obsides
daturas. imperata facturas polliceren tur; quos legationes caesar. qd
in italiã illyricũque properabat in ita proxima aestate. ad se reuerti
iussit, ipse in carnutes. ad des turones q; quae ciuitates. proxim q; his locis
erant ubi bellũ gesserat. legionib; in hibernacula deductis. in italiã
profectus est; obeisque rebus ex litteris caesaris dies quindecim supplicatio
decreuerũt. quod contigit idem pus accidit nulli; Julius celsus cons
tantinus. uc legi. Flauius Liberius Firmiuus. Lupicinus.
Legi. belli gallici. lib. secundus explicit.

Incipit Liber iii feliciter.

Cum in italiã proficisceretur caesar. seruium galbã cũ legione xcii.
et parte equitatus in nantuatis. uera gros. sedunos que misit. qui

IV. Cæsar: *Parisinus 5763, Saec. IX–X.*

THE TRANSMISSION OF THE BOOKS.

THE PERIOD COVERED.—The creative genius of the Romans ends, so far as literature is concerned, with the reign of Trajan (97–117 A. D.). From this time until the invention of printing the preparing and publication of books did not vary from the methods described above, except so far as the parchment codex differed in form from the papyrus roll. During this period of about thirteen centuries we have now to consider the fates of the published works, or in other words of the manuscripts that contained them: the means that were taken to preserve them, how they were lost, and then after nearly a thousand years partially recovered. This period may be naturally divided into three very unequal portions: 1. The Period of the Decline, extending roughly to the Germanic invasions of about the fifth century; 2. The Dark Ages, extending to about the thirteenth century; 3. The Revival of Learning. It must be remembered that we are concerned with the social, political and literary history of these times so far only as it relates to the Transmission of the Manuscripts. 42

THE PERIOD OF THE DECLINE.—It is a fact well known to all students of literature that at the time when genius is least productive and originality most torpid the masterpieces of an earlier day will be most carefully studied and appreciated. This is eminently true of Roman literature: its darkest period saw the establishment of public libraries, the growth of schools and universities on humanistic lines, the rise of the grammarians, and the classics made the last defense of paganism against Christianity. All these agencies made for the preservation of literature, so far as it was preserved at all, and must be examined therefore in some detail. 43

44 PUBLIC LIBRARIES.—The growth of private libraries (§ 29) steadily increased during the empire, for we read that the grammarian Serenus Sammonicus († 212 A. D.) left 62,000 volumes to his son, but the largest of these collections are of little importance compared with the public libraries that were founded during the same period. The first of these to be opened in Rome was established by Asinius Pollio († 4 A. D.) during the reign of Augustus in the *atrium* of Libertas. Augustus himself opened two, and by his successors the number was gradually increased to twenty-eight. Of these the most magnificent was the *Bibliotheca Ulpia*, founded by Trajan. Smaller cities had their libraries too. Pliny, Trajan's governor of Bithynia, tells us (Ep. I, 8) of having given one himself to his native town, Comum, supported by an endowment yielding annually thirty thousand sesterces. The importance, from our standpoint, of these public libraries lies in the fact that such collections were universal in their character, while private libraries are usually gathered in a less catholic spirit. The former would tend to preserve, therefore, the less popular and attractive works that might otherwise have disappeared.

45 SCHOOLS AND UNIVERSITIES.—A still more important part in the preservation of the literature of the past was taken by the schools and universities. These had been established on Greek lines in the city of Rome at least as early as the time of Cicero and Varro, and had spread throughout the empire until in the centuries just preceding the Germanic invasions all the intellectual life of the Roman was connected with education. The branches taught were grammar, rhetoric, logic, arithmetic, geometry, astronomy, and music, but the central thing was the study of the older and greater writers of Greece and Rome. Original creation had virtually come to an end, and it seemed to all educated persons that the study of the works of the past was the most profitable of intellectual pursuits. Two facts in relation to the schools affect the transmission of the manuscripts.

THE "CLASSICS."—The choosing of materials for pupils to 46
study and imitate would lead gradually to the fixing with more or less precision of the canon of the classics, those writers, that is, whose works were regarded as the best of their kind in the various lines of literature. Of some of these authors the complete works were used in the schools; of others certain parts complete in themselves (*e. g.*, the first and third decades of Livy) were carefully studied, while of other parts epitomes were made for reference purposes; of others still selections were made for specific objects, as when, for example, the letters and speeches scattered through the various works of Sallust were brought together in one volume for rhetorical purposes. The result, so far as it affects the transmission of the manuscripts is apparent: of some authors the whole works would be in constant demand and copies would be multiplied almost beyond numbering; of others parts only would be so treated; still others would be wholly neglected. It is evident, also, that these school editions would be especially liable to errors, and even to arbitrary changes for the purposes of instruction.

SCHOLIA.—The needs of the pupils would lead, in the second 47
place, to the preparation of notes and commentaries upon those authors whose language or matter was found to require such helps. Such notes are added to the works of English authors in our own schools now, and must have been even more needed by Roman school boys because no books were then written especially for the young. These school commentaries, to distinguish them from the works of modern scholars, are called *scholia*, and their authors, or (more usually) their compilers, are called scholiasts. Some of these notes were published separately, and have come down to us with the name of the author attached, as, *e. g.*, the commentaries of Asconius (first century) on some of Cicero's Orations, of Porphyrio (second century) on Horace, of Tiberius Claudius Donatus

(fourth century) on Vergil, and of Aelius Donatus (fourth century)
48 and Eugraphius (sixth century) on Terence. Other Scholiasts, and by far the larger number, wrote their notes on the margins and between the lines of their manuscripts of the authors they explained, and of these as a rule inferior scholars we seldom know the names. When it is necessary to distinguish them, they are called by the name of the author ("Scholiast on Juvenal," etc.) or even of the manuscript (§ 69) on which their *scholia* are found. These *scholia* are chiefly valuable for the subject matter of the author, but they give some help also in the text. In the first place, those scholiasts whose commentaries were published separately, frequently quote the passage of the text which they explain, and thus give us the reading of the manuscripts they used, in most cases older and therefore better than our own. In the second place, they sometimes help us to fix the date of a manuscript or its relations to others even when the *scholia* are of little value and the name of their author is not known.

49 GLOSSES.—One sort of *scholia* is often mentioned in editions of the classics. An unusual word was called *glossa*, and in the course of time the definition or explanation of such a word was called by the same name. Collections of these words and explanations were made, called *glossae*, whence our words "gloss" and "glossary." Now when the scholiast found in his text such a word, for example a foreign or obsolete Latin word, he often wrote the word of the same meaning which was current in his time (Latin also, of course) directly above it in the text or close to it in the margin. A later copyist was very apt to take such a gloss for either a correction or an omitted word, and accordingly to omit the original word from his copy, or to write both words together.

50 THE GRAMMARIANS.—Close upon the writing of commentaries to explain the subject matter of the classics followed the composition of scholarly works, dealing directly with the language itself, the sounds, inflections, syntax, prosody, lexicography and so on. The writers upon these subjects, differing widely in their learn-

ing and ability, are grouped together under the name of Grammarians, as opposed to the Scholiasts, although many belong to the one class as much as to the other. For the preservation of the classics they are valuable, entirely apart from their scholarship, in proportion to the number of quotations which they make in illustration of the matters of which they treat. Among those helpful in this way may be mentioned Charisius (fourth century), Diomedes (sixth century), Macrobius (fifth century), Nonius (fourth century), Priscianus (sixth century), Scaurus (second century), and Victorinus (fourth century).

OPPOSITION TO CHRISTIANITY.—It is well known that the 51
higher classes in Rome were the last to embrace Christianity. For resisting the spread of the new faith they found the most effective weapon to be the literature in which were embodied all the beauty and power of pagan morality, culture and refinement. Men of the highest social standing, senators, statesmen, consuls, devoted their energy and talent to fostering the ancient classics. They succeeded in maintaining the old system of education, prevented the establishment of separate schools for the benefit of their opponents, and even endeavored to put the texts of the great Roman writers upon a sounder basis. For this purpose they had made or made with their own hands copies of manuscripts of known excellence (see § 39), or in default of these used their own knowledge of the language to remove the more obvious errors due to the carelessness or ignorance of successive copyists. Some of these editions they attested by their own names, and these names have occasionally come down to us in later copies.

SUBSCRIPTIONS.—These signatures, technically called *subscrip-* 52
tiones, date mostly from the fourth to the sixth century, although a few are earlier, and are known to us in copies hundreds of years later, accompanied perhaps by the subscription of some later reviser. For example, many manuscripts of Terence, dating from

the ninth to the twelfth century, have preserved an ancient subscription in two forms:

CALLIOPIUS RECENSUI CALLIOPIUS RECENSUIT.

This shows that much as these manuscripts may differ from each other, all are derived ultimately from a revision of the text of Terence made by Calliopius, who is otherwise unknown, but is believed for certain reasons to have lived in the third or fourth century. Again, several manuscripts of Cæsar, dating from the ninth and eleventh centuries, have the subscription:

JULIUS CELSUS CONSTANTINUS VC LEGI.

We do not know anything more about this man of high position (*vc*=*vir clarissimus*, see Harper's Dictionary, s. v. *clarus*), but the name seems to show that he lived no earlier than the fourth century.

53 VALUE.—We are able to test the value of these revisions, because we have other manuscripts of Terence and Cæsar that are independently derived. Of Terence we have but one manuscript (*Codex Bembinus*, see Plate III) that has escaped the corrections of Calliopius, but this shows us that he used either inferior manuscripts as his guide, or else relied upon his own insufficient knowledge in correcting the text current in his time. With Cæsar the case is different. The manuscripts derived from the revision of Celsus have been, until very recently, regarded almost the only reliable authorities, and even now Celsus is credited (see Kübler, Teubner's text, p. ix) with having used good copies in making his text, even if he did rely sometimes too much upon his own guesses.

54 SUMMARY.—From the preceding paragraphs it ought to be evident that in the period of the decline all conditions were favorable for the preservation in some form of the manuscripts. The influence of the schools, however, and the well meant, but not always successful, efforts of the revisers would lead us to expect variations in the texts of the more popular authors, and the disappearance of those thought less useful for instruction and less admirable in style.

INPOSVIT NATVRA LOCIS QVO TEMPORE PRIMVM
DEVCALIONVS ACVVM LAPIDES IACTAVIT IN ORBE
VNDE HOMINES NATI DVRVM GENVS ERGO AGRI ERRAE
PINGVES OLVA PRIMIS EXTEMPLO MENSIBVS ANNI
FORTES INVERIANT AVRIGAE BASQ IACENTIS
PVLVERVLENTA COQVAT MATVRIS SOLIBVS AESTAS
ALSINON TVERITIS ILLVS FECVNDAS VBI IPSVM
ARCTVRVM TENVIS ATERIS SVSPENDERE SVLCO
ILLI COEFFICIANT LAETIS NE FRVGIBVS HERBAE
HIC STERILEM EXIGVVS NE DESERAT VMOR HARENAE
AETERNIS IDEM TONSAS CESSARE NOVALIS
ET SEGNE PATIERE SITV DVRESCERE CAMPVM
AVT IBI FLAVAS RESMVTATO SIDERE FARRA
VNDE PRIVS LAETVM SILIQVA QVASSANTE LEGVME
AVT TENVIS ET TYSVI CLAETRIS TISQ LVPINI
SVSTVLERIS FRAGILIS CALAMOS SILVAMQ SONANTEM
VRITE NIM LINI CAMPVM SEGES VRITAVENAE
VERVNI LETHAEO PERFVSA PAPAVERA SOMNO
SED TAMEN ALTERNIS FACILIS LABORARI DATA ANNVIS
MISAT VRARI HIMO PINGVI PVDEAT SOL ANNEVI

V. VERGIL: *Schedae Vaticanae, Saec. IV.*

LOST WORKS.—It is well known that the works of certain 55
Roman authors have been entirely lost, that of others we possess parts only, that there are few whose writings are wholly preserved. We should not regret this, if the works of inferior authors only had been lost—but among the missing are some of the most famous in the lines of history, oratory, philosophy, and poetry. We should expect it, if the works of early writers only had perished—but whole volumes of Cicero, two-thirds of Tacitus, three-fourths of Livy are gone, to mention those names only that are as familiar to us as our own. No imperial library could have lacked complete editions of their works, they must have been included in hundreds of private collections, school boys must have studied them, and teachers commented upon them, but they are no more to be found. We have therefore to explain how so much has disappeared, and how so much has been preserved.

THE DARK AGES.—It was at the very time when Roman lit- 56
erature was the center of all intellectual activity (§ 43) that the catastrophe came that was to overwhelm learning, literature and even Rome itself. In the fourth century the Roman empire was divided; Valentinian took the eastern half with Constantinople for his capital, leaving Rome and the west to his brother Valens. The fifth century had only just begun when the hordes of the north fell upon the western half and made havoc of it. First the Vandals, turned from Italy, established themselves in Gaul. Then the Visigoths sacked Rome, passed into Gaul, and drove the Vandals into Spain. The Vandals, again, crossed over into Africa, ravaged that province, and returned to Italy by the south. The Tartar Huns came next and disappeared leaving desolation behind them. The Franks attacked Gaul, the Saxons Britain. The Ostrogoths disputed Italy with the Vandals, and both were dispossessed by the eastern Emperor, Justinian (527–565). He died and the Lombards appeared. Then the Saracens came from the south

and the Danes from the north. It was not until the time of Charles the Great (Charlemagne), in the last part of the eighth century, that order was restored in Western Europe. Cities had been pillaged, provinces laid waste, empires overturned, a great civilization overwhelmed, and a literature that antedated the cities, provinces and empires, and had inspired the civilization, had practically disappeared.

57 INDIFFERENCE TO LEARNING.—The worst, perhaps, was yet to come. These three centuries of destruction were followed by five centuries of indifference to learning. It is impossible to give within our limits an adequate idea of the ignorance of the period: the ninth chapter of Hallam's Middle Ages cannot be condensed into a paragraph. During this time Latin ceased to be a spoken language; inflections were neglected, syntax ignored, sounds modified, and Spanish, French and Italian began to be. There was not even an educated class. The nobles could not sign their names: until seals were brought into use they subscribed to their charters with the sign of the cross. The ignorance of the church was the subject of reproach in every council; in one held in 992 it was asserted that not a single person in Rome knew the first elements of letters. In the time of Charlemagne not one priest of the thousand in Spain could address a common letter to another. In England King Alfred said that he could not remember a single priest south of the Thames, the most civilized part of his realm, that knew the meaning of the common prayers. Alfred himself had difficulty in translating a pastoral letter of Saint Gregory on account of his ignorance of Latin, the one written language of the time. Charlemagne could not write at all. If the ignorance of nobles, priests and kings was so appalling, that of the commons must have been sublime, and we are ready to find the loss of Roman literature less surprising than its partial recovery.

THE CHURCH.—The one preservative agency was the church. 58
In spite of the gross ignorance, the narrow-mindedness, the worldliness of the priesthood, there were three influences in connection with the church that made for the preservation of classical literature. These were the papal supremacy, the liturgy and the monastic establishments. For our present purpose we may pass over the first two with the short statement that the liturgy was in Latin, and that the need of the church of some one language as a means of communication with its branches everywhere served to keep alive some faint knowledge of the Latin tongue, corrupted as it became. The third must be more fully considered. Of the re- 59
ligious orders of Western Europe one of the most ancient was that founded in 529 on Monte Cassino, near Naples, by Saint Benedict. Its rule was less severe than that of the others, but it enjoined upon its members frugality, soberness and above all industry. From various kinds of manual labor the copying of manuscripts was finally selected as the most likely to keep the mind from carnal thoughts, and so all over Italy, Switzerland, France, England and Ireland the pious monks laboriously copied and recopied the manuscripts of Latin authors amid all the destruction of barbaric invasions, and the poverty of learning that followed. It must be clearly understood that these manuscripts were not copied for publication. The work was purely mechanical, a treadmill process. The completed codices were stored away in the vaults of the abbeys to molder and decay, until, in later times, when the very knowledge of their meaning was lost, they were brought out to be washed and scraped and made fit to receive other copies by other generations of monks. It was from no love of learning, therefore, that the Benedictines and the allied brethren saved the literature of Rome, so much of it, that is, as did not rot in cellars and dungeons, or was not remorselessly rubbed away to make room for hymns and homilies and lives of the saints and martyrs. For

such precious compositions as these were the parchments used that a king's ransom would not now purchase.

60 THE REVIVAL OF LEARNING.—It is impossible to give here an intelligible account of the gradual revival of learning during the period which we have described above as the Dark Ages. The history of the five hundred years from 800 to 1300 comprises the growth of schools, the planting of universities, the cultivation especially of the more useful sciences of medicine, law and theology. It was not until the fourteenth century that literature felt the new movement, and that in Italy. Petrarch (1304–1374) and Boccaccio (1313–1375) were the first to turn for better models to the almost forgotten classics of their countrymen of an earlier day, and the finest minds of the next generations followed their guidance. The last quarter of the fourteenth century saw all Italy permeated with the new enthusiasm, and a positive fever was inspired for recovering the lost literature of Rome. Then it was that the stores of manuscripts buried in the monasteries were eagerly brought to light. Vast quantities were found at Monte Cassino (see § 59), and at Bobbio in Italy, at St. Gallen and Einsiedeln in Switzerland, at Fulda and Mainz in Germany, and in far distant England even, wherever the copying of manuscripts had been the employ-
61 ment of the monks. Petrarch was especially active in searching for new treasures and protecting those that were discovered—for the danger of losing them again was not over in the fourteenth century. A treatise of Cicero De Gloria had been in his possession, but was afterwards irretrievably lost. He declares that in his youth he had seen the works of Varro, but all his efforts to recover these and the second decade of Livy were fruitless. He did find in 1350 a copy of Quintilian, the only one known until sixty-four years later another copy was found in a dungeon under the monastery of St. Gallen. By this time the awakening had touched all classes. Princes and popes gathered scholars at their

courts as the surest means of obtaining fame for themselves. The representatives of the popes in other countries sent to Italy all the classical manuscripts of which they could possess themselves by fair means or foul. Almost all the Latin manuscripts which we now have were thus discovered between 1350 and 1450. Many very ancient manuscripts known at that time have since been lost, but so many copies were made that, so far as we know, but one entire work has disappeared, the Vidularia of Plautus.

INVENTION OF PRINTING.—The fortunate invention of printing 62
about 1450 made secure what had been recovered. The first Latin author to be sent abroad in the new form was Cicero, whose De Officiis was printed in 1465. In less than twenty years from this time the Venetian printer, Aldus Manutius, had begun his great work of giving to the world almost the whole body of ancient literature in the form that has made his name a synonym for tasteful and convenient volumes.

SUMMARY.—This sketch, short and colorless as it is, helps to 63
explain several important facts, often referred to in critical editions.

1. The largest collections of valuable manuscripts are in Italy.

2. The very oldest manuscripts are likely to be palimpsests.

3. The large majority of our manuscripts were written in the fourteenth and fifteenth centuries.

4. Many extant manuscripts are copies of an older manuscript, also extant.

5. Some manuscripts were written by persons with little or no knowledge of Latin.

6. The printed *editio princeps* of certain authors is valuable, because it may have been derived from good manuscripts since lost to us.

EDITIONES PRINCIPES.—The following list includes the prin- 64
cipal Latin authors: Apuleius, Rome, 1469; Cæsar, Rome, 1469; Catullus, Venice, 1472; Cicero, De Officiis, Rome, 1465, Opera Omnia, 1498; Gellius, Rome, 1469; Horace, Venice, 1470;

Juvenal, Rome and Venice, 1470; Lactantius, Rome, 1465; Livy, Rome, 1469; Lucan, Rome, 1469; Lucretius, Brescia, 1473; Martial, Rome, 1470; Nepos, Venice, 1471; Ovid, Rome and Bonn, 1471; Persius, Rome, 1470; Plautus, Venice, 1472; Pliny the Younger, Venice, 1485; Propertius, Venice, 1472; Quintilian, Rome, 1470; Sallust, Venice, 1470; Seneca's Prose Works, 1475, Tragedies, Ferrara, 1484; Statius, Venice, 1472; Suetonius, Rome, 1470; Tacitus, Venice, 1470; Terence, Strassburg, 1470; Tibullus, Venice, 1472; Valerius Flaccus, Bonn, 1474; Velleius Paterculus, Basle, 1520; Vergil, Rome, 1469.

Arranged chronologically: 1465—Cicero's De Officiis, Lactantius; 1469—Apuleius, Cæsar, Gellius, Livy, Lucan, Vergil; 1470—Horace, Juvenal, Martial, Persius, Quintilian, Sallust, Suetonius, Tacitus, Terence; 1471—Nepos, Ovid; 1472—Catullus, Plautus, Propertius, Statius, Tibullus; 1473—Lucretius; 1474—Valerius Flaccus; 1475—Seneca's Prose Works; 1484—Seneca's Tragedies; 1485—Pliny the Younger; 1498—Cicero's Opera Omnia; 1520—Velleius Paterculus.

65 ANCIENT MANUSCRIPTS.—The following list gives the dates of all extant Latin manuscripts which are thought to be no later than the sixth century. As will be explained hereafter (§ 115), the dates are merely approximate, and any of the older parchments may be later by a century than the date here assigned to it. It is also possible that some may have been written at an earlier time. FIRST CENTURY: Two papyrus fragments from Herculaneum containing selections from prose writers. A papyrus roll from Herculaneum containing the Carmen De Bello Actiaco, a specimen is given in § 103. THIRD or FOURTH CENTURY: The seven oldest manuscripts of Vergil, specimens of three, Plates I, V and X. Three fragments of Sallust's Histories, at Berlin, Rome and Naples, a specimen is given in § 103. Palimpsest fragment of Juvenal and Persius at Rome. Palimpsest of Livy at Verona.
66 Fragment of Livy, Book XCI, at Rome. FOURTH or FIFTH CENTURY: Fragments of a palimpsest of Lucan at Vienna, Naples and Rome. The *Codex Bembinus* (§ 53) of Terence at Rome, for specimen see Plate III. The palimpsest of Cicero De Re Publica at

Rome, for specimen see § 106 and Plate II. Palimpsest of Cicero's Orations at Turin, Milan and Rome (from Bobbio, see § 60 above). Palimpsest of Cicero's Orations against Verres at Rome. A few leaves of a palimpsest of Livy at Turin. Palimpsest of Gaius at Verona. Palimpsest of Merobaudes (first half of the fifth century) at St. Gallen. Fasti at Verona. FIFTH or SIXTH CENTURY: Palimpsest of Ulpian at Vienna. Palimpsest of Lactantius at St. Gallen. Vatican fragments of the Jurists, Rome. Palimpsest of Plautus at Milan (from Bobbio). Fragment, *De Jure Fisci*, at Verona. A few leaves of a palimpsest of Hyginus at Rome. Palimpsest of Gellius and fragments of Seneca at Rome. Manuscript of the Grammarian Cledonius (fifth century) at Berne.

It will be noticed that of these twenty-four manuscripts, many **67** of which are badly mutilated, no less than fourteen are palimpsests, but it must also be noticed that, valuable as these palimpsests are, none has furnished us with the complete text of any work of any author. Their testimony is usually decisive for such portions of a given text as they contain, and, more than this, they often enable us to select from later, more legible, and complete codices, the one which is truest to the original.

THE KEEPING OF THE MANUSCRIPTS.

68 CARE OF THE MANUSCRIPTS.—The manuscripts recovered as described above remained sometimes the property of the abbeys in which they were found, but more often passed by purchase, gift or theft into the possession of individual owners, and were at all times liable, as articles of ordinary commerce, to be mutilated, lost, or destroyed. Those that have come down to modern times receive better treatment. All of any value are kept in the great libraries of Europe, the property of the universities or even of the various states. The rules governing their use vary with their value and the spirit of the libraries where they are kept. Some may be taken from the libraries for the purpose of study, others may be examined freely within the library itself, but may not be removed from it, others still must be handled only by an officer of the library, who finds the passage which the student desires to examine, and reads or shows it to him. In general it may be said that, when scholars are properly introduced to the authorities, all reasonable facilities are given them for examining and comparing even the most valuable manuscripts. The greatest obstacle is the lack of complete descriptive catalogues to some of the most interesting and important collections.

