



Bodleian Libraries

UNIVERSITY OF OXFORD

This book is part of the collection held by the Bodleian Libraries
and scanned by Google, Inc. for the Google Books Library Project.

For more information see:

<http://www.bodleian.ox.ac.uk/dbooks>



This work is licensed under a Creative Commons Attribution-NonCommercial-ShareAlike 2.0 UK: England & Wales (CC BY-NC-SA 2.0) licence.

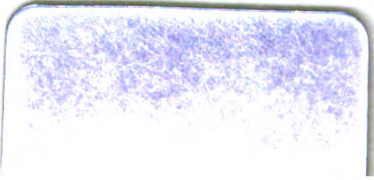




30181

e.

13.



COMPARATIVE GRAMMAR.

A COMPENDIUM
OF THE
COMPARATIVE GRAMMAR
OF THE
INDO-EUROPEAN, SANSKRIT, GREEK AND LATIN
LANGUAGES.

BY
AUGUST SCHLEICHER.

TRANSLATED FROM THE THIRD GERMAN EDITION
BY
HERBERT BENDALL, M.A.
CHR. COLL. CAMB.

PART I.



LONDON:
TRÜBNER & CO., 57 AND 59, LUDGATE HILL.
1874.

All rights reserved.

HERTFORD:
PRINTED BY STEPHEN AUSTIN AND SONS.

TRANSLATOR'S PREFACE.

THIS book is a translation of those parts of Schleicher's 'Compendium der vergleichenden Grammatik der Indogermanischen sprachen' which treat directly of the Indo-European original language, Sanskrit, Greek, and Latin: it was undertaken for the use of students of Greek and Latin Philology, on the suggestion of Mr. Peile, M.A., of Christ's College, Cambridge, to whom I am indebted for several hints and corrections. My thanks are due to Herr Gustav Voigt also, for help kindly given.

I shall be glad if readers will point out any mistakes in the translation.

HERBERT BENDALL.

LIVERPOOL COLLEGE,
Oct. 1874.

PREFACE TO THE FIRST EDITION.

THIS work is meant to be an elementary handbook for lectures and self-instruction. The want of such a work has been hitherto widely felt. The state of Indo-European Philology is now such that it has become possible to write a compendium of the comparative grammar of the Indo-European languages. After we have discarded that part which is still doubtful, there remains a large store of knowledge, embracing the different sides which language offers to scientific treatment: this knowledge will, in my opinion, stand unshaken for all time. The chief object of a compendium of the Indo-European languages is to collect and arrange in a short and appropriate form, and yet in an intelligible manner, these results of Indo-European Philology. Where, however, it is impossible to avoid mentioning what is obscure and doubtful, it will be expressly characterized as such.

It is no slight task to compose a first handbook of this kind treating of the formation of the Indo-European languages: whether the writer of the present work has succeeded in temporarily satisfying the want, others must decide; but he begs them to take it into consideration that his book is a first essay in the direction pointed out.

The following account of the origin of my book may to some extent at least show that I have honestly encountered the difficulties of the task.

I have been Academical Professor for fifteen years, and have lectured on Indo-European grammar from the outset; partly sketching out grammars of particular Indo-European languages, from a philological point of view, partly writing a grammar of the languages which collectively form a speech-stem, *i.e.* a so-called Comparative Grammar. To infer from the number of hearers whom even these latter lectures attracted, and from the perseverance and attention with which I was listened to, they must have treated the subject in a manner intelligible to beginners. I have remodelled my notes more than once. It was a real pleasure to work for my hearers and pupils here: I am indebted to their encouragement and participation for the heartiness with which I undertook the complete re-arrangement of my treatise on Comparative Grammar of Indo-European languages, which I had delivered in two sets of half-yearly lectures.

In these lectures on Indo-European grammar I felt the want of a printed elementary treatise, which should offer in the most appropriate way the necessary examples and comparative tables. Dictating, and continually writing on the black board, is wearisome both to hearers and to the lecturer. Hence the thought first occurred to me of having my paper multiplied in MS. for the use of my pupils. And from this arose by degrees what I have now completed, the composition

of a compendium especially for beginners. This book is therefore my notes repeatedly revised, and this is the point of view from which I desire it to be used and criticized.