69 NAMING OF THE MANUSCRIPTS.—Every library has its own system of identifying its books and manuscripts by letters or numbers, and by these letters or numbers added to the Latin name of the library or city where they are kept the manuscripts are now known and described. A manuscript that has passed from library to library, as almost all have done, has borne of course the special name and mark of each, and so has been known and described differently at different times. Besides, many manuscripts were

used by scholars when they were the property of individuals, and were then called merely by the names of their owners. It follows, therefore, that in using editions of an author separated by many years we may find the name of a given manuscript varying with the dates of the several editions. Owing to these changes in the **70** name it has sometimes happened that a manuscript has been supposed to be lost which really existed but was disguised by a different name, and also that readings from the same manuscript have been quoted under its several names so as to lead to the belief that the one manuscript was two or more. Such errors are sure to be detected in the course of time by the identity of the quoted readings, but they show how necessary it is to have a full history and an accurate description of every valuable manuscript.

DESCRIPTIONS.—As an example of the brief descriptions given **71** in modern critical editions the following is taken from Kübler's edition of Cæsar's Gallic War (1893) in Teubner's series: "Codex Amstelodamensis 81 saec. VIIII–X, olim Floriacensis, postea inter libros Petri Danielis Aurelianensis, deinde Jacobi Bongarsii, inde Bongarsianus primus dictus." The manuscript is number 81 in the library of Amsterdam, was written in the ninth or tenth century, was previously in the abbey of Fleury-sur-Loire (in France), afterwards in the private library of Pierre Daniel of Orleans (born 1530, died 1603), then in that of Jacques Bongars (born 1554, died 1612), and was consequently called *Bongarsianus primus.* Critical editions usually add particulars as to the condition of the manuscript, the size and number of pages, its style of writing, the errors that occur most frequently, etc., etc. Examples are given in connection with the plates. These descriptions are often hard reading, because names of modern places and even persons are Latinized, and these names are not given in our dictionaries. Some help in interpreting these names is given in the following paragraphs, but completeness is not attempted.

72 IMPORTANT LIBRARIES.—The libraries with collections of classical manuscripts are too numerous to be described here, but the most important are named in the following list in alphabetical order by countries. For further information see the article Libraries in the Encyclopædia Britannica, from which this is condensed. There are no Latin manuscripts of any value in the United States.

AUSTRIA: The Imperial Library at Vienna (*Vindobona*), founded in the fifteenth century, contains 500,000 volumes and 20,000 manuscripts (*codices Vindobonenses*). There are besides good manuscripts in some of the monastic establishments, *e. g.*, at Saltzburg (*Salisburgum*, *codices Salisburgenses*). The University Library of Prague contains 200,000 volumes with 3,800 manuscripts (*c. Pragenses*).

BELGIUM: The libraries of the universities at Ghent (*Gandavum*) and at Liège (*Leodicum*) have together over 3,000 manuscripts (*c. Gandavenses* and *Leodicenses*). The Royal Library at Brussels (*Bruxellae*) contains 30,000 manuscripts (*c. Bruxellenses*).

73 DENMARK: The Royal Library at Copenhagen (*Haunia*), founded in the sixteenth century, has 500,000 volumes and numerous manuscripts (*c. Haunienses*).

ENGLAND: At Cambridge (*Cantabrigia*) the University Library has 6,000 manuscripts (*c. Cantabrigienses*), with many others of great value in the library of Trinity College. At Oxford (*Oxonia*) the Bodleian Library, founded in 1602 by Sir Thomas Bodley, contains 30,000 manuscripts (*c. Bodleiani*, or *Oxonienses*) and a valuable collection of first editions (see § 64) of Greek and Latin authors. At London (*Londinium*) is the library of the British Museum, one of the largest and most important in the world, which was founded in 1753 and contains 1,600,000 volumes, including more than 50,000 manuscripts (*c. Britannici* or *Londinenses*). These manuscripts are often further described by the

names of previous owners, *e. g.*, *codices Townleiani*, from the collection of Charles Townley (1737–1805) and *codices Harleiani*, collected by Robert Harley (1661–1724), Earl of Oxford, and his son. 74

FRANCE: At Paris (*Lutetia Parisiorum*) the National Library is the largest library in the world, founded in the fourteenth century, containing 100,000 manuscripts (*c. Parisini*, or *Parisiaci*). Many of these were formerly in the ancient Royal Library (*c. Regii*) or less important collections *e. g.*, at St. Germain (*c. Sangermanenses*), and at Fontainebleau (*c. Bliaudifontani*). Some few good manuscripts still remain in provincial towns, *e. g.*, at Montpellier (*c. Montepessulani*).

GERMANY: Almost all the universities have large libraries containing manuscripts of value. The University of Heidelberg (*Heidelberga*), situated in the Palatinate, has over 400,000 volumes and many manuscripts (*c. Palatini*), and the University of Strassburg (*Argentoratum*) has 500,000 volumes and some good manuscripts (*c. Argentoratenses*). At Berlin (*Berolinum*) the Royal Library contains 15,000 manuscripts (*c. Berolinenses*). At Dresden (*Dresdena*) the Royal Library has about 500,000 volumes with 4,000 manuscripts (*c. Dresdenses*). At Gotha the Ducal Library has more than 6,000 manuscripts (*c. Gothani*). At Munich (*Monachium*) the Royal Library, founded in the sixteenth century, is the largest in the empire and contains 30,000 manuscripts (*c. Monacenses*), while the University Library has 1,800 more. The Royal Public Library at Stuttgart (*Stuttgardia*) has 3,800 manuscripts.

HOLLAND: At The Hague the Royal Library has 4,000 manuscripts. 75 At Leyden (*Lugdunum Batavorum*) are 5,000 manuscripts (*c. Leidenses* or *Lugdunenses Batavi*). At Amsterdam (*Amstelodamum*) are some very valuable manuscripts (*c. Amstelodamenses*) in the library of the university.

ITALY: Of the numerous collections of manuscripts in Italy (§ 63) only the most noteworthy can be mentioned here. At

Florence is the Laurentian library attached to the church of St. Lorenzo; it contains some 10,000 manuscripts, chiefly from the library of San Marco, the collections of the Medici and Leopoldo families, and the library of John Ashburnham, of England, purchased by the Italian government in 1884 (*c. Florentini*, *Laurentiani*, *Medicei*, *S. Marci*, *Leopoldini*, *Ashburnhamii*, etc.). The

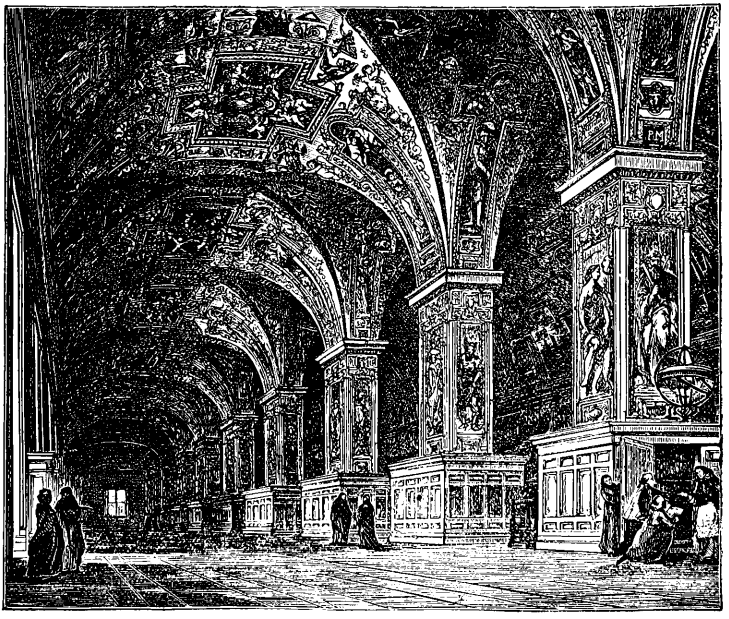


FIG. 7. VATICAN LIBRARY.

Biblioteca Riccardiana, founded by the Riccardi family and purchased by the government in 1812, contains 3,800 manuscripts (*c.*
76 *Riccardiani*). At Milan (*Mediolanum*) the Ambrosian library has 8,000 manuscripts (*c. Mediolanenses* or *Ambrosiani*), including some famous palimpsests. At Naples there are 4,000 manuscripts in the National library and museum (*c. Neapolitani*), some from the old

arcessere. omnia pudere. multum ipse pugnare sepe hostem ferire; strenuum militis. & boni imperatoris officia simul & sequebatur. Sed reus ubi uidit catilina contra acratus erat magna auxiliendere. cohortem praetoriam in medios hostes sinducit. eosq; perturbatos. atq; alios alibi resistentes interficit. Deinde utrimque & lateribus ceteros aggredit. manlius & fesulcoius inprimis pugnantes cadunt postquam fusas copias sequecum paucis relictum uidit. memor generis atq; pristine suae dignitatis. inconfertissimos hostes incurrit. Ibiq; pugnans confodiitur. Sed confecto praelio. tum uero cerneres quanta audacia. quantaq; animi uis fuisset in exercitu catilinae. Nam ferme quisq; uiuus pugnando locum ceperat. eum amissa anima. corpore tegebat. pauci autem quos medios cohors praeteriecerat. paulo diuersius. sed omnes tamen aduersis uulneribus conciderant. Catilina uero longe a suis inter hostium cadauera reptus. paululum etiam spirans. ferociamq; animi quam habuerat uiuus. in uultu gerens; postremo omnicopia. neq; in praelio neq; in fuga. quisquam ciuis ingenuus captus est; tracunctis suae hostium uitae pepercerant; neq; tamen exercitus. P R. laetam aut incruentam victoriam adeptus erat. Nam strenuissimus quisq; aut occiderat. in prelio aut grauiter uulneratus discesserat. Multi autem qui e castris uisendi. aut spoliandi gratia processerant. uolutantes hostilia cadauera. amicum alii. pars hospitem. aut cognatum reperiebant. Fuerant etiam. qui inimicos suos cognoscerent. Itaque ire pomne exercitum. laetitia. meror. luctus. atq; gaudia agitabantur

C. SALLUSTII CRISPI BELLUM CATILINE

EXPLICIT. INCIPIT BELLUM IUGURTHINUM

FALSO QUERITUR DE NATURA SUA GENUS humanum. quod in bello atq; aerumnis. fortiorius quam uirtute regatur. Nam contra repugnando. neq; manus aliud. neq; praestabilius inuenias. magisq; naturae industriam hominum. quamuis autem pus deesse. Sed dux atq; imperator. uitae mortalium animus est. quibus ego tam.

VI. SALLUST: *Parisinus 16024, Saec. IX–X.*

Bourbon library (*c. Borbonici*). At Rome is the Vatican Library, the most famous and magnificent but not the largest in the world, containing some 23,000 manuscripts (*c. Vaticani* or *Romani*). Among these are most of the manuscripts brought from Bobbio (§ 60), 3,500 taken from Heidelberg in 1623 (*c. Palatini*, see above), many bequeathed to the library in 1600 by Fulvius Orsini (*Ursinus*, *c. Ursiniani*), others purchased from Duke Federigo of Urbino in 1655 (*c. Urbinates*), from Queen Christina of Sweden by Pope Alexander VIII (*c. Reginenses* or *Alexandrini*), and from Cardinal Mai, and many other only less famous collections. The library is not fully catalogued and its management is far from liberal. Two other libraries, the *Biblioteca Cosanatense* and the *Biblioteca Vittorio Emanuelo*, have recently been united and contain 77
more than 6,000 manuscripts, most of them from the important collections of the Jesuits of the old *Collegio Romano*. At Turin (*Augusta Taurinorum*) are some good manuscripts (*c. Taurinenses*) in the University Library. At Venice (*Venetiae*) the Marcian Library, founded in the fifteenth century, contains many valuable manuscripts (*c. Veneti, Marciani*, or *Veneti Marciani*), and there are others at Verona in the Cathedral Library (*c. Veronenses*).

SWITZERLAND: There are good libraries with valuable manuscripts at Basle (*c. Basilienses*), at Berne (*c. Bernenses*), at Einsiedeln (*c. Einsidlenses*), at St. Gallen (*c. Sangallenses*), and at Zürich (*c. Turicenses*).

INDEX TO COLLECTIONS.—In the following list are arranged 78
alphabetically the names of manuscripts mentioned above, with a few others occurring in critical editions of school classics: *Alexandrini* (Rome), *Ambrosiani* (Milan), *Amstelodamenses* (Amsterdam), *Argentoratenses* (Strassburg), *Ashburnhamiani* (Florence), *Basilienses* (Basle), *Bembinus* (of Cardinal Pietro Bembo, 1470–1547), *Bernenses* (Berne), *Berolinenses* (Berlin), *Blandiniani* (Blankenberg, Belgium), *Bliaudifontani* (Fontainebleau), *Bodleiani* (Oxford), *Bongarsianus* (§ 71), *Borbonici* (Naples), *Britannici* (London), *Bruxellenses* (Brussels), *Budenses*

79 (Buda, Hungary), *Cantabrigienses* (Cambridge), *Caroliruhenses* (Carlsruhe), *Colbertini* (of Jean Baptist Colbert, 1619–1683, statesman, France), *Colonienses* (Cologne), *Corbeiensis* (of Corvey, town with monastery, in Germany), *Cuiacianus* (of Jacques Cujas, 1522–1590, France), *Einsidlenses* (Einsiedeln), *Florentini* (Florence), *Floriacensis* (§ 71), *Fuldenses* (Fulda, Germany), *Gudiani* (of Marquard Gude, 1619–1700, Germany), *Graevianus* (of J. G. Greffe, 1632–1703, Netherlands), *Guelferbytani* (Wolfenbüttel, Germany), *Haunienses* (Copenhagen), *Laurentiani* (Florence), *Leidenses* (Leyden), *Leopoldini* (Florence), *Lipsienses* (Leipzig), *Londinenses* (London), *Marciani* (Venice), *Matritenses* (Madrid), *Medicei* (Florence), *Mediolanenses* (Milan), *Minoraugienses* (of Augia Minor, an ancient abbey in Austria), *Monacenses* (Munich), *Montepessulani* (Montpellier), *Moysiacenses* (of the abbey of Moissac, France), *Neapolitani* (Naples), *Ottoboniani* (of Cardinal Pietro Ottoboni, 1668–1740, nephew of Pope Alexander VIII, Vatican, Rome), *Oxonienses* (Oxford), *Palatini* (Heidelberg, Rome), *Parisiaci*, or better *Parisini* (Paris), *Petropolitani* (St. Petersburg), *Pragenses* (Prague), *Reginenses* (Rome),
80 *Regii* (Paris), *Regiomontani* (Königsberg), *Riccardiani* (Florence), *S. Marci* (Florence; to be carefully distinguished from *Marciani* above), *Sangallenses* (St. Gallen), *Sangermanenses* (St. Germain), *Scaligeranus* (of J. C. Scaliger, 1484–1558, or J. J. Scaliger, 1540–1609), *Sorboniani* (of the Sorbonne, a department of the University of France), *Taurinenses* (Turin), *Thuaneus* (of Jacobus Augustus Thuaneus (De Thou), a statesman and historian of France, 1553–1617), *Toletani* (at Toledo, Spain), *Turicensis* (Zürich), *Urbinates*, *Ursiniani*, *Vaticani* (Rome), *Veneti* and *Veneti Marciani* (Venice), *Veronenses* (Verona), *Vindobonenses* (Vienna), *Vossianus* (of Isaac Voss, 1618–1689), *Vratislavienses* (Breslau).

81 SYMBOLS FOR THE MANUSCRIPTS.—In editions of the classics in which the manuscripts are frequently mentioned, it is customary for the editors to use in place of the name or names of each manuscript, often long and unwieldy (§ 71), an arbitrary symbol, usually a letter of the alphabet or a numeral. These symbols are prefixed to the descriptions of the manuscripts where they are first given, usually in the introduction or the critical appendix. For example, to the description quoted above (§ 71) Kübler has

prefixed the letter A, and by this symbol the given manuscript, *codex Amstelodamensis 81*, is known throughout his edition of the Gallic War. Scholars may therefore call this manuscript briefly "Kübler's A." It happens unfortunately that there is no generally accepted system in accordance with which these symbols are selected and used by scholars. Some editors arrange their manuscripts in the order of their supposed importance and letter them A, B, C, etc. Others use for each manuscript the first letter of its name or of some one of its several names. Others still, using **82** manuscripts quoted in some earlier standard edition, retain the symbols adopted by the earlier editor, as Kübler seems to have done in the case just cited, adding new symbols, of course, for such manuscripts used by them as the earlier editor did not quote. In using at the same time different editions of the same author, the student has, therefore, to be constantly on his guard against confounding these symbols. For example, in the three editions of Cæsar's Gallic War by Holder (1882), Kübler (1893) and Meusel (1894), the symbols for the six most important manuscripts are shown in the following table:

NAME OF MANUSCRIPT.	Holder.	Kübler.	Meusel.
Codex Amstelodamensis, 81	*A*	A	*A*
Codex Parisinus Latinus, 5056 . . .	*M*	M	*Q*
Codex Parisinus Latinus, 5763 . . .	*B*	B	*B*
Codex Romanus Vaticanus, 3864 . .	*R*	R	*M*
Codex Parisinus Latinus, 5764 . . .	*T*	T	*a*
Codex Vaticanus, 3324	*U*	U	*h*

It will be seen at once that the three editors agree in the sym- **83** bols of but two manuscripts out of the six, and that, while Holder and Kübler may be used together without confusion, great care must be taken when the readings of Meusel are compared with those of either of the others. Such changes of the symbols are, of course, even more confusing when they are made in the same

work. Thus, in the fourth edition of Orelli's Horace (1886–1889) the *codex Ambrosianus* is marked O in the first volume (Odes and Epodes, by Hirschfelder), while in the second volume (Satires and Epistles, by Mewes) it is marked *a*. No reason is given for the change, except that Mewes adopted the symbols of Keller and Holder (1864–70).

84 FIRST AND SECOND HANDS.—Mention has already been made (§ 37) of the correction of errors in ancient manuscripts, and it is hardly necessary to say that such errors and corrections are no less frequent in those of later date. Sometimes the scribe himself discovered his mistake and erased the wrong letters, inserting the right ones in their place, or wrote the correct reading between the lines above the blunder, or in the margin, in the last case indicating by dots or other simple marks the place where the correction was to be made. Sometimes a later reader introduced in the same way corrections, or at least variations, derived from other manuscripts or from his own sense of the appropriate. Now, it is often important to distinguish these corrections from the original reading and from each other, if they were made by different per-
85 sons. If some of the corrections are seen to be in the same writing as the text they are said to be by "the first hand;" others are said to be by the second or third hand, according to their age. These hands are indicated by the editors in several ways: sometimes by small figures written as indices after the symbol used for the manuscript, *e. g.*, A^1, A^2, etc.; sometimes when the manuscript is denoted by a capital letter, *e. g.*, P, the correctors will be marked *p*, p^1, etc. Here, too, there is a lack of agreement among editors.

86 COLLATIONS OF THE MANUSCRIPTS.—It is no longer necessary, as it once was, for a scholar engaged upon a given work to travel all over Europe, from library to library, to examine the scattered manuscripts of his author. Of all important manuscripts of the

posset. rates duplices qq̃ di-
fus. p. xxx. e regione molis
collocabat. Has q̃ter rus an
choris ex uti angulis distin
nabat ne fluctib; moueren
tur. his pfectis collocatisq;
alias deinceps pari mag
nitudine rates iungebat.
hastis atq; aggere iregebat
adit atq; i cursus ad defen
dendu impedirent a fronte
atq; a utq; latere crates;
ac pluteus pregebat. In qr̃
ta q̃q; earum turres turres
binos tabulatos excitabat.
q̃ cõmodiu ipetu nauiu in
cendiisq; defenderent.
Cum hec
pompeius naues
magnas onerarias qs̃ i por
tu brundusino deprehende
rat ad ornabat. ibi turres
cu turribus tabulatis erige
bat easq; multis tormentis
& omni genere teloru cõple
bat ad opa cesaris appellebat.
ut rates propiperet atq; opa
prurbaret; sic cotidie utriq;
omnu funditis sagittis reliqsq;
telis pugnabat. atq; hec
cesar tra animu fuebat. ut
conditiones pacis dimittendas
ratu existimaret. acta e
si magno pea mirabatur

magnu quie ad pompeiu cum
mandatis miserat ad se no
remittit atq; ea res sepe tem
tata e simpte et ciuilia q-
tardabat tamen omnib; reb;
in eo pseuerandu putabat;
tracq; cannuu rebulu legat.
familiare necessariu sctu
bonu libonis mittit ad eu
colloqu causa mandat.
ut libone de ciuitanda pace
hortet. i primis ut ipse cum
pompeio colloqueretur. Pos
tulat magnope se se cide
re demonstrat si ek reisq;
potestas facta fore. ut eqs
citiqnib; ab armis discedat
ut ek. Libo a colloquio cau
nich gressus ad pompeiu pfi
ciscit. Paulo post renuntiat
at. qd consules absint sine
illis ñ posse agi de cõposi
tione. Ita sepius restitus
tempta cesar aliqndo dimit
tendã sibi iudicat & de
bello agendu. Ppe dimi
dia parte opis cesar effec
ta. diebq; p i ea re cõsumpti
xiii. naues a cõsulib; dim
chyo remisse que pore par
te exercitu eode portauer
brundusiu reuertuntur.
Pompeius siue opib; cesaris
pmot. siue etiã qd ab

cui res magna parte laudi atq; cristinationi adlibone pertinuit. sullo

VII. Cæsar: *Vindobonensis 95, Saec. XII–XIII.*

classics copies have been made, called collations, and published to the world. These collations are not complete copies of the manuscript, word by word, much less fac-similes, but give merely the variations of the given manuscript from some other manuscript, or better from some printed edition, of the author, which the collator has taken as his standard. For example, take the third sentence in Cæsar's Gallic War with Lowe and Ewing's text as the standard: *Gallos ab Aquitanis Garumna flumen, a Belgis Matrona et Sequana dividit.* Now, if we wished to publish the reading of the *codex Vaticanus 3324*, marked U by Kübler, a complete copy would require eleven words. As it happens, however, U differs but once from the text we have taken as our standard, and U's reading of the whole sentence is sufficiently indicated by printing this one word, preceded, of course, by the number of the line in the standard text, in which the variation is found: *5, garunna,* U.

The saving of time, labor, and expense by these collations, to 87
say nothing of the wear and tear of the manuscripts, is very great, but over against this advantage must be set the danger of errors, owing in the first place to slips of the collator, and in the second place to slips of the printers who reproduce his work. These errors are being gradually removed by new collations made with far greater care and skill than were formerly employed. Of some very valuable manuscripts, however, which have been destroyed or lost, or which by mutilation or decay have become illegible, editors have still to depend upon early collations which are known to be inaccurate and untrustworthy.

Of a very few manuscripts exact reproductions have been made, either from type or by photography. The latter process may be depended upon accurately to reproduce the original (see the Plates in this book) when the ink is not too dim; the former (*e. g.*, Merkel's Aeschylus, Studemund's Plautus A) is exposed to the same risks of error as the less elaborate collation.

88 UNCOLLATED MANUSCRIPTS.—It is not to be supposed that all Latin manuscripts have been collated. The vast majority have been found after cursory inspection to be copies of older manuscripts in our possession and are therefore of no value except as curiosities. It may be that some of them have been unfairly judged and are deserving of closer study, but not much is to be hoped for from them. Besides these, some few manuscripts may yet be discovered in the large collections which have not been fully or accurately arranged and catalogued (§ 76). Thus, Professor Hale discovered in 1896 a manuscript of Catullus hidden behind a false number in the Vatican library. For specimen page see Plate XI.