It is to be understood that in my lectures I did not confine myself to the matter in the notes; what is printed here is merely that part which I used to dictate. Enlargements on particular points and excursus by the way I have never denied myself. Those who make use of this compendium will perhaps take this into consideration. The attempt to reduce the compass of the book to the narrowest limits possible made it a necessity to banish from it all discussions as regards different views. Generally I have attempted, whenever I could, to arrange the facts in such a way that they carried their proofs with them: moreover, the materials are so copious that even in the lectures it is difficult to find time for a controversial statement of details.

Circumstances unfortunately compelled me to finish the last preparation of the MS. for a printed compendium in a short time: but I hope that I have nevertheless written a useful book.

The design and execution of my work must speak for themselves; to discuss these points here would occupy too much space, and lengthen the compass of the preface to excess.

AUGUST SCHLEICHER.

JENA, *September*, 1861.

ABBREVIATIONS.

A.S.	Anglo-Saxon	mom.	momentary
acc. to	according to	N.H.G.	New High German
bef.	before	O.Bulg.	Old Bulgarian
bes.	beside	O.H.G.	Old High German
betw.	between	origl.	original Indo-European
caus.	causative		language
comb.	combination	partt.	particles
dial.	dialect	Pol.	Polish
diall.	dialects	✓	root
ex.	example	Scl.	Slavonic
exx.	examples	sf.	suffix
f.f.	fundamental form	sff.	suffixes
fm.	form	st.	stem
fmn.	formation	stt.	stems
inserr.	inscriptions	termn.	termination
M.H.G.	Middle High German.	unacc.	unaccentuate

Asterisk * indicates that the form does not occur.

The other abbreviations explain themselves.

TABLE OF CONTENTS.

INTRODUCTION.

	PAGE
I. SCIENCE OF LANGUAGE	1
Grammar	1
II. CHIEF FORMS OF LANGUAGES.	2
(<i>i.e.</i> the arrangement of languages according to their morphology, as Monosyllabic, Confixative, and In- flexive)	
III. THE LIFE OF A LANGUAGE	4
1. Its Development	4
2. Its Decay	4
Differentiation of Languages (Speech-stems, etc.) . . .	4
IV. THE INDO-EUROPEAN LANGUAGES	5
1. The Asiatic group.	5
2. The S.W.-European group	5
3. The N.-European group	
The earliest divisions of the Indo-European Language . .	
Plan of the original separations	

GRAMMAR.

I. PHONOLOGY.

A. VOWELS.

	PAGE
§ 1. INDO-EUROPEAN ORIGINAL LANGUAGE	9
Table of Sounds	9
§ 2. Vowels	10
Examples—1. <i>a</i> -scale.	10
2. <i>i</i> -scale	10
3. <i>u</i> -scale	10
§ 3. Vowel Sound-laws.	12
§ 4. SANSKRIT	12
Table of Sounds	13
Pronunciation of Sounds	14
§ 5. Vowels	16
§ 6. Examples—1. <i>a</i> -scale	16
Loss of <i>a</i> before <i>r</i> , <i>l</i> (<i>r</i> = <i>ar</i> , <i>l</i> = <i>al</i>)	17
Weakening: <i>r</i> = <i>ra</i>	17
Loss before other Consonants—	
<i>u</i> = <i>va</i> , <i>i</i> = <i>ya</i>	18
§ 7. Weakening of <i>a</i> , firstly, to <i>i</i> and <i>u</i>	18
<i>u</i> = <i>an</i> , <i>am</i>	19
Weakening of <i>a</i> , secondly, to <i>ī</i> and <i>ū</i> (<i>īr</i> , <i>ūr</i> = <i>ar</i>)	19
§ 8. Fundamental Vowel <i>a</i>	20
§ 9. Step-formation of <i>a</i> to <i>ā</i> as root-vowel	21
<i>Note.</i> —The roots ending in <i>a</i> which are usually classed	
with <i>ā</i>	21
Step-formation of <i>a</i> in elements expressing relativity	22

TABLE OF CONTENTS.

xiii

	PAGE
§ 10. 2. <i>i</i> -scale; fundamental vowel <i>i</i>	22
Lengthening of <i>i</i> to <i>ī</i>	22
§ 11. First step-formation of <i>i</i> to <i>ē</i>	23
Second step-formation of <i>i</i> to <i>āi</i>	23
§ 12. 3. <i>u</i> -scale; fundamental vowel <i>u</i>	24
Lengthening of <i>u</i> to <i>ū</i>	24
§ 13. First step-formation of <i>u</i> to <i>ō</i>	24
Second step-formation of <i>u</i> to <i>āu</i>	24
§ 14. Vowel Sound-laws	25
1. Laws regulating the concourse of vowels	25
a. Contraction	25
b. Loss of <i>a</i>	26
c. Splitting-up of <i>i</i> (<i>ī</i>) and <i>u</i> (<i>ū</i>) into <i>iy</i> , <i>uv</i>	26
d. Change into corresponding semi-vowel	26
§ 15. 2. Vowel variations conditioned by neighbouring consonants	27
a. Lengthening of vowels before <i>y</i>	27
b. <i>iy</i> , <i>īy</i> = <i>y</i>	28
c. Contraction of <i>yā</i> to <i>ī</i> (<i>ī</i> also as product of older contractions)	28
d. Compensatory lengthening	29
e. Dulling of <i>ā</i> to <i>ē</i> and <i>āu</i>	30
f. Auxiliary vowel <i>i</i> , <i>ī</i>	31
§ 16. GREEK. Table of Sounds	31
Their pronunciation	32
§ 17. Vowels.	
<i>Note.</i> —Ambiguity of sounds	33
§ 18. Examples; 1. <i>a</i> -scale. Loss	34
Weakening of <i>a</i> to <i>ι</i>	34
Lengthening of this <i>ι</i> to <i>ī</i>	35
Weakening of <i>a</i> to <i>υ</i>	35
§ 19. Fundamental vowel; <i>ε</i> = origl. <i>a</i>	36
<i>ο</i> = origl. <i>a</i>	37

	PAGE
o beside a dialectically	37-
a = origl. a	37
a beside e	37
a = a + nasal	38
§ 20. Step-formations of a. First step: 1. e	38
raised to o. 2. a raised to ā, η	39
Second step, ω	40
§ 21. 2. i-scale; fundamental vowel ι	40
Lengthening of ι to ī	41
§ 22. Step-formations of ι. First step: ι raised to ει, αι	41
Second step. ι raised to οι	42
§ 23. u-scale. Fundamental vowel υ. Lengthening of υ to ū.	42
Note.—ι in place of υ	43
§ 24. Step-formations of υ. First step, υ raised to ευ, αυ	43
Second step: υ raised to ου	44
αυ, ωυ, ω as second steps of υ	44
Note.—Initial ου, ευ = origl. va.	45
§ 25. Vowel Sound-laws: general	45
§ 26 a. Insertion of ι in preceding syllable in case of termina- tion -σι	46
§ 26 b. Vocalisation and transposition of γ, ν. 1. γ becomes ι, ν becomes υ	46
2. ε = γ	47
3. Transposition and assimilation of origl. γ and ν after ν, ζ, λ	48
§ 27. Loss of γ, ν, s; consequent vowel-accumulations and con- tractions	49
§ 28. Compensatory lengthening. 1. Compensatory lengthening after loss of n before s	50
2. Compensatory lengthening in medio after loss of s from after λ, μ, ν	50
3. Compensatory lengthening in nom. sing.	50

TABLE OF CONTENTS.