89 CRITICAL EDITIONS.—A critical edition gives in the form indicated above the readings of all the manuscripts of the given work which the editor deems valuable, together with certain other evidences for the original text which will be considered hereafter (§§ 173–178). Such editions are usually very elaborate and costly but of some of the authors read in schools there are critical editions to be had which represent sound scholarship and yet are inexpensive. Among these are Kübler's Cæsar, Meusel's Cæsar (the best), Jordan's Sallust, Klouček's Vergil, and Ribbeck's (1894) Vergil. There are unfortunately no equally convenient and satisfactory editions of Nepos, Cicero and Livy.

II.

The Science of Paleography.

STYLES OF WRITING.

THE ERRORS OF THE SCRIBES.

THE SCIENCE OF PALEOGRAPHY.

STYLES OF WRITING.

PALEOGRAPHY treats of ancient methods of writing. It inves- 90
tigates the history of the characters used to represent speech, traces the changes from age to age in those of the same language, teaches the art or science of deciphering documents, and determines their date and place of origin from the style of writing. Paleography was not recognized as a science until the publication in 1681 of the *De Re Diplomatica* of Jean Mabillon (1632–1707), who gave directions in this work for distinguishing by the writing itself between the genuine documents of the middle ages and the forgeries that were current in his time.

SCOPE OF THE SCIENCE.—By the definition given above Pale- 91
ography should include the study of writings of every sort, of all times and all peoples, regardless of the material (§ 2) which received them. As a branch of classical philology, however, its scope has been greatly restricted. In the first place it is limited to the Greek and Latin languages, and in the second place Epigraphy and Diplomatics, once mere branches of Paleography, have won for themselves the rank of independent sciences. The former treats of the very oldest written records of Greece and Rome, those, that is, cut in stone and metal, or scratched and painted upon wood or other hard substances; the latter deals with the charters, wills, deeds, grants, etc., of the centuries following the breaking up of
the Roman empire. To Paleography is left, therefore, merely the 92
study of the writing, or various styles of writing, found in the manuscripts of the works of literature that have descended to us in the manner just described. Limiting our study of Paleography to Latin manuscripts as we do, the period covered extends from the fourth century A. D., the time when the oldest codices now exist-

ing (§ 65) were written, to the fifteenth century, when the scribe was succeeded by the printer.

93 USES OF PALEOGRAPHY.—From the history already given of the manuscripts it is evident that, other things being equal, the older of two manuscripts is the better: the nearer, that is, its date is to the time of the author, the less the number of transcriptions, in all probability, between it and the original copy, and the less the chances for errors by successive copyists. It is therefore of great importance to scholars to be able to fix the time, even the century, of the writing of a given manuscript, and this is the first thing that paleography undertakes to do. Again, if the study of ancient characters shows that certain letters, for instance, were very much alike and were often mistaken for each other, it may be possible for us, when we find in a manuscript a combination of letters that makes no sense, to reverse the process and discover the letter or letters that the last copyist ought to have written. This is the second use of paleography, and the one that is of
94 greatest importance to the ordinary student. As will be shown below, the dating of manuscripts is largely a matter of practice and experience, not of rules and regulations, and requires direct and long continued contact with the manuscripts themselves. It is a science for experts, and of these there are very few whose opinions have the force of authority. The correction of errors, on the other hand, is of great interest in itself, and may be understood and practiced by persons who have never so much as seen a genuine manuscript. For these reasons the chief stress will be laid here upon the errors of the scribes, and only so much attention will be given to the styles of writing as is necessary to understand the causes of these errors and the methods of correcting them.

95 ANCIENT FORMS OF LETTERS.—Two styles of lettering were known to the Romans at the time when the classics were written.

INCIPIT LIBER PRIMUS.

FELICITER .....

QUOUSQUE TANDEM ABUTERE

catilina patiencia nra. Quadiu

etiam furor iste tuus eludet.

Quem ad finem sese effrenata iacta

bit audacia? Nichil ne te noctur

num presidium palatii. nichil urbis

uigilie. nichil timor populi. nichil

concursus bonorum omnium. nichil hic

munitissimus habendi senatus

locus. nichil horum ora uultusque

moueruntur? Patere tua consilia

non sentis? Constrictam iam horum omnium scientia teneri conuiuationem non

uides? Quid proxima. quid superiore nocte egeris. ubi fueris. quos con

uocaueris. quid consilii coeperis. quem nrm ignorare arbitraris? O tempora.

O mores! Senatus haec intellegit. consul uidet. hic tamen uiuit. uiuit

immo uero etiam in senatum uenit. Fit publici consilii particeps. notat

et designat oculis ad caedem unum quemque nrm. ... autem fortes uiri suis

facere rei p. uidemur si huic furorem ac telum eripiamus. Ad mortem te

catilina duci iussu cons. iam pridem oportebat in te conferri pestem quam tu

in nos omnes iam diu machinaris. An uero uir amplissimus p. scipio pon

tifex m. tullius gracchus mediocriter labefactantem statum rei p. priuatus in

ferre catilinam orbem terrae caede atque incendiis uastare cupientem nos co

nsules perferemus? Nam illa nimis antiqua praeteo quod ahala sp. melium nouis rebus studentem manu sua occidit. Fuit fuit

ista quondam in hac re p. uirtus. ut uiri fortes acrioribus supplicis

ciuem perniciosum quam acerbissimum hostem coherceren t. Habemus se

natum contra catilinam uehementem ac diu. rei p. consilium atque auctoritas huius

ordinis. Nos nos dico aperte consules desumus. decreuit quondam

One style, called the Majuscule (*litterae maiusculae*), is used in inscriptions as much older than the classics as our oldest manuscripts, written with letters of the same form, are younger. These majuscules were the only style used for the formal publication of works of literature until the eighth century, and were used even

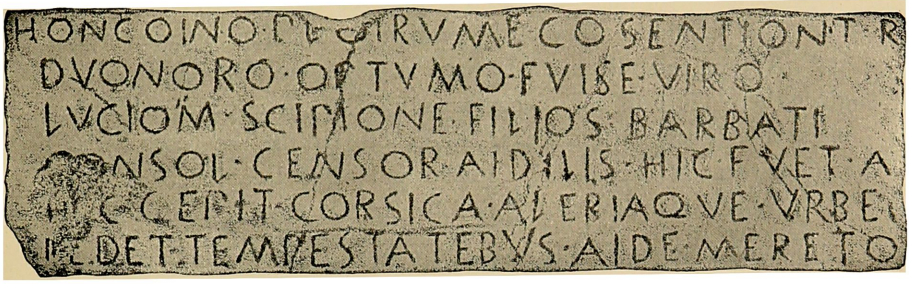


FIG. 8. EPITAPH OF L. CORNELIUS SCIPIO.

to the invention of printing for certain works held in extraordinary esteem (the Scriptures, Vergil) and in other works for the titles and the headings of chapters. From this last use was derived the name Capital (*caput*, chapter) which is still used for one style of these majuscules, the oldest known to the Romans. It 96
may be studied in the copy (Fig. 8) of the inscription upon the

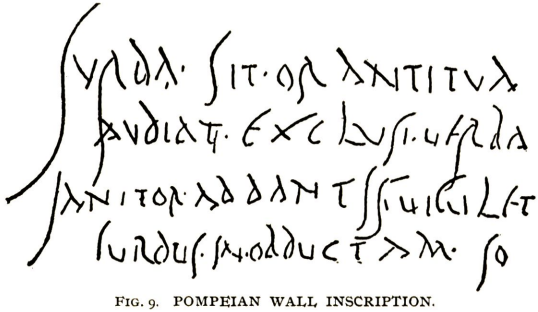


FIG. 9. POMPEIAN WALL INSCRIPTION.

Surda sit oranti tua [janua laxa ferenti] | audiat exclusi verba [receptus amans] | janitor ad dantis vigilet [si pulsat inanis] | surdus in obductam so[mniet usque seram]

tomb of Lucius Cornelius Scipio, dating from the third century B. C. The second style is known as the Cursive. It was used for less formal purposes than the publication of books, *e. g.*, for memoranda, accounts and correspondence. It is known to us from words scratched or written upon all sorts of objects found in the ruins of Pompeii, and also from a number of wax tablets, dating from the second century A. D., which were found between 1786 and 1855 in the mines of Dacia. A specimen from Pompeii is given here (Fig. 9) and a comparison of these cursives with the majuscules above will discover differences not unlike those existing between our small script letters and printed capitals.

97 NATIONAL HANDS.—This old Roman cursive had nothing directly to do with the transmission of the classics, and is therefore of less interest to the student of Paleography than of Diplomatics. Employed for almost all purposes except for the publication of books, but characteristically for legal and administrative documents, it gradually developed, under local influences and modified by the prevailing book hands, into three strongly marked National Hands, the so-called Visigothic, Merovingian and Lombard, very much as the Latin language at the same time was becoming the vernacular languages of Spain, France and Italy. The most important of these is the Lombard, which reached its fullest development at Monte Cassino (§ 59) during the ninth century. The Irish hand has a different origin (§ 105), and is far above the continental hands in firmness and beauty. None of the National Hands were destined to endure long, all being superseded after the time of Charlemagne by the Minuscule type, which is discussed below (§ 108).

98 THE MAJUSCULES.—The Latin Majuscules divide into two types, the Capital and the Uncial. The Capital is the more ancient, is derived directly from the pattern used for carving upon hard materials, and therefore prefers the straight line to the curve, because curves are hard to manage upon stone, wood and metal. So far as formal literary works are concerned the Capital is the characteristic type for the papyrus roll. It was so stiff and slow to write

	Rolls from Herculaneum.	Capitals from Codices.	Ancient Cursives.	Uncials.
a	A (λ, A)	A	λ λ α	A (α) ae ⲁⲁ ⲉ
b	B	B	b α	B
c	C	C	C C	C
d	D	D	α ∂ ∂	∂ ∂ (d)
e	E (E)	E	ll u	ⲉ ⲉ ϭ (e)
f	F (F)	F	ll f F	F F f
g	G	G G G	G ϛ ϛ	G (ϛ)
h	H	H H	H	h
i	I	I	I	I
k	–	K	K h	K
l	L	L	L l	L
m	M	M M M	M M M	M ∞ ∞ ∞
n	N	N	N N N	N
o	O	O	α α	O
p	Γ	P P	P·P	P P P
q	Q	Q Q	α	Q
r	R	R	Λ Λ	R R (R P P)
s	S	S	S S S	S S
t	T	T T	T	T T Q
u	V (V Y)	V U U	u V	U U Y
x	X	X	X	X
y	–	Y	Y	Y
z	–	–	ζ	Z

Fig. 10. MAJUSCULE AND CURSIVE LETTERS.

that even in books it begins to be less common in the fifth century, and then disappears altogether, except in artificial reproduc-
99 tions of the ancient style, in titles and headings (§ 95). The Uncial is a modification of the Capital type due to the effort to combine rapidity with dignity. It is essentially a round hand, making a single curve do duty for several of the straight lines found in a letter of the older type, and changing the forms slightly so as to allow the pen to remain upon the parchment while the whole character was traced. The name Uncial, first found in the writings of St. Jerome (†420 A. D.), is not descriptive, because it means simply "inch high" letters (*litterae unciales*), a name which fits the Capitals just as well. We do not know when the Uncial type was first introduced. It is a common book hand in the fourth century, and is the prevailing book hand from the fourth century to the eighth. It was perhaps the parchment hand, as papyrus was not adapted to fine strokes (§ 15) or hasty pens.

100 CAPITALS.—Two styles of capitals are recognized by experts, called respectively the square and the rustic. In square capital writing the letters are disproportionately wide, and commonly of the same height except that F and L sometimes extend above the others. The angles are right angles, and the bases, tops and extremities are usually finished off with the fine strokes and pendants which are familiar to us in our modern printed copies of the same letters. Rustic capitals, on the other hand, are of a more negligent type, but as a style of writing for choice books were no less carefully formed than the square capitals. The strokes, however, are more slender, cross strokes are short and are more or less oblique and waved, and finials are not added to them. There are
101 also more letters of superior height. Of the two styles the square is certainly the older, although the rustic happens to be found in our oldest manuscript. Capital manuscripts have few contractions and no punctuation marks. Originally words were not separated

but in some that have come down to us the words are marked off by dots placed about midway of the vertical space occupied by the letter (see Fig. 11); in some of these the dots may have been added by a later hand.

SPECIMENS.—Of Square Capitals very few specimens are pre- **102**
served, a few leaves of a manuscript of Vergil divided between Rome and Berlin (Plate V), and a few leaves of another manuscript, also of Vergil, in the library of St. Gallen (Plate X). Both are assigned to the fourth century, and the use at so late a period of a style so laborious and wasteful shows the esteem in which Vergil was then held (§ 95). It has been remarked that Homer in the Greek world, Vergil in the Roman world and the Bible in the early Church were published with a sumptuous elegance to which no other works could aspire. It is a manuscript of Vergil which is singled out by Martial (XIV, 186) to be adorned with the author's portrait.

Of Rustic Capitals specimens are more numerous, although in **103**
this style, too, Vergil is reproduced more frequently than any other author. In addition to the fac-similes of the famous *Codex Palatinus* of Vergil (see Plate I), and the even more valuable *Codex Bembinus* of Terence (see Plate III), we give two specimens. The first represents the oldest Latin manuscript extant, a poem by an unknown author upon the Battle of Actium, found in the ruins of Herculaneum. It is written upon papyrus (§ 65) and from it and others from the same place is taken the first column in Fig. 10. The second is a fragment of Sallust's Histories (Fig. 12), from a badly mutilated manuscript, of which there are a few scattered leaves at Berlin, Rome and Orleans (§ 65.)

UNCIALS AND HALF-UNCIALS.—The two characteristic features **104**
that serve to distinguish the Uncial type of the majuscule from the capital are these: the letters A, D, E, H, and M are curved, and the main vertical strokes tend to rise above or fall below the

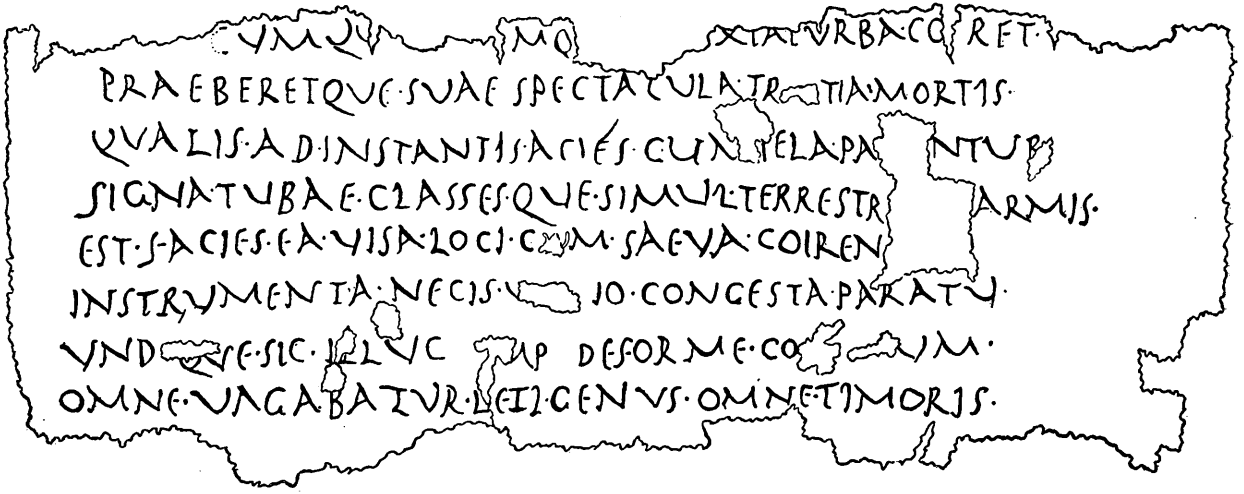
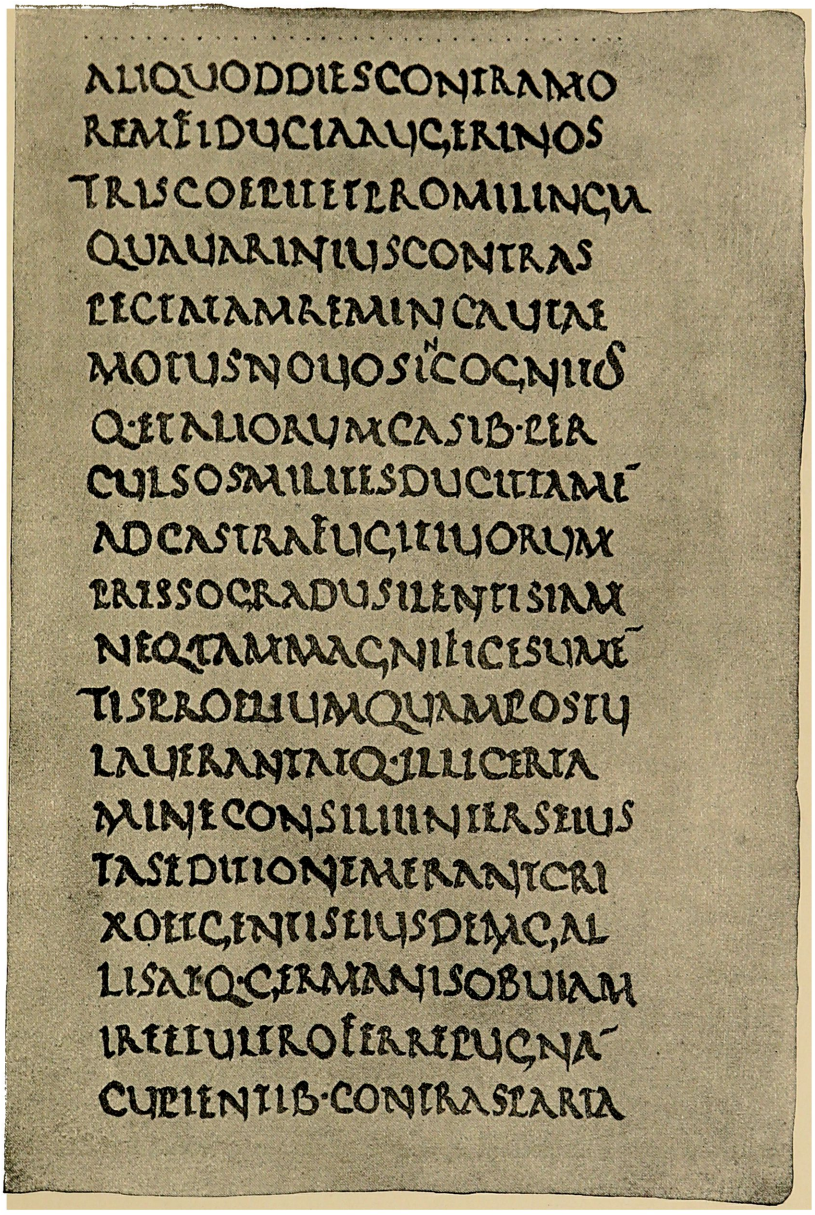


FIG. 11. FRAGMENT OF PAPYRUS ROLL FROM HERCULANEUM.

Praeberetque suae spectacula tr*is*tia mortis.
Qualis ad instantis acies cum *t*ela pa*ra*ntur,
Signa, tubae, classesque simul terrestr*ibus* armis,
Est facies ea visa loci, cum saeva coiren*t*
Instrumenta necis *var*io congesta paratu:
Und*i*que sic illuc campo deforme co*act*um
Omne vagabatur leti genus, omne timoris.



. . . . . .

ALIQUODDIESCONTRAMO
REMEIDUCIAAUGERINOS
TRUSCOEPULEPROMILINGU
QUAUARINIUSCONTRAS
PECTATAMREMINCAUTAE
MOTUSNOUOSICOGNITUS
Q:ETALIORUMCASIB·PER
CULSOSMILITESDUCITAME
ADCASTRAPUGITIUORUM
PRISSOGRADUSILENTISIAM
NEQTAMMAGNIFICESUME
TISPROELIUMQUAMPOSTU
LAUERANTATQ·ILLICERTA
MINECONSILIUMINTERSEIUS
TASEDITIONEMERANTCRI
XOPTIGENTISEIUSDEMAGAL
LISATQ·GERMANISOBUIAM
IRETULITROPERREPUGNA
CUPIENTIB·CONTRASPARTA

line. Otherwise the letters are like capitals, and like these the words are not separated and the abbreviations are few. In the fourth century it was the prevailing book hand, except for the sumptuous editions already mentioned; in the fifth and sixth the letters were still formed with much beauty and precision; in the eighth it was rapidly degenerating. As a test of age the letter M has been selected: in its earliest form the first limb is straight, or at least is not curved inward at the bottom. The letter E is only less characteristic: in the earlier centuries the cross stroke is consistently placed high, but when the hand begins to break the position of this stroke is variable, sometimes high, sometimes low, in the same manuscript.

105 Half-Uncials are derived from the uncials and represent the last efforts of the book hand to differentiate itself from the improved business hand of the time. It is first found, but not as a book hand, as early as the close of the fifth century, and is characterized by exaggerated vertical strokes, by the close approach to our small print of the letters e, m, n, and r, and by frequent ligatures, contractions and abbreviations. It is also called the Roman Uncial and Pre-Caroline Minuscule. It was from the half-uncial style that the independent Irish hand (§ 97) was derived. For specimens of the latter see Plates XII and XIII.

106 SPECIMENS.—Of Uncial writing there are extant a considerable number of specimens, of which two examples are here given. The first is from the most ancient manuscript of this type which has come down to us, the fourth century palimpsest of Cicero De Re Publica, now in the Vatican library, with the superimposed writing omitted. The letters are massive and regular, and the columns are very narrow. An idea of the amount of material required for the whole work may be gained from the five lines here given, there being but fifteen such lines to the column and two columns to the page. The second specimen presents a decided contrast in

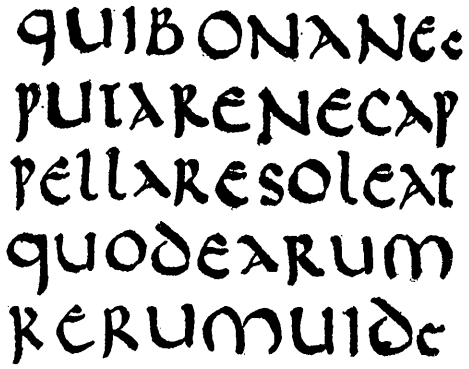


FIG. 13. CICERO DE RE PUBLICA. (See Plate II.)

qui bona nec | putare nec ap | pellare soleat | quod earum | rerum vide [atur]

the size of the characters. It is from the famous fifth century codex of Livy at Vienna.

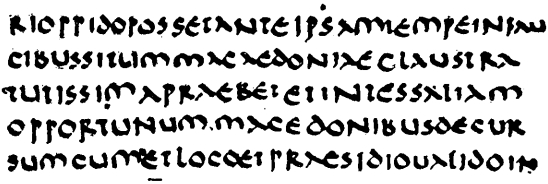


FIG. 14. LIVY—FIFTH CENTURY.

ri oppido posset ante ipsam Tempe in fau | cibus situm Macaedoniae claustra | tutissima praebet et in Tessaliam | opportunum Macedonibus decur | sum cum et loco et praesidio valido in

Of the Half-Uncials we give one specimen, taken from the **107** sixth century manuscript of St. Hilary († 368 A. D.) on the Trinity now in the Archives of St. Peter at Rome. It will serve at the same time as an example of the compositions which effaced so many classical manuscripts (§ 59). The specimen presents almost the entire alphabet, and it will be noticed that, while the round style of uncial writing is retained, very few of the letters are real uncials.