XV

	PAGE
§ 29. 1. Vowel-insertion	51
2. Vowel-prefixure	52
§ 30. LATIN. Table of Sounds	53
§ 31. Vowels	54
§ 32. Examples—1. <i>a</i> -scale. 1. Loss	55
2. Weakening of <i>a</i> to <i>i</i>	56
3. Weakening of <i>a</i> to <i>u</i> ; decline of <i>a</i> to <i>o</i> , <i>u</i> , <i>ū</i> , <i>i</i>	57
<i>u</i> for the <i>o</i> of the older language	57
<i>o</i> retained after <i>v</i> , <i>u</i>	58
§ 33. Fundamental vowel. 1. <i>a</i> = origl. <i>a</i>	58
2. <i>o</i> = origl. <i>a</i>	58
<i>o</i> after <i>v</i>	58
<i>so</i> = origl. <i>sva</i>	58
<i>o</i> before <i>v</i> ; <i>o</i> in other combinations; <i>o</i> , later <i>u</i> , in final stem- and word-formative elements	59
3. <i>e</i> = origl. <i>a</i>	59
§ 34. Step-formations of origl. <i>a</i> . 1. <i>e</i> raised to <i>o</i>	60
2. <i>ē</i> = origl. <i>ā</i>	61
3. <i>ā</i> = origl. <i>ā</i>	61
4. <i>ō</i> = origl. <i>ā</i>	62
5. <i>ū</i> = origl. <i>ā</i>	62
§ 35. 2. <i>i</i> -scale	63
Fundamental vowel <i>i</i>	63
Dulling of <i>i</i> to <i>e</i>	63
First step: <i>i</i> raised to <i>ei</i> , <i>ī</i> , <i>ē</i> ; further to <i>ai</i> , <i>ae</i>	64
Second step: <i>i</i> raised to <i>oi</i> , <i>oe</i> , <i>ū</i>	65
§ 36. 3. <i>u</i> -scale	65
Fundamental vowel <i>u</i>	65
Weakening of <i>u</i> to <i>ū</i> , <i>i</i>	65
Note.— <i>ū</i> as a lengthening of <i>u</i>	66
First step: <i>u</i> raised to <i>eu</i> , for which occur <i>ou</i> , <i>ū</i>	66
<i>u</i> raised to <i>au</i>	67
Second step: <i>u</i> raised to <i>ou</i> , <i>ū</i> , coinciding with First step	67

	PAGE
§ 37. Vowel Sound-Laws	68
Hiatus; contraction; <i>u</i> and <i>i</i> , <i>e</i> remain before vowels . . .	68
§ 38. Assimilation: relationship of vowels to consonants . . .	68
<i>o</i> near <i>u</i> , <i>v</i> ; <i>u</i> near labials, <i>m</i> , <i>l</i>	69
<i>e</i> in final syllables before nasals and two or more consonants;	
<i>o</i> before <i>r</i>	70
Fluctuation of <i>e</i> and <i>u</i> before <i>nt</i> , <i>nd</i> ; <i>i</i> before <i>n</i>	70
Dissimilation	70
§ 39. Final loss of consonants	70
1. Compensatory lengthening	71
2. Contraction	71
§ 40. Vowel-weakening	71
<i>a</i> weakened to <i>e</i> , <i>i</i> , to <i>u</i> ; <i>ā</i> to <i>ē</i>	72
<i>ae</i> to <i>ī</i> ; <i>au</i> to <i>ō</i> , <i>ū</i> : weakening and shortening of longer	
vowels and diphthongs to <i>i</i>	72
Weakening of <i>o</i> , <i>u</i> , to <i>i</i> before secondary suffixes and in	
compounds	72
§ 41. Shortening of vowels in unaccented final syllables . . .	72
§ 42. Loss of final vowels	73
Medial loss of vowels	73
§ 43. Auxiliary vowels	74

B. CONSONANTS.

§ 44. Consonants of the Indo-European Original Language . .	76
§ 45. Momentary mute unaspirated Consonants . . .	77
1. <i>k</i> , 2. <i>t</i> , 3. <i>p</i>	77
§ 46. Momentary sonant unaspirated Consonants . . .	78
1. <i>g</i> , 2. <i>d</i> , 3. <i>b</i>	78
<i>Note</i> .—On the original existence of <i>b</i>	78
§ 47. Momentary sonant aspirated Consonants . . .	78
1. <i>gh</i> , 2. <i>dh</i> , 3. <i>bh</i>	78