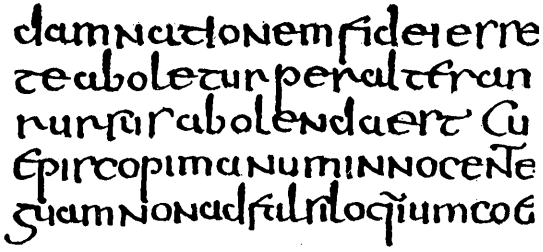


FIG. 15. ST. HILARY.

damnationem fidei esse | te aboletur par alteram | rursus abolenda est cu[ius] | episcopi manum innocente[m] | [lin]guam non ad falsiloquium coe [gisti]

108 THE MINUSCULES.—The next improvement in the direction of a rapid hand is the Minuscule writing. This is in all essentials the same as the small (lower case) letters in our present Roman alphabet. It is historically the product of all the factors already described, the uncial and half-uncial book hands and the contemporary business hands acting upon each other. Chronologically the Minuscule follows directly upon the half-uncial, the cursive and national hands being merely subordinate local forms of no importance in the case of classical manuscripts.

109 Minuscule writing, as are all the styles already mentioned, is at its best in its earlier stages. Of the better forms the Caroline (Carolingian) may be regarded as the type, as it finally became the literary hand of all Western Europe, although in the different countries certain peculiarities of the national hands survived sufficiently for experts to tell with a good deal of accuracy the place of origin of manuscripts of this age. In general it may be said that the Caroline minuscule is round, heavy, almost sprawling. The letter o, for example, is not slender or egg-shaped, but either a true circle or else shaped like an apple, broader than it is long. On the same pattern are formed the left part of d and
110 the right part of b. The up strokes of certain letters, b and l for example, are club like (thicker toward the top), owing to the run-

	Half Uncial	Lombard.	Visi-Gothic.	Mero-Vingian.	Older Minuscules.	Later Minuscules.
a	a a	a	a	a (ae æ)	(a) a a	a a
b	b	b b	b	b	b	b b
c	c	c	c	c	c	c
d	d	d d	d d	d	d d	d d
e	e	e	e	e	e e	e
f	f	f	f	f (ß fi)	f	f
g	g g 3	g	g	g	g	g
h	h	h	h	h	h	h h
i	i	i (li y)	i i	i	i	i
k	k	k k	k		k	k
l	l	l	l	l	l	l
m	m	m	m	m	m	m
n	n μ n	n	n	n	n	n
o	o	o	o	o	o	o
p	p	p	p p	p	p	p
q	q	q	q	q	q	q
r	r	r (ri n)	r	r	r	r v
s	r f	f (st ft	r	f	f	f s
t	t	a t final (ti as Merov.)	a; a. c	a (ti d)	t	t
u	u	u	u	u	u	u
x	x	x	x	x x	x	x y p
y	r	y	p y	y y	v r y	y
z		z	z z	z	z z	z

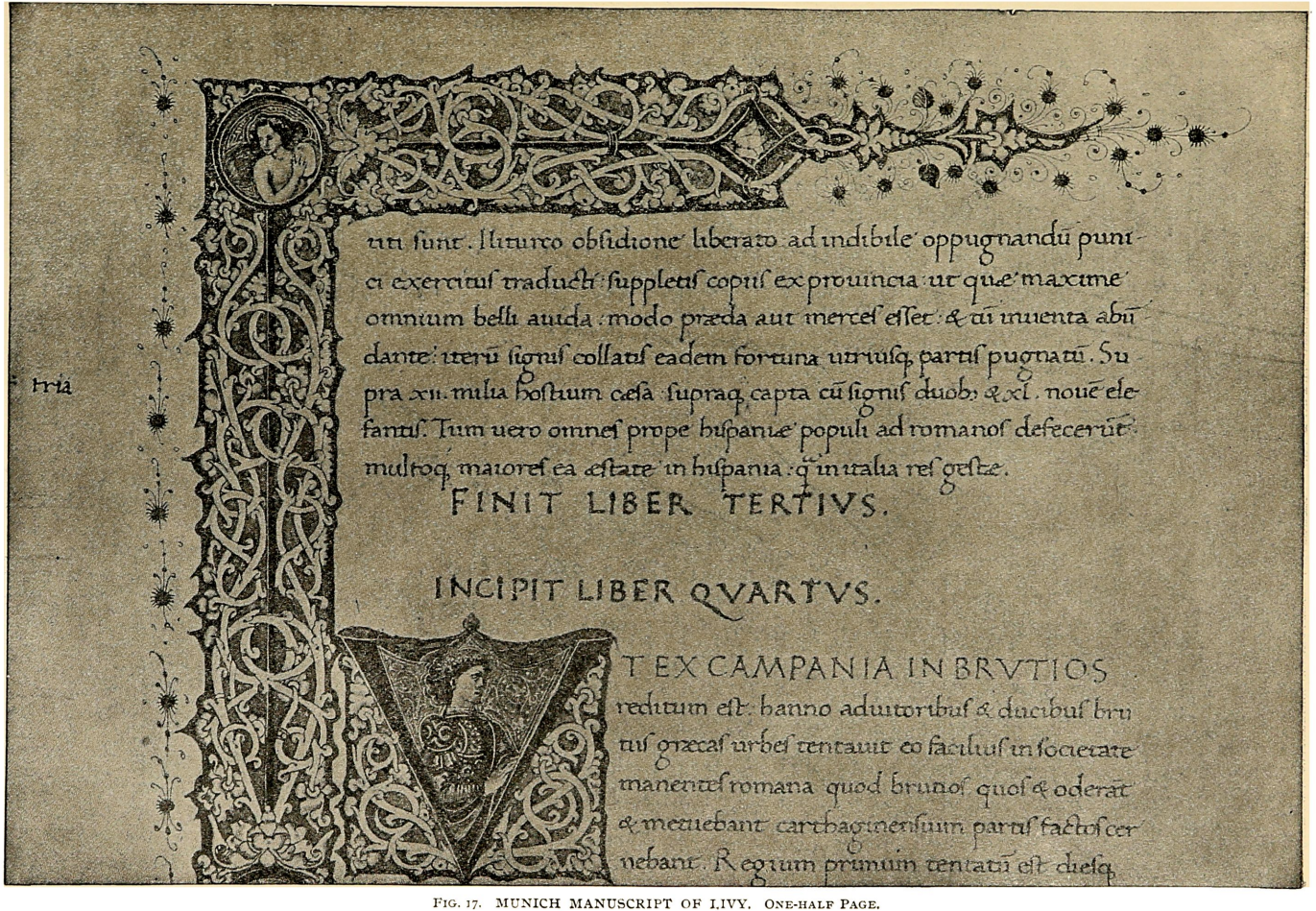
FIG. 16. HALF UNCIAL AND MINUSCULE LETTERS.

ning together of the up and down strokes which we keep separated in our script (ℓ). The letter r is not perpendicular to the line of writing, as are the other letters, but inclines to the right and has the side stroke broad and sweeping. There is almost no distinction between f and s, as in our own books a century ago, and the i has no dot. The Minuscule introduces the separation of words, and a feeble attempt at punctuation. Abbreviations are not especially numerous at first.

111 In the eleventh century the club-like vertical strokes disappear, the writing becomes noticeably more slender, and the o and rounded parts of b and d become egg-shaped. From this time abbreviations become more and more numerous and arbitrary.

In the thirteenth century the rounded character, which has increased with every improvement in the book hand, begins to disappear. The o, for example, is made with two strokes ◊, and so the other letters with rounded parts, and finally all the curved lines become straight. This is the Gothic type, forced and artificial, requiring two or three times the care and time to write: cf. the four stroked o (ϕ). For the reader it is especially trying. It is almost impossible to distinguish the letters i, n, u and m, especially when several occur in combination (*e. g.*, *minimum*): this led to the writing of double i with accented letters (íí), and finally to the accent over a single i (í), whence our dotted form. It is from this Gothic Minuscule that the German lower case letters are derived.

112 In the fifteenth century came a reaction. The Humanists (§§ 60, 61) with a finer taste turned back to the Caroline Minuscules as the characters for their copies of the precious manuscripts they were searching for so eagerly and copying as fast as found. Here, too, they made improvements. From the majuscules they borrowed initial letters for sentences and proper names, and used them, as has been remarked already, for titles and chapter headings.



tria

titi sunt. Illiturco obsidione liberato ad indibile oppugnandū puni
ci exercitus traducti suppletis copiis ex prouincia ut quæ maxime
omnium belli auida modo præda aut merces esset & ūi inuenta abū
dante: iterū signis collatis eadem fortuna utriusq partis pugnatū. Su
pra xii. milia hostium cæsa supraq capta cū signis duob; & xl. nouē ele
fantis. Tum uero omnes prope hispaniæ populi ad romanos defecerūt
multoq maiores ea æstate in hispania q̄ in italia res gestæ.

FINIT LIBER TERTIVS.

INCIPIT LIBER QVARTVS.

VT EX CAMPANIA IN BRVTIOS
reditum est. hanno adiutoribus & ducibus bru
tiis græcas urbes tentauit eo facilius in societate
manentes romana quod brutios quos & oderat
& metuebant carthaginensium partis factos cer
nebant. Regium primum tentatū est diesq

FIG. 17. MUNICH MANUSCRIPT OF LIVY. ONE-HALF PAGE.

113 SPECIMENS.—The vast majority of our classical manuscripts are written in minuscule letters, and specimens are therefore easy to obtain, even if hard to select. The fac-similes of manuscripts of Cæsar, Sallust and Cicero (Plates IV, VI, VII, VIII, etc.) are excellent examples of their several dates. In addition to these is given an example of a fifteenth century manuscript, a Munich codex of Livy (Fig. 17), to show the improved forms of the Humanists. It is fortunate for us that the invention of printing came during this period of simple good taste, for it fixed the Caroline character forever as the type for modern books.

114 ABBREVIATIONS.—In the later styles of the minuscules the number of contractions, abbreviations and ligatures increases to an enormous extent. The object was to save not merely time and labor, but also parchment which was exceedingly costly. The use of these abbreviations has greatly increased the labor of the paleographer, because there was no general system in accordance with which they were used, and a scribe's misinterpretation of a predecessor's symbols might introduce, and has introduced, endless confusion into our texts. It is impossible to give any connected treatment of the subject. A table of the most frequent contractions is given (Fig. 18), with the warning that practice only will enable one to read with accuracy, not to say facility, the manuscripts of the later centuries.

115 SUMMARY.—From what has been said it will be understood that the age of the ordinary manuscript can be fixed only within very wide limits. The various styles of writing shade so gradually into each other, that it is hard to tell where the earlier ends and the later begins. In general it may be said that a codex wholly in capitals is earlier than the eighth century, and if the words are not divided earlier than the seventh; that an uncial manuscript was written between the fourth and the eighth; the minuscule prevails after the ninth, and if marked by many abbre-

apud	ap̄
autem	ꝟ, ꝟ (An.Sax.); au̅ au̅t
ber	ꞓ
-bis	ꞓ (urbis urꞓ)
-bus	B (Capit.), b. (s. also -us).
con-	ꝯ (shorthand; in XIII. Cent.)
	9).
de	đ
deus, i etc.	D̄S D̄I etc., etc.,
enim	N ; later ꝥ, ꝥ.
esse	= ; more commonly ꝛ̄ꝛ̄ u. c̄ē.
est	⁊, ÷, ÷ ; An.Sax. ⁊ ; in
	XV. Cent. ⊙, ꝑ etc.
et	⁊, ⁊, ⁊, ⁊, ⁊, ⁊ ⁊ ⁊ &, &.
haec hic hoc:	ꝯ haec & hoc, h̄ hic, h̄ h̄
	hoc.
m	—, ÷ ÷
mem, men	m̄
n	— (nō non).
-nt	nt (at end of word); ⁊, ⁊, ⁊.
-or	ꝓ , later also ꝓ. ꝓ
per	ꝑ (Visigoth), ꝑ
pra	p̊, p̊
prae	p̄ (p̄, p̄).
pri	ṗ (An.Sax. also ꝑ).
pro	ꝓ, ꝓ, ꝓ
proprio	ꝓ
propter	ꝓ, ꝓ
pur	ꝑ
quae, qui, quod:	q quae, q & q qui, ꝑ &
	qđ & q̄ quod.
quando	qn̄ , also qđo
que	Q (majuscule also); qꝯ
	(XII. Cent.); q ;
quia	qꝑ (in Gaius qꝑ).
quid	q̇, q̇, q̄.
quidem	qđ, q̄
quoniam	qm. qn̄m. (majuscule
	too), quo
ri	ꝛ (in XV. Century also er,
	ir, re, r, e after r).
runt	r̄
ser -sis	ſ
sunt	s̄ s̄, ſt̄
tera, ten, ter	t̄
-ud	đ e. g. illđ illud.
-um	l , for ex. ꝓ rum, ꝓ
	orum.
ur	— , e. g. t̄ t̄ tur; later
	tꝛ tur.
us	ꝯ 9 , e. g. iꝯtꝯ iustus; al-
	so ; ꝯꝯ , e. g. conſtātīꝯ
	Constantinus.
ut	v u
vel	ꝉ, ꝉ
versus	ꝓ

FIG. 18. ABBREVIATIONS AND CONTRACTIONS.

viations is not earlier than the eleventh; manuscripts of Verg later than the style of writing would indicate in other autho two manuscripts written in the same style the more care written is, other things being equal, the older; in any type ness and constraint indicate a later date. As a last test we appeal to the spelling. We know from inscriptions the spel in general use at various periods, and if a manuscript vari spelling from the use of the author's day we may thus fi date. If, on the other hand, it retains the spelling current i author's time, it may be taken to be a careful copy of an e manuscript, whatever its own date is (see, however, § 128).

Experts go much further than this, but their results reached by practice and experience.

THE ERRORS OF THE SCRIBES.

THE CODEX.—We may turn now from theoretical, or historical, Paleography to its practical side, the discovery of the errors which a scribe would be apt to make in copying such a manuscript as we have described. It will be convenient at this point to review briefly the essential features of the manuscript which would serve as his copy, and which he would pass on in turn to his successors. So few of the papyrus rolls have come down to us (§ 12) that we may henceforth disregard them altogether and concern ourselves with the parchment codices only. The manuscript, then, or codex, will mean to us a parchment book with the leaves stitched or glued into a cover, or binding, more or less like our own books (§ 16). These leaves are usually of folio or quarto size (§ 16), with writing on both sides (§ 13), sometimes arranged in narrow columns (Plates II, XII), sometimes running clear across the page (Plate I) exclusive of the margins. These margins are often covered with notes (§ 48), written perhaps by several different hands (§ 84), but all as a rule later than the codex itself. Some codices were written between the fourth and tenth centuries, more from the tenth to the thirteenth, but most from the thirteenth to the fifteenth (§ 63). Of these the oldest (§ 98) are written in capitals or uncials, without separation of words and without punctuation marks (§ 101), but with few contractions; the later are written in minuscules, with a few stops and numerous contractions (§ 111). The evidence, however, goes to show that all our manuscripts, no matter how written, are derived from originals written in capitals. To the earlier codex from which the later are derived the name archetype is given. We know, of course, that all our manuscripts are later by many hun-

116 117 118

dred years than the authors' copies, but we cannot tell in any case how many reproductions may have been made between the originals and our copies. There is absolutely no foundation for the idea once fondly cherished, that among our manuscripts of some author, may be one written under his own eye.

119 FAULTY COPIES.—Now there is no manuscript extant which can be depended upon to reproduce accurately the original copy. Such manuscripts were almost unknown in the times of the authors themselves (§ 37), and all have suffered from successive transcriptions. The best manuscript, therefore, will be found to contain many blunders: lines that will not scan, words and sentences that have no meaning. These may be corrected perhaps by comparison with other manuscripts, but it sometimes happens that none of our manuscripts gives the passage correctly, or that, while several or all give good scanning and good sense, they do not give the same words. In all such cases, *i. e.*, where the manuscripts support each other in obvious blunders or contradict each other, it is the business of the critical editor to restore the text as nearly as he can to its original form, either by determining for one manuscript against the others, or by emending all. In doing so he proceeds according to certain rules of paleography derived from a study of the errors which the scribes were most apt to make. These errors are of three kinds: Unavoidable, Intentional and Accidental.

120 CLASSIFICATION OF ERRORS.—This classification is practically exhaustive but it is not the common one. Scholars usually say that the faulty copy varies from the original by giving more words, fewer words, or different words. This differs from our classification simply by looking at the result rather than at the process. The usual treatment is given in Freund's *Triennium Philologicum*, Vol. I, p. 250 f., another in Lindsay's *Introduction*, p. 10. A less formal treatment is that in Gow's Companion to School Classics, p. 60 f., from which are taken several of the examples used below.

ut aliarũ omnũ rerũ sic uuiendi modũ·
Senectus aiũt ꝯtatis ẽ p actio tamquã fabu
le cuĩ defetigationẽ fugere debem̃ p̃sertĩ
adiuncta sacietate· Hec habui de senectute
quę dicere ad quã uirnã puenimus· ut ea
quę ex me audistis re expti phare possitis·

Quousque tandem

abutere catilina patientia nr̃a· Quãdiu
etiã furor iste tuus nos eludet· Quẽ ad
finẽ sese effrenata iactabit audacia· Nihil
ne te nocturnũ p̃sidiũ palatii· nihil urbis
uigiliẽ· nihil timor ppli· nihil ĉcursus bonõ
omnũ· nihil hic munitissim̃ habendi senat̃
locus· nihil hoĩ ora uultusq· mouent· Pa
tere tua ĉsilia ñsentis· Constricta iã hoĩ
omnũ scientiã teneri ĉiurationẽ tuã ñ ui
des· Qd proxima ꝗd superiore nocte egeris· u
bi fueris· ꝗd ĉsilii ceperis· ꝗs ĉuocaueris· quẽ
nr̃m ignorare arbitaris· O tempora· o
mores· senatus hęc intelligit· ĉsul uidet·

hic tam̃ uiuit· uiuit· immo v. etiã in senatũ uenit· fit
publici ĉsilii participes· notat et designat oculis ad
cedẽ· unũquẽq; nr̃m· Hos aiũt fortes uiri satisfa
cere· r· p· uidem̃ si istũ furorẽ ac tela uitem̃ Ad
mortẽ te catilina duci iussu ĉsulis iã pdẽ opor
tebat· ut ferri pestẽ istã quã tu inmos omis
iã diu machinaris· An vir amplissim̃ p· scipio
pontifex maxim̃ tiberiũ graccũ mediocriter la
befactantẽ statũ r· p· puat̃ interfecit· Cati
lina vorbẽ terrę cedit atq; incendiis uastare
cupientẽ nos ĉsulẽ pferem̃· Ita illa nimis antiq
pterea· qd· e· seruilis ala· sp· eiũ nouis rebus stu
dentẽ manu sua occidit· fuit· fuit quondã ista
uirtus in hac re· p· ut uiri fortes acriores ĉtra ĉsu
lis cuĩ pniciosũ quã acerbissimũ hostẽ coher
cerent· Habem̃ enĩ senat̃ ĉsultũ in te catilina
uehemens et graue· Non de ẽ· r· p· ĉsiliũ neq; huius auctoritas
ordinis· Hos nos dico apte ĉsules desim̃· De
creuit qndã senat̃ ut L· opim̃ ĉsul uideret·
ne qd· r· p· detrimentũ capiat· Hoc nulla inter
cessit· uitũ fect̃ ẽ ppter quasdã seditionũ suspi
ciones· Gai graccus clarissimo patre amaiori
b̃ occisus cũ liberis· M· fuluiũ ĉsularis simili

IX. Cicero: *Rhenaugiensis 127, Saec. XI.*

UNAVOIDABLE ERRORS.—These are due to injuries suffered by **121** the manuscript used as copy after it was itself completed. The most conscientious and painstaking scribe could only copy what was before him: if that was defective his own work could be no better. Now, time has dealt hardly with all our codices, and all good manuscripts, exposed to the ravages of fire, damp, mildew, moths and mice, are more or less defective or illegible. Sometimes in the course of years or centuries, one or more leaves would be lost from the codex that served as copy: all our manuscripts of Cornelius Nepos have the same gap (*lacuna*, it is called) in the life of Lysander, showing that all are derived from the same archetype, itself defective here. We have no means of telling whether much or little has been lost.

Again, leaves sometimes became loose, and were replaced in the **122** wrong order, or were carelessly put together at the end of the codex, in either case sure to make the next copy wrong. Thus, in the second book of the Annals of Tacitus chapters 62–67, as our one manuscript and the older editions give them, belong after chapter 58 and before chapter 59. On the other hand, of the two manuscripts of Lucretius at Leyden one (Munro's B: *Vossianus Q. 94*) has at the end 206 verses that cannot be read consecutively; fortunately the other manuscript (Munro's A: *Vossianus F. 30*) has these same verses in the proper order, 52 in Book I, 104 in Book II, 50 in Book V, showing that A is an older manuscript than B, having been copied from their common archetype before the leaves were disarranged.

Again, a part of a leaf might be torn off. Thus a manuscript **123** of Horace (Keller and Holder's ε: *Einsidlensis 361*) gives only the latter parts of lines 1–18 of Epist. I, x, showing that the upper left hand portion of one page of the archetype was gone. In such a case if the loss were small and the sense clear the scribe might be tempted to supply the missing words from his own inner con-

sciousness. So we account for the strange variation at the end of line 126 of Horace Sat. I, vi, where the manuscripts are divided between two readings, each making good sense:

Ast ubi me fessum sol acrior ire lavatum
Admonuit, fugio { rabiosi tempora signi,
campum lusumque trigonem.

And so in Tibullus I, ii, 25, a missing pentameter was filled in in four ways:

En ego cum tenebris tota vagor anxius urbe.
25 { Securum in tenebris me facit esse Venus.
Praesidium noctis sentio adesse deum.
Ille deus certae dat mihi signa viae.
Usque meum custos ad latus haeret amor.

124 Lastly, when a scribe discovered that he had omitted something he was accustomed to write it in the margin or at the top or bottom of the page (§ 84). His successors, copying his work in turn, are scarcely to be blamed if they have inserted the omitted words in the wrong place. So in Horace Ep. I, xv, verses 43 and 44 are omitted in some manuscripts, put after 38 in several and after 39 in others. So also in Cæsar B. G. I, xiii, 6, all the manuscripts and many school editions still give the senseless

. . . ut magis virtute quam dolo contenderent aut insidiis niterentur.

The words *quam dolo* undoubtedly should follow *contenderent.*

125 INTENTIONAL ERRORS.—These are of two kinds, due either to the bad faith of the scribe when he tried to pass off as authentic what he knew was not written by the author, or to his ignorance when he tried recklessly to make sense of what he did not understand. Errors of the first kind are not the source of much trouble; they would be dangerous to make and not likely to be perpetuated. Plenty of passages there are the genuineness of which is doubted by some editor or editors, but most of these are due to another mistake to be discussed hereafter—the incorporation into the text of marginal notes—and in others the jury of scholars dis-

agree so widely that no verdict can be brought against the scribe
Thus Horace Carm. IV, viii can hardly be right: it contains 34 **126**
verses, while all the others have a number divisible by four. So the editors proceed to reduce the lines to a multiple of four by rejecting the spurious verses. Knightly and Martin reject verses 7 and 8, leaving 32; Schütz 14, 15, 16, 17, one-half of 24, 25, and one-half of 26, leaving 28; Kiessling 17 and 33, leaving 32; Nauck 17 and 28, leaving 32. Hardly any two agree upon the inserted lines. One other passage in Horace has a suspicious look. In Carm. III, xviii, 11 and 12,

> Festus in pratis, vacat otioso
> Cum bove pagus

some manuscripts give for the last word *pardus*, evidently a devout scribe's reminiscence of Isaiah xi, 6: "The leopard shall lie down with the kid."

Errors due to ignorance are more frequent though confined in **127**
the main to points of grammar. Thus in Horace Carmen I, iv, 12,

> Nunc et in umbrosis Fauno decet immolare lucis
> Seu poscat agna sive malit haedo

some manuscripts have *agnam* and *haedum* because the copyist unable to govern the ablatives as they stood made them objects of *poscat* and *malit*. Precisely the same change has been made in Vergil Ec. iii, 77:

> Cum faciam vitula pro fugibus, ipse venito

where the variant *vitulam* is found. So in Horace Carm. I, viii, two indirect questions are followed by four direct. In most of the manuscripts the direct questions were deliberately changed to indirect until the process was stopped in line 8 by the impossible scanning of *timeat* for *timet*. Again in certain manuscripts of Cicero all subjunctives after *quod* were quietly changed to indicatives because in the middle ages it was believed and taught that *quod* was always followed by the latter mood. Foreign words suf-

fered most from the ignorance of the copyists. Often transliterated correctly enough by one scribe they were ruthlessly "corrected" by his unscrupulous successors into such Latin words as they were thought to resemble. The Gallic names in Cæsar are cases in point and many Greek proper names in the Latin poets, and common nouns and other parts of speech in Cicero's letters, have come down to us distorted out of all resemblance to their original forms.

128 ACCIDENTAL ERRORS.—These are of four kinds: of the Ear, the Eye, the Memory, and the Judgment. It has been asserted by good authorities that there are no errors in Latin manuscripts due to dictation imperfectly heard. It is of course true that most of our codices were written at a time when dictation was no longer usual, but they are none the less derived from archetypes that were almost certainly written from dictation (§ 33). The question is complicated moreover by our ignorance of many points relating to the pronunciation of Latin, especially the changes that must have taken place in the later periods of the language. We do know that many words were spelled in more than one way and that various spellings of the same word were current at the same time. Hence some of the cases where manuscripts differ in spelling may be explained by supposing that the copy was read to a number of scribes who spelled the words according to their individual preferences, without regard to the spelling of the author. This same variation in spelling shows us that the sounds of *-ae*, *-oe* and *-e*, of *b* and *v*, of *t* and *d*, of *ci* and *ti* must have been identical or very similar, and to the ear there could not have been much difference between *-et*, *-at* and *-it*. So we may account for the readings *exitium* and *excidium*, Horace Carm. I, xv, 21, *voluntas* and *voluptas*, I, xxvii, 13, *citrea* and *cyprea*, IV, 1, 20. So in Vergil, Aen. I, 48 and 49:

. . . Et quisquam numen Iunonis adorat
Praeterea, aut supplex aris inponet honorem

we find *adorat* . . . *inponit*, *adorat* . . . *inponet*, *adorat* . . . *inponat*, etc., to say nothing of the varying prefixes *im-* and *in-*.

ERRORS OF THE EYE.—Of these we make four kinds: Ablepsy 129
or Blindness, Dittography, Lipograpy or Haplography, and Skipping. By ablepsy is meant the failure to distinguish between words that look somewhat alike. A study of the tables of letters and of the fac-similes already given will show that in the manuscripts many letters and combinations so closely resemble each other as to be scarcely distinguishable when read rapidly. Errors arising from this source are more common in the later codices, written in minuscules, than in the earlier majuscule writing. Still they are sometimes found even in capital writing, as the taking of F for E, C for G in the case of single letters, and in combinations the taking of N T (often ligatured, ⲛ) for V T or V I. The letter S was often turned the wrong way ƨ, and if written too closely after I was liable to be taken for R (IƨI). An example of the 130
former confusion may be found in Velleius Paterculus II, xxix, 3, where it is said of Pompeius that he was

". . . potentiae, quae honoris causa ad eum deferretur, non VT ab eo occuparetur, cupidissimus."

Madvig suggested VI for VT (*vi* for *ut*) which removes all difficulty. An example of the latter is found in Horace Carm. I, iv, 8:

. . . dum gravis Cyclopum
Voleanus ardens VISIT officinas

where most of the manuscripts have *urit*, *i. e.*, VIƨIT. So we shall never know when Terence was born. He died in 160 B. C. when, according to the archetype, he was passing his *IIIcesimum* (=*tricesimum*) *quintum annum:* this might be carelessly written however for (*III*=I*I*I) *vicesimum quintum*, a difference of ten years.

In minuscules, on the other hand, the single letters *i* and *t*, 131
b and *v*, *c* and *e* are very similar, and so too are the combinations

in, *m*, *ni* (§ 111), *ut* and *lu*, *iec*, *lec*, and *tec*, *cl* and *d* (Fig. 15), *lu* and *hi*. Our texts still hesitate between *Verucloetius* and *Verudoctius*. Then there are whole words that closely resemble each other: *omnia* and *omina*, *fulmen* and *flumen*, *dearum* and *dierum*, *numen* and *nomen*, and very many others. In Horace Carm. II, vi, 19, some manuscripts have *nimium* for *minimum*; in Ep. II, i, 198, they read *nimio* and *mimo* where Bentley thought Horace wrote *nummo*.

132 Lastly under this head we may speak of marks of abbreviation (see Fig. 17, p. 77), some of which were conventional, others arbitrary, all liable to be overlooked by one scribe or wrongly interpreted by another. This last source of error may be more properly classified below under errors of Judgment.

133 DITTOGRAPHY.—This is the writing twice of what ought to be written but once, and is an error only less frequent than ablepsy. Turning over a few pages of Reid's Cicero's Academica I found *mallent* for *malent*, *antiqui qui* for *antiqui*, and (an excellent example) *materiam iam* and *materiam etiam* for *materiam*. In Sallust Catiline, xix, 3, the inferior manuscripts have *quos sine exercitu* for *quos in exercitu*. Tyrrell's foot notes to Plautus Miles Gloriosus show *autem milia* for *autem illa* (ablepsy, too), *vim me cogis* for *vi me cogis*. This error is especially exasperating in the case of numbers expressed by capital letters: thus in Cæsar B. G. II, iv, 9, one manuscript says the Menapii promised VII thousand men, another VIII and another VIIII. Fortunately in this case they could go no higher by dittography, but in such matters as these little reliance can be placed upon the text. As a last example take Livy XXVII, xi, 11:

> . . . cui di sortem legendi dedissent, et ius liberum eosdem dedisse deos.

Here the writer of the best manuscript has expanded the six words *dedissent . . . dedisse* into the sixteen *dedissent et ius liberum eosdem dedissent et ius liberum eosdem dedissent et ius liberum eosdem dedisse*.

LIPOGRAPHY OR HAPLOGRAPHY.—This is the converse of dit- 134
tography, that is, the writing once of what ought to have been written twice, and is equally common. What has been said above about dittography in the case of numbers applies also to lipography. In the Academica (I, 4 and 32) are found *abhorrent* for *abhorrerent*, *probatur* for *probabatur*, and in the Miles *mortem ale* for *mortem male*, *simile sciat* for *similes sciat*. So we find such errors as *dicit* for *didicit*, *decus* for *dedecus*, etc. In Cicero Laelius xiv, 48, *si qua significatio* should be, in Reid's opinion, *si quasi significatio*.

SKIPPING.—The last and worst error of the eye is skipping, 135
the worst, because where we depend upon one manuscript only we frequently find passages where something must have been omitted, and where there is no clue but the context to what has been lost. The error is due of course to the scribe losing his place as his eye traveled from copy to parchment, and is caused almost always by the occurrence of similar words, or at least similar syllables, in the same relative position in different lines. Thus in the best manuscript of Sallust (*codex Parisinus Sorb. 500, saec. X*) Cat. xx, 11:

> . . . nobis rem familiarem etiam ad necessaria deesse? Illos binas aut amplius domos continuare, nobis larem familiarem nusquam ullum esse?

the eye of the scribe passed from the first *familiarem* to the second, omitting all the words between them. Here the omitted words are supplied in the margin and by other manuscripts. Such mis- 136
takes are rare in poetry, where the prosody, and sometimes the stanza, may be a safeguard. Still in Horace Carm. I, xii, 25-27:

> Dicam et Alciden puerosque Ledae,
> Hunc equis, illum superare pugnis
> Nobilem; quorum simul alba nautis
> Stella refulsit,

where lines 26 and 27 end in the same syllable *-is*, several scribes have omitted line 26, although the omission spoils the sense and stanza, and one even changed *nobilem* in 27 to *nobiles* to make

it agree with *pueros* in 25. Of course this error may sometimes be charged against the scribe when the fault is due to a defect in the copy (§ 121), but the two sources may usually be distinguished by the fact that a torn (but not a stained) archetype causes loss on two pages at least.

137 ERRORS OF THE MEMORY.—Every one who has had occasion to do any copying knows how wearisome it is to copy word by word. It is much faster and less irksome to copy by groups of words, taking each time as much as one can retain in memory. There are three dangers: that getting the correct sense of the passage we may arrange the words of the copy wrongly, or substitute for them synonymous expressions, or omit or add words where the omission or addition will not affect the general sense. We have therefore these three errors to consider.

138 TRANSPOSITION.—The changing of the order of words in a Latin prose sentence is more frequent than in English on account of the greater freedom of arrangement in the inflected language. It is hardly possible that there is a single chapter in Cæsar, or Cicero, for example, where all the manuscripts give the same order. The following examples from Cicero Pro Cluentio, vii, will show how common the error is: *dubitatio ulla . . . ulla dubitatio*, *scire volui vos . . . scire vos volui*, *causa accusandi . . . accusandi causa*, *rebus suis diffidentes . . . diffidentes suis rebus*, *et fuit apud eum . . . et apud eum fuit*, *mortuus est . . . est mortuus*, *is heredem fecit . . . is fecit heredem*, *sororis filium suae . . . sororis suae filium*.

139 All the manuscripts give the first words of Livy's (59 B. C.–17 A. D.) preface: *facturusne sim operae pretium*, whereas Quintilian (40–118 A. D.) expressly quotes them (IX, iv, 74) as the beginning of an hexameter: *facturusne operae pretium sim*. So even syllables or single letters were transposed, as in Vergil Georg. IV, 71, where one manuscript gives *aries* for *aeris*, and in II, 356, where the best manuscript (Ribbeck's *M: codex Mediceus 39, 1*,

saec. V.) ends the verse with *submoveret ipsa*, for *sub vomere et ipsa*, adding the sin of Lipography to that of Transposition (*v* and *m* are transposed, and the *e* is written once). For transpositions due to marginal corrections see § 124.

SUBSTITUTION.—The substitution of synonymous expressions **140** for the exact words of the author is nearly as common. Hence the various readings of *et, -que*, *ac*, and *atque*, *tum* and *tunc*, *ut* and *uti*, *ni* and *nisi*, *ob* and *propter*, *quod* and *quia*. Sometimes a singular may be substituted for a plural, as *hoc postulo* for *haec postulo*, or one tense for another practically the same, as *dico* for *dicam*, *debetis* for *debebitis*, or words of nearly the same significance, as *putaretur* for *videretur*, *defendenda* for *depellenda*, *adiungerer* for *adhiberer*. All these examples are taken from a few pages of Cicero Pro Cluentio.

OMISSIONS AND ADDITIONS.—Unimportant words, that is, words **141** whose presence or absence will not essentially affect the meaning, are frequently left out or put in by the copyist. Such words are especially the personal and possessive pronouns (for reflexive pronouns see Reid on Cicero Acad., p. 115, l. 12), certain prepositions, especially *in* and *cum*, the verb *esse*, most frequently when it would be part of a compound tense, words repeated for emphasis in the same clause, and vocatives, especially such as *iudices*, *patres conscripti*, and the like. Less frequently subordinate clauses are omitted, but this is more apt to be due to Skipping than to imperfect memory. To this fault belongs also the confusion in proper names when two or more stand near each other: frequently the scribe would repeat the first and leave us with no clue to the second.

ERRORS OF JUDGMENT.—Of these three classes may be made: **142** the wrong division of words, faulty expansion of abbreviations, and the insertion in the text of *scholia* written between the lines or in the margin.

143 WRONG DIVISION OF WORDS.—It has been remarked that in majuscule writing (§ 101) words were not separated and sentences were not divided by punctuation marks. When later copyists, writing in minuscules, undertook to divide the words (§ 110) and to punctuate the sentences mistakes were numerous, and these were the cause afterwards of still further corruptions of the text. In Cæsar B. G. I, xxxi, 12: *quod proelium factum sit ad Magetobrigam*, some manuscripts divide differently, *Admagetobrigae*, changing the ending to fit the construction. In Vergil Aen. III. 150:

> . . . visi ante oculos adstare iacentis
> In somnis, multo manifesti lumine, qua se . . .

we have a dream, but it becomes a vision if we write *insomnis* (genitive).

144 This error is usually complicated (see above) by one or more of those already mentioned. Thus the manuscripts read in Plautus Mil. Glo. 309: *hocine simile sciat . . . aedis tollat*, which makes no sense. The error arose by the scribe first taking *nc*, the conventional abbreviation for *nunc*, for *-ne* (§ 132), then *si miles* was written *similes*, and finally, by Lipography (§ 134) an *s* was lost before *sciat*. The original text must have been: *hoc nunc si miles sciat . . . aedis tollat*. There is another good example in line 1262, where the manuscripts read:

> Non video: ubi est?
> Videre spolia mares.

These words give a meaning, but one foreign to the context. The last words should be: *videres, pol, si amares*. The words were first divided wrongly, and then the meaningless *spolsia* was turned, perhaps by a later copyist, into the nearest Latin word, *spolia*.

145 FAULTY PUNCTUATION, or incorrect division of clauses and sentences, scarcely requires illustration, but one example may be given to show how it may be complicated with the error just described. In Seneca Ep. LXXXI, 4, the codices have:

Philosophia unde dicta sit apparet: ipso enim nomine fatetur.
Quidam et sapientiam ita quidam definierunt ut dicerent, etc.

This was corrected by Madvig: ... *fatetur quid amet. Sapientiam*, etc.

Of the trouble caused by the misinterpretation of abbreviations something has been said under another head (§ 132), an example is given above (§ 144) in the Miles, l. 309.

INTERPOLATIONS.—It has been remarked (§§ 47–49) that on the **146** margins of their manuscripts the ancient grammarians and critics often wrote their *glossae* and *scholia*, just as nowadays the margins of too many school books are used for the same purpose. These notes might consist of a single word or several lines, all written in Latin, of course, and often in close imitation of the author's style. On these same margins (§ 84) the scribes wrote the words they had accidentally omitted from the text. Now when in the middle ages a scribe undertook to copy an ancient manuscript covered with notes and corrections, he could not always tell them apart, could not, that is, in all cases distinguish the several hands (§ 85), and so the comments of the scholiast were often incorporated in the text. Some of these are readily detected by comparison with other manuscripts and some less easily by the difference in style, and the [ ] in our text books mark off such words as scholars generally believe to be spurious. Some, of course, may never be detected. The supplanting of a genuine word by its gloss (§ 49) is a more serious matter, for only rare words needed glosses, and as students of language we cannot afford to lose a single word that the Romans ever used.

UNCERTAIN SOURCES OF ERROR.—While the most common **147** errors of the scribes have been pretty fully illustrated above, it must not be supposed that the cause of a given blunder can always be confidently named as soon as the blunder itself is detected. In some cases the corruption existing in our manuscript may be due to error superimposed upon error in successive copies. Sometimes the given fault may be due to any one of several pos-

sible causes, the particular one being of no possible consequence. As an illustration we may take the omission of a word: it may be due to haplography, or to skipping, or to the deliberate act of the scribe. For instance, in Plautus Amph. 723:

Enimvero praegnati oportet et mālum et mālum dari

some manuscripts give the words *et malum* but once. This may be explained either as a case of haplography, or an attempt by the copyist to correct what he conceived to be a blunder of dittography
148 on the part of his predecessor. There are still other reasons for the omission of a letter or word. In some elaborate manuscripts (see Fig. 17) initial letters of verses or chapters were made very ornamental, and would be left by the scribe for the "rubricator", or "miniator" to fill in. In many such manuscripts, *e. g.*, the *codex Ursinianus* (D) of Plautus, these letters were not supplied, and later copies are either defective or variously emended. This lack of initial letters may account for the variation in Horace, Carm. I, xix, 11:

Et versis animosum equis,

where for the first two words (*et* perhaps abbreviated) we find the
149 manuscripts give us variously *versis*, *aversis* and *et versis*. Again, in the *scriptoria* of the monastic establishments there were correctors whose duty it was to revise the manuscripts as fast as they were written, comparing them perhaps with the originals or with other standard copies. If a scribe found in his copy a word which he could not make out, or did not understand, or which he took to be a corruption, he might leave it for this corrector to fill in either from his superior knowledge or after comparison with a copy more plainly written. The corrector might fail, however, to notice the omission, and so the copy would be even more faulty than its predecessor. It is evident that the certain correction of such errors will very rarely turn upon the particular explanation which we adopt for them, and this is true of many errors other than those of omission.

VICIT INTER DVRVM PIETAS DAT VRORA TVERI
NATE TVAE NOTAS AVDIRE ET REDDERE VOCES
SIC EQVIDEM DVCEBAM. NIMOREBAR QVE FVTVRVM
TEMPORA DINVMERANS NEC MEMEA CVRA FEFELLIT
QVA SEGO TETERRAS ET QVANTA PERAEQVORA VECTVM
ACCIPIO QVANTIS IACTATVM NATE PERICLIS
QVAM METVIN EQVIT LIBYAE TIBI REGNA NOCERENT
HEAV TEM TVAM GENITOR TVA TRISTISIMA CO
DES VPER OSTENTAT DEINSVMMA CACVMINA LINQVVNT
SAEPIVS OCCVRENS HAEC IN MINA TENDERE ADEGIT
STANT SALE TYRRHENO CLASSES DAVINGE DEXTRAM
DAC GENITOR TE QVE AMPLEXVNES VBTRAHEBOSTRO
SIC MEMORAN SLARGO FLETVS IMVLVO RARIGABAT
TER CONATVS IBI COLLO DARE BRACCHIA CIRCVM
TERRVSTRA COMPRENSA MANVS EFFVGIT IMAGO
PARLEVIBVS VENTIS VOLVCRI QVE SIMILLIMA SOMNO
INTERE AVIDE TAENEAS IN VALLE REDVCTA
SECLVSVM ENEMVS ET VIRGVLTA SONANTIA SILVAE
LETHAEVMQVE DOMOS PLACIDAS QVIETAE NATATAM LVEM

X. Vergil: *Sangallensis 1394* Saec. IV.

III.

The Science of Criticism.

METHODS AND TERMINOLOGY OF CRITICISM.

TEXTUAL CRITICISM.

INDIVIDUAL CRITICISM.

THE SCIENCE OF CRITICISM.

METHODS AND TERMINOLOGY OF CRITICISM.

THE general functions of Philological Criticism may be said to **150** be to examine the works of antiquity that have come down to us, to determine and restore so far as possible their original forms, and to assign to them their proper place among other works of the same sort. By a gradual limitation, which we have already seen (§ 91) in the matter of Paleography, the field of Criticism has been narrowed to the literatures of Greece and Rome, works of art being considered the province of the younger science of Archæology. By common consent, too, the last function named above has been left to general literary criticism. In this book we confine ourselves to Roman materials, and may therefore take for our last subject of discussion the restoration to their original forms (see § 119) of the works of Latin Literature so far as they have been transmitted to us.

SUBDIVISIONS OF THE SCIENCE.—While the general definition of **151** Philological Criticism given above would probably be accepted by writers upon the science, even the most superficial reading of their works discloses a wide difference in their methods of treatment, due largely to their various subdivisions of the science into what may be called its branches. We read to our confusion of Higher and Lower Criticism, of Diplomatic and Conjectural Criticism, of Grammatical, Historical, Aesthetic, and Individual Criticism, to use only the names employed by English authorities. These names are not arbitrary and meaningless, but are more or less naturally derived from some work which the critic does, or some result at which he aims. We must therefore try to understand them clearly, whether all prove to be of practical value or not; and we can understand them best by considering the nature of the critic's work.

152 THE CRITICAL DOUBT.—We are reading the text of some classic and find something that we do not understand, or we find something peculiar in the expression of what we do understand. The standard by which we judge is our knowledge of the language which we are reading and our familiarity with the facts about which we read. If we do not distrust our own knowledge, the perplexity occasioned by the unintelligible or unusual expression will cause a doubt about the integrity of the text we are reading, because we know from experience with books in our own language that the author's words are not always correctly reproduced upon the printed page. This doubt may be thus formulated: Was this word or this phrase or this sentence which offends us written in this way by the author? Of course if we had in our hands the original manuscript of the author the doubt would not be pre-
153 cisely the same. In this case, if a similar offense is given, as it is given in almost every letter we receive, we ask: Did the author intend to write this which offends us, or have we here a slip of the pen? In the case of inscriptions we have what approaches very nearly to an original manuscript; in the case of Cæsar, Sallust and Nepos, however, we do not have the original manuscript but a copy, one out of a long series of copies, no one knows how long, and the doubt as to the integrity of the text is all the more natural. This same doubt can arise and does arise in another way. We find in the text which we are reading, be it in a printed book or a manuscript, in a passage which of itself causes no perplexity and gives no offense, one or more variants. Even if all these, taken one by one, are intelligible and satisfactory, still a doubt is started, for the author can not have used all the variants, if indeed any one of them is his.

154 CAUSES OF DOUBT.—Now it is evident that these doubts, or the causes of these doubts, that is, the offenses against the standard by which we judge, are very numerous, and of many kinds.

Codex Otho 1829

HI patrium uenio longis afinibz exul
Cauli mei reditus cōpitriota fuit
Saluet acalamis tribuit au sriai nom
Quiqz notat turbe pretereuntis iter
Quo licet ingenio uestruz celebrate ctullū
Cuius sub modio clausi papirus erat.

Catulli uerونensis liber incipit ad cornelium.

QVi dono lepdruz nouum libelluz
Arido modo pumice expolituz
Cornelio tibi. namq tu solebas
Deas cē aliquid putare nugas.
Iam tūc cum ausus est unus vtalorz
Omne cuū tribus explicare cartis
Doctis Iupiter ⁊ laborios.
Quare tibi habe quicquid hoc libelli
Qualecūqz q patrona uirgo
Plus uno maneat perenne sedo.

Gen nietru - falcutiū endecasil labū - gstans ex qūqz pedibus pō spondeo sio dactylo - ⁊ trib trochaeis. inē quos recipit ⁊ spōdeus macrē īfine - pūctus cesuradqz iambz ⁊ pō pede - ⁊ aliqō anapestū

BIBLIOTHECA APOSTOLICA VATICANA

Flebis passerī lesbie.

Passer delitie mei puelle
Quū aiz lutere quem in sinu tenere
Quū primuz digitum dare appetenti
Et acris solet incitare morsuz.
Cum desiderio meo nitenti
Carum nescio quid libet iocari
Et solatiolum sui doloris
Credo ut aiz graus acquiescat ardor
Tecum lutere sic ipa possem.
Et tristis animi leuare curas
Tam gratum est mihi q ferūt puelle
Pernicē aureolum fuisse maluz
Quod gonam soluit diu ligatam

1 falcutiū endecasillabū.

al petenti

enit negatū

and it is the attempt to classify these offenses that has given rise to so many divisions and subdivisions of the science of criticism with distinctive names. To understand these names let us carry the process a little further. We find in the text which we are reading an expression which violates the formal laws of the language as they are already known to us, or which is at least contrary to the usage of the writer or of his time so far as these usages are already known to us; or else we find something wrong with the thought: it either gives no sense or a sense which contradicts what has gone before. In other words the language considered either in itself or as an expression of thought offends us, and the effort to remove this offense is called Grammatical Criticism, or Literal Criticism. Again, we find in the statement of **155** facts already known to us, something that contradicts what we have learned from other sources and have believed to be true. This contradiction may raise a doubt as to the facts themselves, a doubt which leads to what is called Historical Criticism. Or, if we do not distrust the facts, we may distrust the good faith of the author, and this is correctly enough though not so obviously referred to the same branch of criticism. Or, if our confidence in the *fides* of the writer cannot be shaken we have no recourse but to doubt the integrity of the text, which carries us back to Grammatical Criticism, or as a last resort to wonder whether the passage may not be an interpolation or the whole work perhaps assigned to the wrong author. To settle these last questions we appeal to what is usually called the Higher Criticism: a better, because more suggestive, name is Individual Criticism. Finally, **156** we may find something that offends our taste, something correct enough in itself but out of place in the poem, as unpoetical, in the oration, as unoratorical, in the history, as undignified or what not, and this brings us to Technical or Aesthetic Criticism. But before we inflict upon the poet or orator or historian the penal-

ties for violating the canons of taste we may find reason as before to distrust rather the integrity of the text or the identity of the reputed author.