	PAGE
§ 48. Spirants. 1. <i>y</i> , 2. <i>s</i> , 3. <i>v</i>	79
§ 49. Nasals. 1. <i>n</i> , 2. <i>m</i>	79
§ 50. <i>r</i>	80
§ 51. SANSKRIT. Consonants	80
§ 52. Original momentary mute unaspirated Consonants	80
1. Origl. <i>k</i> ; Sk. <i>k</i> =origl. <i>k</i> ; <i>ḳ</i> =origl. <i>k</i>	82
Sk. <i>ḳh</i> =origl. <i>sk</i> ; Sk. <i>ḳh</i> =origl. <i>sk</i> (a variation of Sk. <i>ḳh</i>	82
acc. to sound-laws); Sk. <i>ç</i> =origl. <i>k</i> and its interchange	
with <i>k</i> , <i>ś</i> , etc.	83
Sk. <i>p</i> =origl. <i>k</i>	83
2. Origl. <i>t</i> ; Sk. <i>t</i> =origl. <i>t</i> ; Sk. <i>th</i> =origl. <i>t</i>	84
<i>Note</i> .— <i>ks</i> for <i>kt</i>	84
3. Origl. <i>p</i> ; Sk. <i>p</i> =origl. <i>p</i> ; Sk. <i>ph</i> =origl. <i>p</i>	85
§ 53. Origl. momentary sonant unaspirated consonants:	
1. Origl. <i>g</i>	85
Sk. <i>g</i> =origl. <i>g</i> ; Sk. <i>g'</i> (and its representatives acc. to	
sound-laws)=origl. <i>g</i>	85
Sk. <i>h</i> for origl. <i>g</i>	86
2. Origl. <i>d</i> ; Sk. <i>d</i> =origl. <i>d</i>	86
<i>d</i> from <i>sd</i>	86
3. Sk. <i>b</i>	86
§ 54. Origl. momentary sonant aspirated consonants:	
1. <i>gh</i> ; Sk. <i>gh</i> =origl. <i>gh</i> ; Sk. <i>h</i> =origl. <i>gh</i> ; Sk. <i>ḡh</i>	86
2. <i>dh</i> ; Sk. <i>dh</i> =origl. <i>dh</i> ; Sk. <i>h</i> =origl. <i>dh</i>	87
3. <i>bh</i> ; Sk. <i>bh</i> =origl. <i>bh</i> ; Sk. <i>h</i> =origl. <i>bh</i>	87
Roots beginning or ending with origl. aspirates	87
§ 55. Spirants. 1. Sk. <i>y</i> =origl. <i>y</i>	88
2. Sk. <i>s</i> =origl. <i>s</i>	88
Sk. <i>ś</i> =origl. <i>s</i>	88
Variation of origl. <i>s</i> to <i>ś</i> , <i>ṣ</i> , <i>r</i> , <i>ç</i> , acc. to sound-laws	89
Change of <i>as</i> to <i>ō</i> ; change of <i>ś</i> to <i>k</i> before <i>s</i>	89
Change of <i>ś</i> to <i>t</i> , <i>d</i>	90

	PAGE
3. Sk. <i>v</i> = origl. <i>v</i>	90
§ 56. Nasals. 1. Sk. <i>n</i> = origl. <i>n</i>	90
Loss of <i>n</i> before case-terminations	91
2. Sk. <i>m</i> = origl. <i>m</i>	91
Interchange of <i>n</i> , <i>m</i> , with <i>ñ</i> , <i>ní</i> , <i>ñ</i> , <i>ñ</i> , acc. to sound-laws	91
§ 57. <i>r</i> - and <i>l</i> -sounds	91
Sk. <i>r</i> = origl. <i>r</i>	91
Sk. <i>l</i> = origl. <i>r</i>	92
§ 58. Sound-laws	92
§ 59. Medial. 1. Assimilation: before sonant consonants are found sonants, before mute mutes	93
Dissimilation; <i>s</i> before <i>s</i> to <i>t</i>	94
2. Aspirates: sonant aspirates + <i>t</i> become sonant unaspi- rated consonants + <i>dh</i> ; <i>ht</i> becomes <i>gdh</i> ; <i>ht</i> , <i>hth</i> , <i>hdh</i> , also become <i>dh</i> with lengthening of preceding vowel	94
Transposition of aspiration from termination to beginning of roots	95
Law of reduplication	95
§ 60. Termination. 1. Only one consonant tolerated <i>in fine</i> (com- monest exception <i>ñs</i>)	96
2. None but mute consonants stand <i>in fine</i>	96
§ 61. GREEK. Consonants	97
§ 62. Origl. momentary mute unaspirated consonants:	
1. <i>k</i> ; <i>κ</i> , <i>γ</i> = origl. <i>k</i>	98
<i>π</i> , <i>τ</i> = origl. <i>k</i>	99
2. <i>t</i> ; <i>τ</i> = origl. <i>t</i>	100
<i>κτ</i> beside <i>ks</i> of other languages	100
3. <i>p</i> ; <i>π</i> = origl. <i>p</i>	100
Note 2.—Unorigl. aspiration of mute momentary con- sonants	101
§ 63. Origl. momentary sonant unaspirated consonants.	
1. <i>g</i> ; <i>γ</i> = origl. <i>g</i>	101
<i>β</i> = origl. <i>g</i>	102