157 Given now one of these three causes of doubt, and the three classes will be found to be practically exhaustive, we have next to find the appropriate word or phrase or sentence to remove the offense, and lastly to establish such appropriate term as the original term used by the author. The appropriate term may be easy or hard to find. Sometimes it is our consciousness of the appropriate that takes offense at the reading: *stella clarus*, *Romulus secundus fuit rex Romanus*, although even here we might hesitate between *sol* and *clara* for the first, and *Numa* and *primus* for the second. It may be that among the variants recorded in the editions which we consult, or actually existing in the manuscripts which we examine, we discover an appropriate term, and this the only one that is appropriate. It is evident that this may be pronounced with confidence to be the original term, the one used by the author. This process of finding what is appropriate and establishing it by comparison of manuscripts is called Diplomatic Criticism, and depends for its success and certainty upon our knowl-
158 edge of Paleography and the making and fate of manuscripts. But it may well be that nothing appropriate is found in the variants, and the critic is left to find it in his own sense of what is suitable. If he can invent such an appropriate term, which removes the original offense and gives rise to no other, he may put it forward as probably the original word or phrase, etc., and if other scholars accept his suggestion (technically termed a "conjecture") as certain, it is called an "emendation" and becomes part of the text. Such a process is very inappropriately called Conjectural Criticism; inappropriately, because it has in it no element at all of criticism. It is to be hoped that a better name may be suggested for it.

KINDS OF CRITICISM.—These illustrations will serve to explain the technical terms used by writers upon criticism, and will also show that, however convenient these names may be to describe more or less distinct processes, they are of very little practical importance, because of the close relation of these processes to each other and their mutual dependence. No hard and fast line can be drawn between any two of them even theoretically, and in practice no such line ever is drawn. Still, for convenience of treatment we may make two divisions: the two that are commonly but very inappropriately called the Lower and the Higher Criticism. The former undertakes to determine and restore so far as possible the original form of the composition, while the latter characterizes the style of the work and identifies its author. We shall use the more suggestive and therefore more appropriate names Textual and Individual Criticism. **159**

CRITERION.—It must be remembered that the standard by which we determine the appropriateness of a given term is simply our own knowledge. When therefore we take offense at a certain reading it may well be that our knowledge of general usage or of the author's peculiar usage is at fault and not the traditional text. What seems to the critic at one time faulty may in the light of fuller knowledge seem correct and appropriate (see Munro's Lucretius, third edition, p. x). This change of attitude is more likely to occur when the period between successive revisions is longer than the span allotted to a single scholar. It is not merely the advances made in critical science during the intervening years, but far more the wider range of modern scholarship in all fields of investigation together with its microscopic minuteness, that puts our recent texts above those of the past, and gives them promise of more of permanence as well as of authority. And this is our chief hope (see §§ 12 and 88) for further improvement. **160**

TEXTUAL CRITICISM.

161 IT has been remarked above (§§ 152, 153) that the impulse to a critical examination of the text we are reading may come from two sources. We find something inappropriate, which offends us, or we find an appropriate but unfamiliar term in a familiar passage, which excites our surprise. Our first thought naturally is to inquire whether or not the perplexing term rests upon any authority, for it may be a misprint or the invention of the editor whose text we are using. If we find authority for the inappropriate term, or for both of the appropriate terms, our perplexity can be removed only by determining the value of the authority in the first case, or of the opposing authorities in the second. This process is called Textual Criticism and can best be understood if we suppose the case of an editor undertaking the independent determination of the text of some classic.

162 APPARATUS CRITICUS.—Such an editor has first to collect all the testimony available for the original work. The amount and importance of this testimony, called collectively the Critical Apparatus, will vary widely with different authors and with different works of the same author, but will consist of some or all of the following: manuscripts of various dates, early printed editions, translations into other languages (available for Greek authors and the Scriptures only), ancient commentaries, citations and imitations by later writers, technically termed "testimonia." These we shall consider in the order given.

163 THE MANUSCRIPTS.—These are the most important witnesses and the editor will make his collection as complete as possible and will study them with peculiar care. He will seldom or never have the manuscripts themselves before him as he works but merely

collations (§ 86, but cf. § 87 at the end), that is, witnesses to witnesses. These collations are not so trustworthy as the manuscripts, because liable themselves to the same defects as the manuscripts, the errors of the copyist, and in addition in most cases to the errors made by printers and undetected by proof readers. Besides these the collator of several manuscripts of the same work is liable to confuse the readings and to assign them to the wrong manuscripts. Sometimes we have several collations of the same manuscript made by different scholars, and where these vary the editor will append the name of the collator (see Tyrrell's Plautus Mgl., p. 7). The testimony of any particular manuscript is not therefore absolutely reliable, and never can be made so, but modern collations are more trustworthy than earlier ones, not only on account of the increased attention given to Paleography, but also on account of the more general recognition of the fact that in describing manuscripts the least and apparently most insignificant detail may prove to be of great importance.

EXAMINATION OF THE MANUSCRIPTS.—Having collected as 164
many manuscripts, *i. e.*, collations of manuscripts as possible, the editor next examines them all methodically to determine the relative weight that is to be attached to their individual testimony. This does not mean that all will be scrutinized with the same minuteness, for a very cursory examination of one manuscript may show the editor that it is merely the copy of an earlier one in his possession and may therefore be entirely neglected. In the same way he will disregard the printed editions that are founded upon manuscripts which he still has, for these editions have no independent value and are one step further from the original. On the 165
other hand, if the foundation manuscripts are no longer extant (as in the case of Velleius Paterculus, see Rockwood p. xvii f.) the *editio princeps* (§ 64) represents them and testifies for them. In this case the *fides* of the editor of the book must be considered:

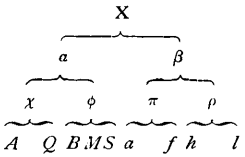
the readings of the manuscripts X and Y of Cicero's letters, upon which Orelli largely based his edition and which were known only from the edition of Simeon Du Bos (born 1635), have been proved to be forgeries with which the unscrupulous editor undertook to bolster up his often convincing conjectures (see Tyrrell Cicero in his Letters, p. c). So the great problem of Horatian criticism turns upon the confidence to be reposed in the readings from certain lost manuscripts preserved in the edition of Jacobus Cruquius, issued in 1578 (see Wilkins Horace Ep., p. xxvii, and Palmer Horace Sat. 3d ed., p. xxix f.).

166 POSSIBLE RESULTS.—This examination of the manuscripts and the editions which represent lost manuscripts will result in one of four possibilities, as follows: 1. The editor may find but one manuscript of his author upon which to base his text. This condition obtains in the case of Hyperides and Babrius among Greek writers, and the first six books of the Annals of Tacitus among the Latin writers. The condition is so rare because it means that the works in question were entirely lost for a time and were not recovered until after the invention of printing (about 1450). In such a case the editor's task is comparatively simple: he has but to take the necessary pains to read the manuscript correctly and reproduce it accurately. All that he does beyond this is, strictly
167 speaking, not textual criticism. 2. The editor may be able to trace all existing manuscripts back to a single manuscript also existing. This is true of certain Orations of Lysias, true of Athenaeus, true of books XI–XVI of the Annals and I–V of the Histories of Tacitus, and is believed by certain scholars to be true of some few other works. The course of the editor in this case is as clear and simple as in the first case, when once the derivation of the manuscripts is demonstrated. This demonstration, however, is a matter of exceeding nicety and corresponding difficulty. The mere agreement in all or almost all readings with an important

XII. HORACE: *Bernensis 363, Saec. IX.*

difference in age is not enough to prove the descent. The most convincing proof is a lacuna (§ 121) in all the younger manuscripts with no evidence of mutilation, while such mutilation is found in the oldest manuscript at the place where the lacuna occurs. 3. The editor may find that all existing manuscripts may **168** be traced to one manuscript no longer extant, which can, however, be more or less completely and accurately reconstructed from copies in his possession. Such a manuscript is the Henoch's codex of the Dialogue of Tacitus (see Gudemann's edition, p. cxv) and the Verona manuscript of Catullus. This last was used in the tenth century and disappeared, was found again and copied in the fourteenth century and has again disappeared (see Merrill's Catullus, p. xxxvi). The proof of the descent is, of course, even more difficult here than in the second case, although essentially the same in kind. The task of the editor, moreover, will be simplified only so far as as he is able to reconstruct the archetype. When this cannot be accomplished we have the fourth and last case. 4. The **169** editor may find his manuscripts hopelessly confused, or divided into several families whose connection cannot accurately be determined, and to which the several manuscripts can be assigned only doubtfully or provisionally. Here the difficulty increases in proportion to the extent of the work and the number of the manuscripts. Sometimes, when the manuscripts are very numerous, the problem may be solved by some favorable, almost lucky, circumstance, as *e. g.*, the superiority of P. (see Plate VI) over all the other manuscripts of Sallust, even those of the same class. On the other hand the problem may baffle generation after generation of scholars, as has been the case, and seems likely to be the case forever, with Horace. The consideration of these four cases will show how the discovery of a single manuscript, although of no great value in itself, may completely overthrow the accepted text of a given author.

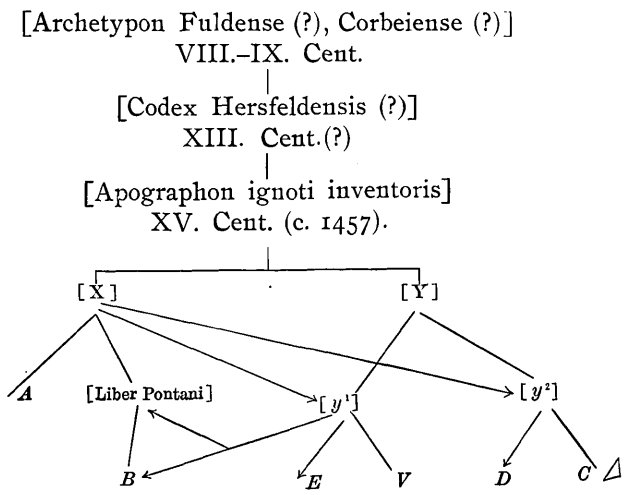
170 STEMMATA.—The derivation and relation of the manuscripts of certain authors may be represented by diagrams, called *stemmata* (genealogical tables), varying in complexity with the number and character of the manuscripts. The most interesting are those which illustrate the descent of our existing manuscripts from a supposed original no longer extant (case three above). As an illustration Meusel's *stemma* of the manuscripts of Cæsar's Gallic War is here given, taken from his edition, Berlin, 1894. Of the twenty manuscripts which he names on p. xi, eleven are disregarded because they are believed to be copies of some of the remaining nine (§ 164). These nine manuscripts, distinguished by the letters *A*, *Q*, *B*, *M*, *S*, *a*, *f*, *h*, *l* (§ 82), Meusel arranges in four groups, *AQ*, *BMS*, *af*, *hl*, because the members of each group agree so closely in their readings as to warrant a belief in a common origin for each set. This origin for *A* and *Q*, *i. e.*, the lost manuscript from which both *A* and *Q* were copied, he calls χ: wherever, therefore, *A* and *Q* have common readings, we have the reading of χ; whenever they disagree we must assume an error on the part of one copyist or both. In like manner the common source of *B*, *M*, *S* is called ϕ, of *a* and *f* π, of *h* and *l* ρ. These four supposed originals χ, ϕ, π, ρ, each reconstructed as explained in the case of X, are now carefully compared and are found to divide into two groups, χ resembling ϕ very closely, and π resembling ρ. The archetype of χ and ϕ is called α, that of π and ρ is called β, and these two, reconstructed as were the other supposed originals, are found to have so many common readings, and so many variations that can be explained paleographically as coming from a common source, as to point at a common origin for both. This source, called X, is therefore the common archetype of all our manuscripts of the Gallic War.



171

172 USE OF THE STEMMATA.—The use of the *stemmata* has two advantages. First, the relationship of the manuscripts is shown at a glance, and also the relative importance of their readings singly and in combination. Secondly, much less space is needed for recording their readings (§ 86 at end), X denoting the reading of all the manuscripts (*A*, *Q*, *B*, *M*, *S*, *a*, *f*, *h*, *l*), α the reading of five (*A*, *Q*, *B*, *M*, *S*), and so on.

A more complicated *stemma* may be studied on p. cxxxiv of Gudemann's Dialogue of Tacitus:



ANCIENT TRANSLATIONS.—As the testimony of the manuscripts 173
is indirect to an extraordinary degree, and as between the most ancient of these and their originals hundreds of years, perhaps even a thousand years, intervene, the editor looks eagerly for testimony more nearly or quite contemporary with the original. The most ancient testimony is furnished by translations into other languages, and while, as has been said (§ 162), the Latin classics derive no benefit from this source, they do throw some light upon the earlier writings of the Greeks. It is well known that even in the earliest times the Romans had translations from the Greek. Fragments of the translation of the Odyssey by Livius Andronicus have come down to us, and Cicero not only made set translations of whole works, but filled his philosophical writings especially with translations either made by him or taken from earlier Roman poets. Such translations are very free, but those made by writers of the early church and even in the middle ages are painfully literal, almost word for word. It goes without saying that the freedom of 174
the most ancient translations detracts from their value for critical

purposes, and yet some assistance has been derived from this source, as *e.g.*, by Spengel and Rauchenstein on Phaedrus 279 A from Cicero Orator 41. It is also evident that the help thus gained will avail more in making a selection between two or more variants than in restoring a passage hopelessly corrupt. Another fact that depreciates the value of this testimony is that it is transmitted to us through manuscripts no older or better perhaps than those which we have of the original, for instance all the manuscripts of the passage of Cicero referred to above are later by half a century than the best manuscript of the Phaedrus. Worse than this, it has been shown that some ancient translations have been "corrected" in later times, that is, modified so as to bring them into harmony with the corrector's text of the original.

175 ANCIENT COMMENTARIES.—Of far more importance are the ancient commentaries or scholia (§ 47) upon the masterpieces of antiquity, many of which have been preserved to us. We have complete commentaries, for example, upon the works of Hippocrates (fl. 400 B. C.) by Galen († 200 A. D.) in eighteen books, upon Aratus (fl. 270 B. C.) by Hipparchus († 125 B. C.), and several upon the writings of Aristotle and Plato. Besides these there are extracts more or less valuable from commentaries upon Homer, Aristophanes and the tragedians. Less assistance is given by the commentaries upon the Latin writers but some of these are very valuable, as, *e.g.*, the scholia of Aelius Donatus on Terence (about the middle of the fourth century), of Servius and Tiberius Donatus on Vergil (also fourth century), of Porphyrio and the Pseudo-Acro on Horace (date uncertain), all in a very unsatisfactory form. All these commentaries are of more value from the standpoint of interpretation than of textual criticism, but it was customary then as it is now to prefix to the note one or more words of the text, and of course many notes are concerned with the words them-
176 selves. Unfortunately, the *lemmata*, as the words from the original

prefixed to the notes are called, have often been altered by later students to fit the texts current in their times, and the precise form of even a word which is discussed is seldom of moment to a commentator concerned chiefly with the meaning. Besides, the critic has here, as sometimes in the case of translations, to deal with texts even more corrupt than those of the original upon which he is engaged, for it is only very recently that an effort has been made to settle on scientific principles the texts of these commentators.

CITATIONS.—To the *apparatus criticus* must be added the cita- **177**
tions by later writers. So large a body of the post-classical literature has come down to us that the occasional quotations found therein from the works of the classical writers are collectively very numerous and of considerable importance. The works of the Church Fathers are filled with quotations from the heathen writers, *e. g.*, St. Augustine with maxims from Sallust. Still richer sources are the fragments of the grammarians and lexicographers (§ 50). But here, too, the editor is apt to be disappointed. Too often he finds numerous citations from precisely those passages of his author that present no critical difficulties, and none that bear upon the term in doubt. Then comes the usual difficulty in regard to the text of the grammarians and lexicographers and saints whom he consults, and the additional vexation that they often quote from memory only and sometimes give in different passages different forms of the same quotation. Their value for these reasons is, therefore, very differently estimated by different editors.

IMITATIONS.—Lastly, attention is now being given to the imita- **178**
tions in late writers of favorite predecessors in the same style of composition. It is evident that when such an imitation is established the evidence may be made to point in either direction, *i. e.*, from the better established text forward or backward to the text in

doubt. The weight to be attached to evidence of this sort is at best not very great, but may serve to turn a nicely balanced scale. In general it will be found to count more for the interpretation of the author than for his text. Friedländer's Martial gives a good idea of the use of these imitations.

179 USE OF THE APPARATUS.—The apparatus having been collected as completely and as accurately as possible, its use has next to be considered. Here we must bear in mind the fact that by far the larger part of the text of the average classic presents no critical difficulty at all. For nine words out of ten, to put the case mildly, the evidence against a given term or for it will be so overwhelming, that no occasion for perplexity will be given. For the tenth term no rules can be given that will have in practice any general application or binding force, but these hints may be suggested: First, the authority of the apparatus should be heeded so far as it can be determined; secondly, the fitness and appropriateness of every suggested term in itself must be considered; thirdly, the possibility of deriving paleographically (§ 93) the rejected term from the one received into the text has great weight. It is evident that the second suggestion will depend largely upon the editor's taste and his familiarity with the usage of his author.

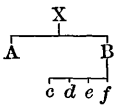
180 Take an example: In two manuscripts of equal authority we find a different number of words; the additional term in the one is appropriate, its absence from the other causes no perplexity. The editor will first ask how the term got into one copy if it was not in the original. This will be easily explained if the same word occurs near by or if it is a word often supplied or likely to be added as an explanation. He will next inquire how the term was lost from one copy if it stood in the original. This loss is always possible, but it is especially easy and therefore probable if it is a word not needed for the sense and likely to be lost by a

181 failure of the memory (§ 141). Again, suppose that two terms

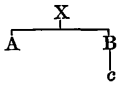
occur in two manuscripts of equal authority but in reverse order, *res publica* and *publica res*. Here the editor will ask which is the usual and natural order, which the unusual and artificial, and will assume that the latter is the order in the original as being more likely to be changed by the scribe. This brings us face to face with Griesbach's famous canon for New Testament criticism: That the more difficult reading is to be preferred to the easier, because the latter is more apt to be an alteration than the former. This is true so far as intentional variations from the original are concerned, but it is not true of unintentional errors. Unintentional errors, however, are far more numerous than intentional errors (§ 125), and the canon is therefore of very limited application. So it will be found to be with every rule that may be laid **182** down, there will always be exceptions and exceptions. Every editor will consciously or unconsciously adopt rules for his own procedure, based upon his familiarity with the apparatus he is using and varying with the author whom he considers. And even should different editors of a given author agree upon the rules to be applied, a rare thing for editors to do, their decisions upon specific applications of the rules would be sure to vary in many cases. It was the failure to recognize the reasonableness of many of these differences of opinion that caused the bitter feeling of the older critics toward each other personally, a feeling that still finds vent occasionally in our philological journals and reviews.

183 RELATIVE WORTH OF MANUSCRIPTS.—We have now to consider the meaning of such expressions as "greater or less manuscript authority," "a better or poorer manuscript," etc. The first editions were based upon such manuscripts as their publishers could procure, sometimes upon the first manuscripts they chanced upon, and presented texts of little critical value. When scholars began to turn from these editions to the manuscripts, their first impulse was to count the manuscripts for or against a given term, and give to the greater number the respect due to superior authority. A little thought will show how utterly

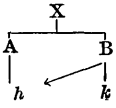
unscientific such a procedure is: Suppose that in the tenth century two copies, A and B, were made of the manuscript X, which was then lost, and that in the fifteenth century four copies, *c*, *d*, *e*, and *f*, were made of B, which also was lost. Now when the scholar of the sixteenth century found A and *c* for a certain reading, and *d*, *e* and *f* for the only variant, he would decide against the true authority of the manuscripts if he gave his decision in favor of the majority.



184 The next step was to select some one manuscript, usually on account of its age or the care showed in its writing, and to vary from it only when its readings could not be made to yield a satisfactory sense. This was a step forward, for age is presumptive evidence of worth (§ 93), and so is careful writing (§ 115), and so also is freedom from interpolation. But presumptive evidence is not enough: Suppose that in the tenth century two copies, A and B, are made of the manuscript X, which immediately disappears. Suppose that A is carelessly made, while B is a good copy, and that in the fifteenth century a good copy, *c*, is made of B, which then disappears. Now when the scholar of the seventeenth century finds A for a certain reading and *c*, later by five hundred years, for the only variant, he will naturally side with A, but his decision may be wrong. Mere age is evidently not enough.



185 Take these same manuscripts, A and B, and suppose that from A is made a careful copy, *d*, and from B a careless copy, *c*, and that these last copies only are preserved: who can tell which is the better manuscript with no further information than these data give? Take a last example: Suppose that from A is made the careful copy *h*, and from B the careless copy *k*, and that the owner of *h* corrects his copy by comparing it a few years later with B. A and B are now lost, and in the seventeenth century an editor finds that the interpolated manuscript *h* has one reading and the uninterpolated manuscript *k* another: where lies now the balance of authority, if he cannot distinguish the second hand (§ 84) in *h*? If he can distinguish it?



186 Test of Worth.—From these illustrations it ought to be evident that no rule of general application can be laid down that will determine from external considerations only the worth

of any manuscript. Its own readings are the only index to its worth, *i. e.*, the manuscript which varies least frequently from the correct text is the best. But, it is urged, we get our text from the manuscripts, and to get the correct text we must know what manuscripts have superior authority. Two considerations will help to explain this apparent paradox. The first has been mentioned already (§ 179): a very large part of the text of every author is now and has been for five hundred years, perhaps, critically certain. This of itself gives opportunity to test the value of any manuscript, a process shown with admirable clearness by Professor Pease in his treatment of the manuscripts of Terence (Tr. A. Ph. Ass'n, 1887). In the second 187
place scholars make themselves so familiar with an author's way of thinking and with his style of expression, worked out from passages critically certain, that when they come to an uncertain passage they are able to test the opposing manuscripts by their fidelity to the known usage of the author. Both these considerations call for a considerable period of study, extending over generations perhaps, and it is this long and careful study that really tests the manuscripts. It is true that when the best manuscript is found by some such process as this, it will usually prove to be an old manuscript (as compared with its fellows), and carefully written, and free from interpolations, but no one of these qualities, no two or three of them, is a certain indication of excellence.

CONJECTURAL EMENDATION.—No matter how excellent and 188
numerous the manuscripts of a given author are, no matter how complete the other materials (§ 162) of the critical apparatus, there will still remain occasional passages where all the help which the apparatus renders cannot furnish a satisfactory text. At this point textual criticism has reached the limits of its obligation, beyond this it does not go. Scholars, however, are not content to stop even here; they undertake by a process of divination, not of criticism, to give to us the words written by the author, although lost or distorted beyond recognition in the course of time. The process is one which we all almost unconsciously employ to a limited extent at least: the sentence we are reading does not end at the bottom of the page, but we can guess a word or two more

before we turn the leaf; a word in a friend's letter is carelessly written or blotted, but we divine the meaning from those that pre-
189 cede or follow it. The process, when we come to analyze it, is this: the reader puts himself in the position of the writer and by a purely intellectual effort tries to realize what the writer under the given circumstances must have thought and therefore written. No rules can be given for such a process. It depends essentially upon the reader's ability to identify himself with the writer; it calls not merely for the fullest intellectual sympathy and appreciation, but also for that fullness of knowledge which is the goal of modern scholarship, for the reader who understands the writer best, will be most successful in his conjectures.

190 CRITICISM AND CONJECTURE.—But while the act of conjecture has nothing to do with criticism, criticism resumes its functions so soon as the conjecture is made. All the critical tests (§§ 154–156) grammatical, historical, individual, and technical, must be applied. If these are satisfied by the conjectured term, it is 'possible.' It becomes 'probable' if it will satisfy the one diplomatic test that can be applied to it: can all the variants, or at least the best attested variant, be derived from the conjectured term by the processes (any or all) of corruption known to us from our study of paleography? Further than the 'probable' conjecture cannot go, although in the fullness of our enthusiasm over some unusually
191 brilliant suggestion we pronounce it 'certain.' Certain it becomes only when it is confirmed by the discovery of new manuscript authority, as, *e.g.*, Reuter's conjecture on Plautus Trin. 297 and Bishop Hare's on 313 afterwards found in A. This confirmation is very rare, but it is the hope of such rewards which has made conjectural emendation with some scholars a passion, almost a madness. It ought to be remembered that it is no less a triumph of scholarship to vindicate the soundness of a manuscript reading impugned by others, than to emend a passage that has been despaired of for centuries.

Nāq; me ſilua lupus ⁊ ſabina
dū meā canto lalagen. ⁊ ultra
tm̄ nū curis uagor expeditis
a fugit inermem
gle portentū neq; militaret
daunias latus alte hercules
nec iube tellus generat leonū
Anida. Nutrix
pone me pigris ubi nulla capit
arbor estiua recreat aura
quod latus mundi nebulę malusq;
Iuppiter urget
pone sub curru nimū propinqui
solis in terra domibus negata
dulce ridentem lalagen. amabo
dulce loquentem
ad Iram.
Poscimur si quid uacui sub umbra
lusimus tecum quod et hęc cannū
uinat ⁊ plures arte dictamnū
barbite. carmen
Verbio primū modulate ciui
qui ferox bello tū inter arma
siue iactata reliquerat. uido
libū litore nauium
⁊ multas uenere q; ⁊ illi
rempherente puer canebat
⁊ licū nigros oculos nigro q;
crine decorū
O decus phoebi ⁊ dapibus supremi
grata. tertido semper o labor
dulce lenimen. m. cū q; salue
rite uocatū
sapphi ad puerū ministrū
Ascos odi puer. app.ratus
displicent nexe philyra corone
mitte sectari rosa q; locorū
sera morę
simplici myrto nt. ad labores
reduxi curo neq; te ministri
dedecet myrto neq; me subarta
uite bibentem
Anhunt saphica. de libro primo
carminū. Incipiunt de libro
secundo. saphica. ad sallustiū crispū
encomiastice tetracolos
Nullus argento color et auarus
abdito terris inimice lamnę
crispe sallusti nisi temperato
splendeat usu
Illum exercent pecul. cur acuo
hortus i pratis animi patiens
illum arat pinna. metuente solui
fama superstes
Latius regnes auidum domando
spiritum q; si libia remotis
gadibus iungas uiq; poenus
seruit uni
Crescit indulgens sibi dirus hydrops
nec sitim pellit nisi causa morbi
fugerit uenis et aquosus albo
corpore languor
Redditum cyri solio prahatem
dissidens plebi numero beatorum
eximit uirtus populumq; falsis
dedocet uti
Vocibus regnum et diadema tutum
deferens uim flamq; laurus
praestringit oculos inter ipsos
spectat aeternos
Achilla amare crimen non e
Ne sit ancillę tibi amor pudori
xanthia phoeni prius et solentem
seruat. brisei. niueo colore
mouit. achillem
Mouit diuae. telamone natum
forma captiue dominum tecmessę
arsit atrides medium i tumultu
uirginę raptam
barbare postquam cecidere. tumę
thessalo victore et adempti hector
tradidere fessis leuia. tulit
praeda. troiae
Nereiae dis tenent beatis
phthii diis plaue decorent parentes

LIMITS OF EMENDATION.—As the most conservative defender of 192
the manuscripts must admit the necessity of some conjectural emendation, so the boldest emendator admits the necessity of restraint. To draw a line, however, and say to the followers of Bentley and Madvig and Cobet and Dobree "Thus far and no farther" is impossible. Professor Chase puts the case in a nutshell when he says of Madvig's emendations of Livy that he feels less sure "that the words Madvig gives are those which Livy actually wrote, than that they are the best possible expression in Latin of what Livy wished to convey."

OPPOSING VIEWS.—A less temperate expression of the same 193
thought will be found on p. xxxvii of Professor Tyrrell's preface to his edition of the Miles Gloriosus of Plautus, over against which, for the sake of fairness, should be placed Professor Palmer's outburst on pp. xxxviii–xliv of his preface to the Satires of Horace in the same series, or Munro's defense of the emendation of Horace on pp. xix–xxxii of the edition by King and Munro. Bentley, the most subjective of all critics, has put his view of the matter into the often quoted phrase: *Nobis et ratio et res ipsa centum codicibus potiores sunt.* Against this stands the fact that modern editors do not accept one in a hundred of the changes introduced by Bentley into his text of Horace.

INDIVIDUAL CRITICISM.

194 THE name we have chosen for the second division (§ 168) of criticism is not the common one. Higher criticism is the name most frequently heard, because so frequently used by theological writers. It might, perhaps, be well to leave this name to denote the more restricted application of the science to the Scriptures only. Philologists object to the term not so much on account of its arrogant and invidious sound, as because it fails to describe the function of this branch of criticism. As a descriptive name the German Kritik des Echten und Unechten, criticism of the genuine and the spurious, is especially apt and appropriate, but long and unwieldy, and even among German scholars the term Individual-Kritik is perhaps as common.

195 PURPOSES OF INDIVIDUAL CRITICISM.—Individual Criticism is concerned chiefly with the matter of authorship, and undertakes to answer such questions as these: If a given composition is ascribed by tradition to a particular author, did he produce it? If to more than one, which (if any) of the number produced it? If to none, who did produce it? Such questions are not new, they have engaged the attention of scholars as far back as the history of philology goes. The very earliest students of classical literature were in doubt as to what poems were to be assigned to Homer out of the mass of what we now call cyclic literature. To early times also goes back the custom of ascribing for the sake of profit inferior works to writers of established reputation: only twenty-one out of one hundred and thirty plays called Plautine in the time of Varro were pronounced genuine by that great critic (Gell. III, 3). Soon after the death of Horace spurious poems were circulated under his name, and similar examples might be multiplied. Some such

questions are still busily discussed that have engaged the attention of scholars for generations (*e. g.*, the Dialogue of Tacitus [?]), and new ones constantly are propounded. To understand the process followed in investigating these problems it will be best to put ourselves in the position of an editor examining the title of his author to a given composition, as we did (§ 161) in the case of textual criticism. The evidence which he has to consider is partly external and partly internal and may be examined conveniently under these heads.

EXTERNAL EVIDENCE—MANUSCRIPTS.—The editor will first **196** examine the manuscripts to see how far the traditional authorship is supported by their authority. The value of their testimony is in no case very great, but varies with the age of the manuscript, deliberate falsification being more likely in those of later date. In any case the manuscript will hardly do more than show where the "burden of proof" lies. Sometimes they will agree in assigning the work to an author even when his title to it is known from other sources to be weak, *e. g.*, in the case of the rhetorical treatise *Ad Herennium,* which all incorrectly assign to Cicero. Here, of course, the burden of proof lies upon those who claim the work for another author. Sometimes the manuscripts will be found to disagree, or perhaps the best manuscript will offer a choice of authors. The latter is the case with the valuable literary treatise Περί ὕψους, once ascribed to Cassius Longinus (third century) but now generally attributed to Dionysius of Halicarnassus († 7 B. C.), the best manuscript of which has the title Διονυσίου ἢ Λογγίνου. Finally the manuscript may suggest no author at all, as, *e. g.*, in the case of the Lives of Eminent Commanders universally published now under the name of Cornelius Nepos.

ANCIENT WRITERS.—The editor will turn next to the ancient **197** writers, scholiasts, grammarians, lexicographers, etc., for evidence ("*testimonia*," see § 162) older and therefore more valuable than

that of the manuscripts (§ 177). He may find the title of the given work among those credited to a certain author, in which case he must consider the probability of several works on the same subject having the same title, or better he may find among the citations from a certain author passages which have come down to us in the given work only. The value of such testimony turns upon two points. First, the competence of the witness must be considered, for it is evident that a writer will speak with greater authority upon the works of a friend than upon those of a stranger, upon works in his own peculiar province than upon those in a less familiar field. So we will instinctively heed the testimony of Aristotle the pupil in regard to the works of Plato the teacher, of the younger Pliny in regard to the works of his uncle, of a professional rhetorician in regard to works of rhetoric. Again, some writers have a better reputation than others for care and
198 painstaking. In the second place, the character of the testimony, affirmative or negative, must be taken into account. Except in the case of the expert testimony, just mentioned, affirmative evidence, *i. e.*, evidence supporting the current tradition, is not of great value: it simply carries the tradition back a step further than the manuscripts. Negative testimony is much more important, especially that of experts, for it shows either that the tradition is later than the time of the witness, or that he had reasons for disbelieving it. A good illustration is furnished by the *Ad Herennium* mentioned above. All the manuscripts (and the oldest, *Parisinus 7714*, dates from the ninth century) ascribe the work to Cicero, and so do Saint Jerome (331–420 A. D.) and the famous grammarian of the sixth century Priscian; but Quintilian, III, 1, 21, mentions Cornificius (fl. 90 B. C.) as the author, and to him all scholars now assign the work. In this case the negative testimony is aided by the date of the witness (about 35–100 A. D.), his right to speak upon rhetorical questions, and his reputation for carefulness and truthfulness in his statements.

INTERNAL EVIDENCE—HISTORICAL.—From the external testi- 199
mony the editor will turn to that furnished by the work itself, and will first apply the tests of historical criticism (§ 155): Does the work, in the first place, betray an ignorance of facts which must have been known to its supposed author? Does it, in the second place, show an acquaintance with events that occurred only after the time of the supposed author? This is perhaps the safest test that can be applied to a work internally, for it leaves least to depend upon the partiality or prejudice of the editor. The results will depend upon the character of the work, which may or may not contain many allusions capable of historical identification, and also upon the greater or less precision with which we can determine the time and the place of the reputed author. One thing the editor must consider with great care, the possibility of interpolation. Diplomatic tests (§ 155) will reduce this danger to a minimum, but for this minimum due allowance must be made. This allowance will vary of course with the editor.

INDIVIDUALITY.—Next comes the agreement of the views ex- 200
pressed in the given work with the reputed author's views upon the same subjects as known to us from other sources. An editor would justly scout the idea of Sallustian authorship for a pamphlet in support of the nobility, or of defending as the work of Horace a newly discovered epic in praise of Augustus. The results in this case will depend, of course, upon the fullness and accuracy of our knowledge of the views of the traditional author, and due allowance must be made for alteration in these views in the case of a man whose literary career covers a long period of time, and also for the freedom or reserve with which he expresses his views under different circumstances. Cicero's changed political views between the impeachment of Verres (70 B. C.) and the defense of Sulla (62 B. C.) furnish a case in point, and so does the different tone with which he treats of matters of state in his con-

fidential letters to Atticus and in his public deliverances upon these same themes from the rostra or in the senate.

201 LANGUAGE AND STYLE.—Next comes the linguistic test, furnished by grammatical criticism (§ 154). Sometimes very general considerations will be sufficient for a negative decision. No fact is more familiar than the growth and development of a language, the change from age to age in forms, syntax, prosody, vocabulary. If a work written at one time is assigned to an author of a widely different time, the study of the language will surely detect the error. The same thing is true of variations due to differences in place of birth or education, but in less degree: does not Asinius Pollio charge Livy with *Patavinity* (provincialism)? In most cases for negative testimony, however, and in all cases for affirmative testimony, these general considerations will not suffice. The solution of the problem will require that a thorough comparison be made between the language of the work under consideration and the language of the author known to us from other sources. How minute and thorough must be the editor's knowledge of both only the highest scholarship can realize, and besides this we must have enough writings of the reputed author, unquestionably genuine, to make the test extensive as well as minute. Under these conditions it is probable that this test is the safest and surest of all, but we must be very sure that the conditions are fulfilled: the supposed genuine works may be in part spurious, the comparison may be partial, the editor's knowledge may be defective (§ 160).

202 The early application of the test is shown in Varro's judgment upon the plays of Plautus (Gell. III, 3, 1 and 2), and is ascribed to Cæsar by Cicero (Fam. IX, 16, 4); the danger is shown by Cicero no less clearly in the famous letter (Att. III, 12, 2) in which he suggests that the authenticity of one of his genuine compositions might be successfully denied because it was written less carefully than usual. Modern scholars, famous for critical talents, have been

Ppterea pollicetur intempore semet cum exercitu adfore. Ita compositis rebus in loca quā
maxime occulta discedit. Ac post paulo cognoscit marium extranere frumentatum
cum paucis cohortibus sicca missum. quod oppidū primum omnium post mala pugnam
a rege defecerat. Locum de lectis equitibus noctu pgit. et ita egredientib: romanis in porta pug
nam facit. simul magna uoce siccenses hortatur. uti cohortes a tergo circumueniant. fortuna
illis pdcari facinoris casum dare. sic fecerunt. postea inregno illo sin libertate sine metu
aetate acturos. Ac nimarius signa inferre. atque eu cadere oppido p paratus set. p fecto
cuncta aut magna pars siccensium fidem mutauissent. Tanta mobilitate se numidae
gerunt. Sed milites iugurthini. paulisp a rege sustentati. post quā maiore ui hostes ur
gent. pauca amissis p fugi discedunt. Marus ad zamam pueniit. Id oppidum in con
positum. magis opere quam natura munitum erat. nullius indigens. armis uirisq:
opulentum. Igitur metellus pro tempore atq: loco paratus rebus cuncta moenia exercitu
circumuenit. legatis imperat. ubi quisq: aut ire (de signo dato) deinde undiq: simul clamor ingens ortus.
ne quae res numidas terret. in sensi. interiaque sine tumultu manent. poeliu in capit
Romam pro ingenio quisque par se in minus glande aut lapidibus pugnare. alii succedere
ac murum modo suffodere. modo scalis adgredi aut pere. proeliū in manib: facere. Con
tra ea oppidani in pximos saxa uoluere. sudes. pila. praeterea picem. sulphur. et reda m
mixta ardenti mittere. Sed nec illos quidem qui p aetatem manserant timor animi: satis
munuerat. Nam plerosq: iaculatorum aut manu emissa uulnerabant. pariq:
periculo. sed fama par. bonis atq: ignauis erant. Dum apud zamam siccertatur.
iugurtha ex inprouiso. castra hostiū cū magna manu inuadit. remissis qui in psidio
erant. et oīa magis quā proeliū exspectantibus postam inrumpit. At illi repen
tino metu pculsi. sibi quisq: p moribus consulunt. alii fugere. alii arma capere.
magna pars uulnerati aut occisi. Ceterum ex omni multitudine. non amplius quadra
ginta memores nominis romani grege facto locum cepere paulo quā alii editiorem.

mobilitatem numidarum

Remissis occisis ceteris

Editiorem id. aliquem excelsiorem

deceived again and again. Muretus managed to insert a few trimeters of his own among some verses of Accius without detection by Scaliger, who published them without question in his first edition of Varro, and Wolf, failing to find in the printed editions of Cicero a letter ascribed to him in a manuscript in the library at Berlin, pronounced the letter spurious from internal considerations, but was forced to retract when a pupil showed him that he had merely looked for the letter in the wrong place in the book.

FORGERIES.—In cases where one author has deliberately imitated the style of another, no matter whether he intended to pass the spurious work off as genuine, or whether in after times the mistake was made by others, the problem is much harder to solve. It may be taken for granted that the imitator would conform as closely as possible to the historical conditions, would reproduce only the best known and safest views of his model, and would follow closely his peculiarities in style and language so far as these would be known to him. Detection from internal considerations will depend entirely, therefore, upon the ratio between his knowledge and that of modern scholarship, a ratio that is constantly changing in favor of detection. External tests are the main reliance, however, in cases of this sort. Excellent material for practice of a sort not too difficult may be found in the letters and speeches which Sallust has inserted in his account of the Conspiracy of Catiline, especially the letter of Lentulus (Cat. xliv, 4) and the speech of Cæsar (Cat. li). **203**

TESTS OF PROPOSED AUTHORS.—Now if from all the evidence thus obtained the editor regards the case as proven against the traditional author, he next proceeds to find the real author, and the problem is not unlike those proposed for solution in textual criticism. If the manuscript or the ancient authorities suggest another author than the one usually received (as in the case of the *Ad Herennium* mentioned above, § 198), or other authors, the editor will assume such author, or such authors one by one, as real and will then apply all the tests which he has used in the case of the traditional author. If none stands the test, the problem now resembles that of conjectural emendation: the editor endeavors **204**

to find some author who could have written the given work, a process of divination pure and simple. If he hits upon one historically possible, the tests are again applied, and if the results are satisfactory the probable (§ 190) author is found. So it stands with Cornelius Nepos, the argument for whose authorship of the Lives of Eminent Commanders is given, as an instructive illustration, in the next section. Further than the probable this process cannot go, and hence the energy with which it is pursued, and the envy and hatred and malice and all uncharitableness which such an investigation discovers as that of Professor Gudemann into the history of the discussion over the authorship of the Dialogue of Tacitus.

205 ILLUSTRATION OF PROOF.—There have come down to us and are now published under the name of Cornelius Nepos twenty-three short lives of Eminent Commanders (*Vitae* or *Liber de Excellentibus Ducibus*), not Romans. It is to be noticed that these are not only not ascribed by any ancient authority to Nepos, but are apparently assigned by the manuscripts to Aemilius Probus (of the time of Theodosius). The authority of the manuscripts is easily disposed of by considerations that need not be discussed here, but the claim of Nepos to the authorship of the Lives rests upon the following arguments only:

206 Several passages in the Lives (17, 4, 2; 18, 8, 2; 1, 6, 2) seem to have been written during the transition between the republic and the monarchy, and the last two of these seem to refer to the year 36 B. C. Now, at this time lived T. Pomponius Atticus, and the Lives are dedicated to an Atticus, whose *nomen* and *praenomen* are unfortunately not given. About this time moreover lived also Cornelius Nepos, a close friend of T. Pomponius Atticus, who is known from other sources (Gell. 11, 8, 5, and see the other refs. in Teuffel 198, 5) to have written "Lives" of eminent men. The inference that the extant Lives without an author are by this author without other extant "Lives" is natural, and becomes almost irresistible (*i. e.*, probable) when we find (1) that these Lives are followed in all extant manuscripts by lives of Cato and T. Pomponius Atticus, which are known to be by Cornelius Nepos, and (2) that these

lives of Cato and Atticus show the same characteristics in substance and diction, the same kind of generalization, and the same tendency to exculpate and exalt their subjects as do the Lives of Eminent Commanders. All modern scholars, therefore, of reputation agree in assigning the authorship of the Lives of Eminent Commanders to Cornelius Nepos.

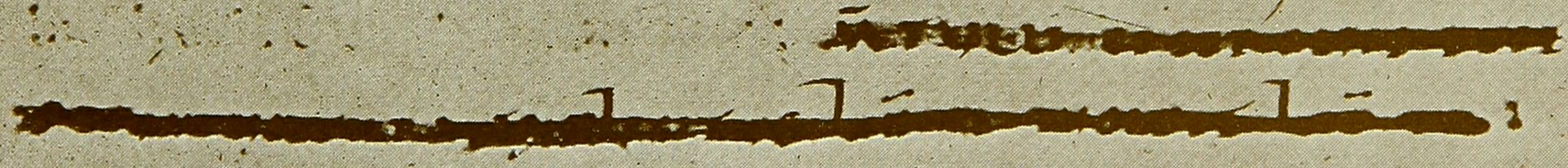
SUMMARY.—It is greatly to be regretted that there is no history of Philological Criticism in English, no biographical dictionary even, to which the student can turn for information about all the scholars whose names he finds in philological publications. A sketch of the development of Textual Criticism may be found in Harper's *Dictionary of Classical Literature*, with a brief bibliography. In Gow's *Companion*, p. 66 f., is given a list of famous critics and scholars, and some account of the greatest of these may usually be found in the biographical dictionaries and encylopedias, if they are not mentioned in Harper's *Dictionary*. Besides, the introductions to the more elaborate editions commonly describe the contributions made to the criticism and elucidation of the several authors by the scholars who have worked upon them. Students who can read German will find abundant helps at their disposal, the most important of which are named in the bibliographies appended to the several essays in Müller's *Handbuch*, Vol. I.

In general it may be said that the greatest advances made in criticism, with few and rare exceptions, have been made in very recent times. This is largely due to the increased attention given to Paleography, a study made possible by the cheapening of facsimiles on account of improved methods of pictorial reproduction, but more largely perhaps to the general spread of scientific methods through all branches of study: *fas est et ab hoste doceri!* It can hardly be said that there are now any "opposing schools" of criticism, so far as classical philology is concerned, however individuals may differ in their methods and results. Differences there are in the texts of even those authors that have been most carefully

studied, but these differences are on the whole very few and insignificant, and it may be affirmed that the texts of all the great classics of Latin literature, with the possible exception of Plautus, are to-day more trustworthy and nearer to the original than is, for example, the accepted text of our English Shakespeare.

DEORUM SECD

ergo earū partes diligunt ut Romā athenas parta rodum earū
urbiū separatim abuniuersis singulos diligunt, ut phyrhi bello caruū
fabricaū. corūcanū, primo punico calatinū duellū metellū luracium sae
cundo maximū marcellū africanū, post hos paulū gracchū catonē
patrū ue memoriā sapionē. laelium multos q; praeterea & nostra ciui
tas egregia tulit singulares uiros. quos nemine nisi iuuante deo
tale fuisse credendum est, quae ratio poetas maxume eque omerum impu
lit ut primapib; heroum ulixi diomedi agamemnoni achilli cer
tos deos discriminū & periculoq; comites adiungere & praeterea ipsos deos
saepe praesentia equales sup commemorauit dedarant abhis & monitanib;
& singulis hominib; consuli, qd quidem intellegit & iam significationib;
rerū futurarū. quae tū dormientib; tum uigilantib; portendunt,
multa praeterea ostentis multa omen, tis admonem. multisq; reb; alii
quasdiuturnus usus ita notauit ut artem diuinationis efficere & nemo igi
tur uir magnus sine aliquo adflatu diuino unquam fuit, nec uero ita are
fellendum est ut si segetib; autumnetis cuius pia tempestas nocuerit.
aut si quidem uitae comodis casus abstulerit eum cui quid orum acade
rit. aut in usum deo. aut neq gloriae deo. iudicem magna dicuram par
ua neq legum magnis aut uirtus perempsomi rei, siquidem ratus amiti
& a primape filosofia socrate dignum est deuertatib; uirtutis & copi
is, haec mihi ferre in mente uenierant quae dicenda putare de natu
ra deorum, tu aut cotta time audias eandem causam agas. te quae & prim
apem auem & pontifice esse cogites, & qm in utramque partem uo
bis licet disputare hanc potius tu mare eaq; facultate diserendi qua
tibi ar hetorica exercitationib; accepta amplificauit academi
a. potius huc conferes, malaeni & ia pia consuetudo est, con
traeos disputantis siue ex animo id fit siue simulate,



XV. CICERO: *Vossianus Fol. 86, Saec. X.*

Description of Plates.