	PAGE
2. d ; δ =origl. d	102
3. b ; β =origl. b	102
<i>Note.</i> — χ , θ , ϕ for γ , δ , β	103
§ 64. Origl. momentary sonant aspirated consonants.	
1. χ =origl. gh	103
2. θ =origl. dh	104
<i>Note.</i> — θ for χ	104
3. ϕ =origl. bh	104
<i>Note.</i> —Roots beginning and ending with origl. aspirates	105
Consonantal Prolonged-sounds	105
§ 65. Spirants: 1. y ; Gk. ι (also transposed)=origl. y . . .	106
ϵ , ζ =origl. y	106
$'$ =origl. y ; loss of origl. y	107
2. s ; σ =origl. s , sometimes also <i>in initio</i> ; $'$ =origl. s , sv .	108
Transfer of $'$ from middle to beginning of a word . . .	109
<i>Note.</i> — $\acute{\epsilon}\acute{o}\varsigma$ =* <i>sevos</i>	109
$'$ as a later representative, esp. before ν	110
Loss of origl. s	110
Loss of origl. s before ν , ρ , μ and other consonants . .	111
3. v ; ν (also transposed)=origl. v	112
F =origl. v	112
$'$ =origl. v	113
<i>Note.</i> — $\beta=v$, $\sigma\phi=sv$	113
§ 66. Nasals: 1. ν =origl. n ; the nasal dependent on following	
consonants	114
2. μ =origl. m ; ν in terminations for origl. m	115
§ 67. r - and l -sounds; ρ =origl. r	116
λ =origl. r	116
§ 68. Sound-laws: Medial	116
1. Assimilation. a. Complete assimilation of foregoing	
to following sound: ν , $\nu\tau$, $\nu\delta$, $\nu\theta$ before following s .	116

	PAGE
b. Complete assimilation of following to foregoing sounds: of F, y, σ ; $\tau\tau = \tau y, \theta y, \kappa y, \chi y, \delta\delta = \delta y, \gamma y$. . .	117
c. Partial assimilation of foregoing to following sounds, before τ, σ , only mutes can stand, before δ only sonants, before θ only aspirates. Before ν labials pass over into their labial; ν before labials becomes μ ; τ, δ, θ , before μ often become σ ; κ, χ , before μ become γ ; aspiration before nasals, ρ, λ ; τ before ι becomes σ , sometimes also before ν	119
d. Partial assimilation of following to preceding sounds; $\delta y = \zeta$; aspiration of unaspirated consonants on acct. of preceding prolonged sounds.	121
e. Simultaneous assimilation, partial and complete, of sounds to one another; γy to ζ (ζ is not $= \beta y$); τy , $\theta y, \kappa y, \chi y$ to $\sigma\sigma$	122
$\sigma\sigma$ apparently $= \gamma y$	123
$\sigma\sigma$ not $= \pi y$	123
f. Apparent sound-insertion between consonants coming together: $\nu\rho, \mu\rho, \mu\lambda$, become $\nu\delta\rho, \mu\beta\rho, \mu\beta\lambda$, for which $\beta\rho, \beta\lambda$ also occur ($\pi\tau$ in <i>initio</i> for π) . . .	123
g. Elision of σ between consonants; loss of τ, ν , between vowels	124
2. Dissimilation; dentals before τ, θ , to σ ; avoidance of two aspirates one after the other; avoidance of two similar or like consonants separated by vowels . . .	124
3. Aspirates; retrogression of aspiration upon τ beginning a root.	125
4. Law of reduplication.	125
§ 69. Termination. Only σ, ν and ρ end a word; τ cast off or changed into σ ; θ changed to σ	126
τ falls off, sometimes also other consonants; m becomes ν ; rejection of the last consonant from final groups of consonants; ν ἐφέλκυστικόν, etc.	126