LIST OF PLATES.

		OPP. PAGE
I.	VERGIL: *Palatinus, Saec. IV–V* . .	Frontispiece
II.	CICERO: *Schedae Vaticanae, Saec. IV–V* . .	22
III.	TERENCE: *Bembinus, Saec. IV–V* . .	26
IV.	CÆSAR: *Parisinus 5763, Saec. IX–X* . .	34
V.	VERGIL: *Schedae Vaticanae, Saec. IV* . .	40
VI.	SALLUST: *Parisinus 16024, Saec. IX–X* . .	50
VII.	CÆSAR: *Vindobonensis 95, Saec. XII–XIII* .	56
VIII.	CICERO: *Ambrosianus C. 29, p. inf., Saec. X* .	62
IX.	CICERO: *Rhenaugiensis 127, Saec. XI* . .	80
X.	VERGIL: *Sangallensis 1394, Saec. IV* . .	92
XI.	CATULLUS: *Romanus, Saec. XIV* . .	96
XII.	HORACE: *Bernensis 363, Saec. IX* . . .	102
XIII.	HORACE: *Bernensis 363, Saec. IX* . .	112
XIV.	SALLUST: *Parisinus 16025, Saec. IX–X* . .	118
XV.	CICERO: *Vossianus Fol. 86, Saec. X* . .	122
XVI.	CICERO: *Parisinus 18525, Saec. XII* . .	126

DESCRIPTION OF PLATES.

FAC-SIMILES are given of one or more manuscripts of each of **209** the following authors: Cæsar (Plates IV and VII), Catullus (XI), Cicero (II, VIII, IX, XV, and XVI), Horace (XII and XIII), Sallust (VI and XIV), Terence (III), and Vergil (I, V, and X). Of equal value for purposes of study are the fac-simile of a fragment from Sallust's Histories (Fig. 12, p. 69) and the reduced specimen of the Munich Livy (Fig. 17, p. 76). The specimens are taken from the authors read early in our courses of study and have been selected to illustrate the styles of writing described in §§ 95–115 rather than to represent the *apparatus criticus* of the several authors.

Plate I, Frontispiece. The *Codex Palatinus*, or *Codex Vaticanus* **210** *1631*, of VERGIL, Ribbeck's P. Written in rustic capitals (§ 103) of a style as early as the third century, and variously dated (§§ 65, 102, 115) from the fourth to the fifth. The volume has 571 leaves, counting the sheets of blank paper inserted by the binder between every two leaves of parchment; 33 leaves have been lost. It belonged originally to the library in Heidelberg (§ 74) but was taken to Rome in 1623 (§ 76), thence to Paris in 1797 and returned to the Vatican in 1815. The page given contains lines 277–299 of the first book of the Georgics. The letters barely discernible at the ends of the lines are from the opposite side of the leaf.

Plate II, p. 22. The *Schedae Vaticanae*, or *Palimpsestus Vati-* **211** *canus 5757*, of CICERO'S De Re Publica. Uncial writing of the fourth or fifth century (§§ 66, 106) covered by half-uncials of the eighth. This is the famous *codex rescriptus* originally at Bobbio (§ 60), which was discovered at Rome by Cardinal Angelo Mai

(1782–1854) and published by him in 1822. The manuscript is badly mutilated (§ 67), whole quires as well as single leaves being missing. The specimen page gives De Re Publica I, xvii, 26–27.

212 Plate III, p. 26. The *Codex Bembinus*, or *Vaticanus 3226*, of TERENCE, Umpfenbach's A. It is written in rustic capitals (Thompson's *Palaeography*, p. 189) of the fourth or fifth century, called uncials by some editors. It had originally 114 leaves, but 16 whole leaves and parts of others are wanting. It was owned by Cardinal Pietro Bembo (1470–1547), passed into the hands of Fulvius Orsini (§ 76) and is now (§ 214) in the Vatican. It is the oldest and best of the manuscripts of Terence, and one of the best manuscripts of Latin authors preserved to us. The specimen gives Phormio 179–223. The codex has valuable marginal notes.

213 Plate IV, p. 34. The *Codex Floriacensis*, or *Codex Parisinus 5763*, of CÆSAR, Meusel's B. Minuscule writing of the ninth century. The volume has 180 leaves, of which leaves 1–112 contain Cæsar's Gallic War, and leaves 113–180 books xiii–xvi of Josephus. The manuscript was anciently in the monastery of St. Benedict at Fleury-sur-Loire, and is variously known as *Colbertinus 897* and *Regius* $\frac{4938}{3.3.}$. Besides the subscription of Constantinus (§ 52) it has at the close of book II:

FLAVIUS LICERIUS FIRMINUS LUPICINUS LEGI.

This subscription is supposed to date from the sixth century. The codex has marginal readings from other manuscripts, is incomplete, and belongs to the "first class" of the manuscripts of Cæsar, marked α in the *stemma* on p. 104. The specimen gives the close of book II and the beginning of book III.

214 Plate V, p. 40. The *Codex Vaticanus 3256*, or *Schedae Vaticanae* or *Puteanae*, of VERGIL, Ribbeck's A. Written in square capitals (§§ 100, 102) and now generally assigned to the fourth century (§ 65) although at one time believed to be much older (§ 115), even of the time of Augustus, and hence called the

XVI. CICERO: *Parisinus 18525, Saec. XII.*

"Augustean Fragment." Of this manuscript, possibly the oldest extant of any Latin classic, seven leaves only are preserved, four in the Vatican and three in the Royal Library in Berlin (*Schedae Berolinenses*), containing Georgics I, 41–280, and II, 181–220. The manuscript was once in the library of St. Denis in France, but the time of its mutilation is unknown. The Vatican leaves have the memorandum: *Claudius Puteanus Fulvio Ursino d. d.*, and it is known that Du Puy gave them to Orsini in 1574–75. When Orsini died in 1600 they passed with his other books into the possession of the Vatican. The history of the leaves at Berlin cannot be traced so far back. A fragment of the same manuscript is known to have been in the library of Pierre Pithou (scholar and jurist, 1539–1596), but is now lost. From it, however, four verses, Aen. IV, 302–305, are preserved in a fac-simile made for the second edition of Mabillon's *De Re Diplomatica* (§ 90). The specimen page gives Georgics I, 61–80.

Plate VI, p. 50. The *Codex Parisinus 16024*, or *Sorbonianus* **215**
500, of SALLUST, Jordan's P. Minuscule writing of the ninth or tenth century. The manuscript had originally at least 190 leaves, of which 144 are lost from the beginning. The remaining 46 leaves contain the Catiline and Jugurtha with the *lacuna* in the latter (J. ciii, 2–cxii, 3) which characterizes all the manuscripts of the first class. The last page cannot be read, having been pasted upon a piece of blank paper, perhaps by a binder, and the preceding page ends abruptly with the words *fuit ante diem* (J. cxiii, 3). This is the best manuscript of Sallust, the only one of the first class whose readings are quoted separately by Jordan. The specimen page gives the close of the Catiline and the beginning of the Jugurtha.

Plate VII, p. 56. The *Codex Vindobonensis 95* of CÆSAR, **216**
Meusel's *f*. Minuscule writing of the twelfth or thirteenth century. The manuscript has 182 leaves containing besides the Gallic

and Civil Wars the Alexandrian, African and Spanish Wars. It is a manuscript of the second (β) class, see § 53 and the *stemma* p. 104. The specimen page gives Bell. Civ. I, xxv, 6 *posset*–xxvii, 2 *quod ab.* The scribe omitted a few words in line 18 of the second column, indicating the omission by the letter *d* (*i. e.*, *desunt*), and added them at the bottom of the page, preceded by the letter *h* (*i. e.*, *haec*).

217 Plate VIII, p. 62. The *Codex Ambrosianus C. 29*, *part. inf.* of CICERO, Baiter and Kayser's A. Minuscule writing of the tenth century. The codex has 158 leaves, containing the De Officiis, the orations against Catiline, and those for Marcellus, Ligarius and Deiotarus. It was once the property of Cardinal Federigo Borromeo (1564–1631), the founder of the Ambrosian library. The specimen gives the beginning of the first oration against Catiline.

218 Plate IX, p. 80. The *Codex Rhenaugiensis 127* of CICERO, Baiter and Kayser's R. Minuscule writing of the eleventh century. The manuscript has 62 leaves, containing the Cato Major and the orations against Catiline. The Laelius originally preceded these but has been lost. The specimen gives the close of the Cato Major and the beginning of the first oration against Catiline.

219 Plate X, p. 92. *Codex Sangallensis 1394*, or *Schedae Sangallenses Rescriptae*, of VERGIL, Ribbeck's G. Square capital writing (§ 65) of the fourth century. The volume is composed of a number of fragments gathered by Ildefonse d'Arx in 1822. Of Vergil eleven leaves only remain (and of these three or four were written over in the twelfth or thirteenth century) containing Georg. IV, 345–566; Aen. I, 381–418 and 685–722; III, 191–228 and 457–532; IV, 1–38; VI, 688–724. The specimen gives Aen. VI, 688–705, with verse 678 inserted between 695 and 696. Notice the correction of *inter* to *iter* in the first line.

220 Plate XI, p. 96. The *Codex Romanus*, or *Ottobonianus 1829*, of CATULLUS, Hale's R. Minuscule writing (North Italian Gothic)

of the close of the fourteenth century. The manuscript has 73 leaves, containing Catullus alone (§ 19). It was discovered (§ 88) by Professor Wm. Gardner Hale in 1896 in the Vatican library, and is considered by him to be of the same rank as O and G, standing in the same relation as G to the "lost Verona" manuscript (§ 168). It is the most carefully and beautifully executed manuscript of the three and the richest in variant readings. A full collation will shortly be published by Professor Hale, and the Vatican will give out at the same time a complete fac-simile. The specimen page is the first of the codex.

Plates XII and XIII, pp. 102 and 112. The *Codex Bernensis* **221** *363* of HORACE, Keller and Holder's B. Minuscule writing (Irish Hand, see § 105) of the ninth century, the oldest manuscript of Horace extant. It has 197 leaves, of which leaves 167–186 contain parts of Horace arranged irregularly (see Orelli's preface). It bears the name of Bongars (§ 71) and was once in the library of Fleury-sur-Loire, to which it was supposed to have been brought by Alcuin (735–804) or one of his fellow-workers. Plate XII reproduces the obverse of leaf 167, containing a short life of Horace, of no particular value, and the first of his odes. Plate XIII shows the reverse of leaf 168 containing Carm. I, xxii, 9–24; xxxii, 1–16; xxxviii, 1–8; II, ii, 1–24; iv, 1–4.

Plate XIV, p. 118. The *Codex Parisinus 16025*, or *Sorboni-* **222** *anus 1576*, of SALLUST, Dietsch's P[1]. Minuscule writing of the ninth or tenth century. The codex has 47 leaves containing the Catiline and Jugurtha with the *lacuna* (§ 215) marking the manuscripts of the first class. It is little inferior to P, although not quoted separately by Jordan. The page reproduced contains Jugurtha lvi, 2 *praeterea*–lviii, 3 *editiorem*. The glosses are as follows:

Marginal—*In tempore, subaudi necessitatis, id est oportune—Id est querere frumentum—Nota mobilitatem Numidarum—*

glans—Remissis, id est ociosis, cessantibus—Ediciorem, id est apciorem excelsiorem.

Interlinear—*de signo dato—perticas—bant* in several places to show the force of the historical infinitive over which it is written

223 Plate XV, p. 122. The *Codex Vossianus Fol. 86* of CICERO. In the library of the University of Leyden, minuscule writing of the tenth century. The manuscript has 192 leaves containing parts of Cicero's philosophical works. The page here reproduced gives De Natura Deorum II, lxvi, 165 *Ergo et* to the end. A later hand has added the marginal note, *Finitur disputatum Balbi* and the caricatures.

224 Plate XVI, p. 126. The *Codex Parisinus 18525* of CICERO. This codex, written in minuscules of the twelfth century, has but six leaves left, containing fragments of the first and second orations against Catiline. The specimen shows Catiline I, xii, 29 *vocibus* to the end and the beginning of II. The last four lines give a summary of the second oration, as follows:

Superiore libro Catilina circumventus eloquio Ciceronis spontaneum elegit exilium, unde oratori maxima venisse videbatur invidia; sed postero die timore dissimulato processit ad populum fingens se timere quod emiserit Catilinam ut minus sit invidiosum quod in exilium expulerit. Prohemium (*i. e.*, prooemium) *sumptum ab exultatione dicendis verbis pene triumphantibus qui sine damno populi Romani bellum superare potuerit.*

INDEX.

INDEX.

References are to the sections.

Abbreviations: for names of Manuscripts, 81; in Manuscripts, 110, 114, 132, 145.
Accidental Errors: of the Eye, 129–136; of the Ear, 128; of the Memory, 137–141; of the Judgment, 142–146.
Addition of unimportant words, 141.
Age of Manuscripts, 12, 24, 65; as test of value, 93, 184; tests of age, 115.
Aldus Manutius, 62.
Alexandrian Scholars: divide the Rolls, 11; measure them, 36; as critics, 195.
Ancient Commentaries, 175. 177; Criticism, 195; Manuscripts, 65; Translations, 173, 174.
Apparatus Criticus, 162–178; Manuscripts, 163f; Translations, 173; Commentaries, 175; Citations, 177; Imitations, 178; Use of Apparatus, 179.
Archetype, 118, 170, 171.
Aristotle's Constitution of Athens, 12.
Atramentum, 5. See Ink.
Atticus, as publisher, 30, 37.
Authors: position of, 25; relation to patrons, 26; to publishers, 27; property right in books, 26; complaints of, 37, 38. See also Publisher, Libraries.
Authorship: test of, 196–203; proof of, 205, 206.

Barbarian Invasions, 56.
Bookhands, 98, 105.
Books: papyrus, 6; parchment, 16; manufacture, 32; cost, 35; measured, 36; titles, 40; copyright in, 26; market for, 29, 34; published without author's consent, 27; rare books used as copy, 32; corrected, 37.
Bookstores, 29, 31. See *Tabernae*.
Cæsar: leading Manuscripts, 82; subscriptions, 52, 53; stemma, 170.
Calamus scriptorius, 5.
Calliopius, 52, 53.
Capital letters, 95, 96, 98, 100, 102, 103, 115; similarities between, 129.
Capsa, 8.
Caroline minuscules, 109, 112.
Causes of critical doubt, 152–158.
Chartae, 4.
Christianity, opposition to, 51.
Church, influence of, 58.
Cicero: his publisher, 30; libraries, 29; complains of errors, 37; books published without his consent, 27.
Citations in later authors, 177.
Classics, canon of, 46.
Clergy, ignorance of, 57, 58.
Codex: meaning of word, 16; form, 16; size, 19; convenience, 20, 33; *Codex rescriptus*, 23, 67, see Palimpsest; description of *Codex*, 116, 117. See also Books, Parchment.
Collations of Manuscripts, 86, 87, 88, 163.
Conjectural Criticism, 151, 188–193; objection to the name, 158. See Emendations.
Conjectures confirmed, 191; "probable" and "certain," 190.
Constantinus, 52.
Copyright, 26.
Cornua, 7.
Correction of Errors, 37. See Errors.
Correctors: in authors' times, 37; later, 52, 53.
Cost of Books, 35.
Criterion of the Appropriate, 160.
Critical Editions, 71, 89.
Criticism: Science of, see Contents; Higher and Lower, 151, 155, 194–206;

References are to the sections.

Diplomatic, 151, 157, and see Textual; Conjectural, 151, 188–193; Grammatical, 151, 154; Historical, 151, 155; Aesthetic, 151, 156; Individual, 194–206; applied to Emendations, 190.
Cursive Writing, 96, 97; little to do with Classics, 97; influence on bookhand, 108.

Dark Ages, 56.
Decline of Literature, 43.
Descriptions of Manuscripts, 71.
Dictation, 33; errors from, 128.
Diplomatic Criticism, 151, 157, 190, and see Textual.
Diplomatics, 91.
Dittography, 133.
Division of Words, see Separation; wrong division, 143, 144; of sentences, etc., 145.
Doubt, critical, 152, 153; causes of, 154–156; removal of, 157, 158.

Ear, errors of, 128.
Editions, 34; by subscriptors, 51, 52; first, 64, 165.
Education, 45; disappearance of, 57; revival of, 60.
Emendation defined, 158; conjectural, 190–193; possible, probable and certain, 190; limits of, 192; opposite views of, 193.
Epigraphy, 2, 91, 95.
Errors: in the authors' time, 32, 37; in our Manuscripts, 119, 149; classification of, 120.
Examination, critical, of Manuscripts, 164, 165; possible results, 166–169.

Families of Manuscripts. See *Stemmata.*
Fasces, 8.
Faulty Manuscripts, 119.
First Editions, 64, 165.
Forgeries, detection of, 203.
Frontes, 7.

Glosses, 49, 146.
Gothic Letters, 111.
Grammarians, 50, 175.
Grammatical Criticism, 151, 154.
Griesbach's Canon, 181.

Half-Uncials, 105, 107.
Hands; first and second, 84, 85, 146, 185; National, 97.
Haplography, 134.
Higher Criticism, 151, 155, 194–206, see Individual; objections to the name, 155, 194.
Historical Criticism, 151, 155, 199.

Ignorance of all classes, 57, 58; of copyists, 63, 125.
Illustrations in Manuscripts, 7, 102.
Imitations, 178.
Inconsistencies in Names and Symbols of Manuscripts, 69, 70, 71, 81–83.
Individual Criticism, 194–206. See Contents.
Individuality as test of Authorship, 200.
Ink, for papyrus, 5; for parchment, 15; colors, 15; washed away, 5; improved, 15; scraped off, 23.
Instruments for writing, 5, 15. See Ink, Pens, *Stilus.*
Intentional Errors, 125–127.
Internal Evidence of Authorship, 199.
Interpolations, 146.
Irish hand, 97, 105.

Judgment, Errors of, 142–146.

Keeping of the Manuscripts, 68–89.
Kinds of Criticism, 159.

Lacunae, 121.
Learning, Indifference to, 57; revival of, 60.
Libraries first brought to Rome, 29; private, 29; public, ancient, 44; modern, 72–80; use of Manuscripts in, 68; Latin names of, 78–80.
Librarii, 29, 30.
Limits of Emendation, 192; of Textual Criticism, 188.
Linguistic test of Authorship, 201.
Lipography, 134.
Literal Criticism, 154.
Lombard Hand, 97.
Lost Manuscripts, 61, 168; works, 55.
Lower Criticism, 151. See Textual.

References are to the sections.

Majuscules, 98f; errors in, 129.
Manuscripts: lost, 61; names changed, 70; in apparatus criticus, 163; relative worth, 183–187. See Contents, and also *Codex*, Book, Papyrus, Parchment.
Marginal Notes, 47, 49, 84, 124.
Membrana, 14. See Parchment.
Memory, errors of, 137.
Merovingian Hand, 97.
Minuscules, 108–115; 131.
Monastic establishments, 59, 60.
Mutilated Manuscripts, 67, 121.

Names: various, for same Manuscripts, 69; of Manuscripts commonly used, 78, 79; of places, Latin, 72–80.
National Hands, 97.
Numismatics, 2.

Offenses, critical, 152–158.
Oldest Manuscripts, 65; printed classics, 64.
Omission of unimportant words, 141.
Opposition to Christianity, 51.
Ovid: Metamorphoses published without his consent, 27.

Paleography, 90–149. See Contents; practical, 116–149; theoretical (historical), 90–115.
Palimpsests, 5, 23, 59; preserved, 65, 66; value of, 67.
Papyrus: relation to parchment, 3; manufacture, 4; size of sheets, 4; instruments for writing on, 5; palimpsest, 5; rolls, 6; odd forms of, 18; preserved, 12, 65.
Parchment: relation to papyrus, 3; history of, 13, 14; instruments for writing on, 15; books, 16; odd forms, 18; superior to papyrus, 20; size of sheets, 16; of books, 19; tardy use, 22; age of books, 24; oldest preserved, 65, 66; first books written on parchment, 21.
Patron and Author, 25.
Pens for papyrus, 5; finer for parchment, 15; metal, quill, 5;
Pergamena, 14. See Parchment.
Pergamos, 14.
Period of Decline, 43; of Transmission, 42.
Petrarch, 60, 61.
Plays circulated for reading, 28.
Pre-Caroline Cursive, 105.
Preservation of Rolls, 12; of codices, 65; of Literature, 43 f.
Printing, 62; source of our letters, 100, 113; of German letters, 111; first editions, 64.
Proof of Authorship, 205, 206.
Publication of Books, 25–41; uncommercial, 29; commercial, 31.
Publishers, 31; relation to Authors, 26.
Punctuation in majuscule writing, 101; minuscule, 110; errors in, 145.
Purpose of Individual Criticism, 195.

Quill pens, 5.
Quires, 16.

Rapidity of Publication, 34.
Reading the Rolls, 9.
Recensions of Early Scholars, 52, 53.
Relative worth of Manuscripts, 183–187.
Revival of Learning, 60.
Rolls: how made, 6; read, 9; size, 10; ready made, 11; preserved, 12. See Papyrus.
Roman Uncial, 105.
Ruling Parchment, 15.
Rustic Capitals, 100, 103.

Scholia, 47, 146, 175.
Schools and contemporary Authors, 31; preserve literature, 45; corrupt it, 54; revival of, 60; school books, 47; against Christianity, 51.
Scrinium, 8.
Selections from complete works, 46.
Separation of Words: in Capitals, 101; uncials, 104; minuscules, 110; errors in, 143.
Sheets: sizes of Papyrus, 4; parchment, 16; ruled, 15; quires, 16; arrangement of, 16; lost or transposed, 122.
Similar sounds, 128; letters, capital, 129, 130; minuscule, 131.
Size of Rolls, 10; codices, 19; papyrus sheets, 4; for poems, etc., 11; parchment sheets, 16; editions, 34; measurement of, 36.

References are to the sections

Skipping, 135, 136.
Slaves as copyists, 29, 30, 32, 33, 36.
Sounds confused, 128.
Specimens, of Capitals, 102; rustic capitals, 103; uncials, 106; half-uncials, 107; minuscules, 113.
Spelling as a test of Manuscripts, 115; concurrent spellings, 128.
Square Capitals, 100, 102.
Stemmata, 170–172; of Cæsar, 170; Tacitus' Dialogue, 172.
Stichometry, 36.
Stilus, 15.
Styles of Writing, 91–115. See Contents.
Subdivisions of Criticism, 151; in this book, 159.
Subscriptions, 52, 53.
Substitution, 140.
Symbols for Manuscripts, 81.

Tabernae librariae, 29.
Tardy use of Parchment, 22.
Testimonia, defined, 162; explained, 173–177, 197, 198.
Tests of Authorship, 196–202; of Manuscripts, age, 115; worth, 186, 187.
Texts, modern, soundness of, 208.
Textual Criticism, 161–193. See Contents.
Titles, doubtful forms of, 40, 41.
Tituli, 8.
Transmission of Manuscripts, 42–67, See Contents.
Transposition, 138, 139.

Umbilicus, 7.
Unavoidable Errors, 121–124.
Uncials, 98, 99, 104, 106, 115.
Uncollated Manuscripts, 88.
Unimportant words added or omitted, 141.
Uses of Paleography, 93, 94; of Palimpsests, 67; of *Stemmata*, 172; of Subscriptions, 53.

Vellum, 3. See Parchment.
Vergil: a supposed original Manuscript, 35; sumptuous editions, 102; portrait, 102; date of codices, 115.
Visigothic hand, 97.
Volumen, 6, 7.

Wax Tablets, 2, 96.
Writing as manual labor, 59; rapidity of, 34; materials for, 2, 5, 15.
Wrong Division of Words, 143, 144; of clauses and sentences, 145.