	PAGE
§ 70. LATIN. Consonants.	128
§ 71. Origl. momentary mute unaspirated consonants:	
1. <i>k</i> ; Lat. <i>c, q, qv</i> =origl. <i>k</i>	128
Lat. <i>g</i> =origl. <i>k</i>	129
<i>Note</i> .—Pronunciation of <i>c</i> before <i>i</i> ; <i>h</i> =origl. <i>k</i> in pro-	
nominal stem <i>hi-</i> , <i>ho-</i> , and in $\sqrt{hab}$; Lat. <i>p</i>	
not = origl. <i>k</i>	129
2. Lat. <i>t</i> =origl. <i>t</i>	130
3. Lat. <i>p</i> =origl. <i>p</i>	131
§ 72. Momentary sonant unaspirated consonants:	
1. <i>g</i> ; Lat. <i>g, gv, v</i> =origl. <i>g</i>	132
<i>Note</i> .— <i>Flug</i> beside <i>flu</i> ; <i>b</i> not=origl. <i>g</i>	
Mispronunciation of <i>gn</i> as <i>nn</i>	133
2. <i>d</i> ; Lat. <i>d</i> =origl. <i>d</i> ; Lat. <i>l</i> =origl. <i>d</i>	133
3. <i>b</i> ; <i>b</i> of other languages	134
§ 73. Momentary sonant aspirated consonants:	
(<i>f, in medio b</i> represents all the aspirates; <i>ch, th, ph</i> are	
not Latin)	134
1. <i>gh</i> ; Lat. <i>g, gv, v</i> =origl. <i>gh</i>	134
<i>h</i> =origl. <i>gh</i> ; loss of <i>h</i> (<i>h</i> wrongly written)	136
<i>f</i> =origl. <i>gh</i>	136
2. <i>dh</i> ; Lat. <i>d</i> =origl. <i>dh</i> ; <i>r</i> =origl. <i>dh</i> ; <i>f</i> =origl. <i>dh</i>	137
<i>b</i> =origl. <i>dh</i>	139
2. <i>bh</i> ; Lat. <i>b</i> =origl. <i>bh</i>	139
Lat. <i>f</i> =origl. <i>bh</i> ; Dat. <i>h</i> =origl. <i>bh</i> . <i>Note. t, p, not=origl.</i>	
<i>dh, bh</i>	139
§ 74 Spirants; 1. <i>y</i> ; Lat. <i>j</i> =origl. <i>y</i> ; <i>i</i> =origl. <i>y</i>	141
Loss of <i>y</i>	141
2. <i>s</i> ; Lat. <i>s (r)</i> =origl. <i>s</i>	142
3. <i>v</i> ; Lat. <i>v</i> =origl. <i>v</i> ; <i>u</i> =origl. <i>v</i>	142
<i>Note</i> .— <i>suus, tuus, *sevos, *tevos</i>	
Loss of origl. <i>v</i>	143

	PAGE
§ 75. Nasals; 1. <i>n</i> ; before gutturals is found the nasal, before labials the labial guttural	144
2. <i>m</i> =origl. <i>m</i>	144
§ 76. <i>r</i> - and <i>l</i> -sounds; Lat. <i>r</i> =origl. <i>r</i>	145
Lat. <i>l</i> =origl. <i>r</i>	146
§ 77. Sound-laws. Medial.	
1. Assimilation. a. Complete assimilation of a foregoing to a following sound; doubling not characterized in the older spelling.	146
Loss of <i>d, t, n</i> , before <i>s</i>	147
Loss of <i>g</i> before <i>y</i> ; of <i>g</i> before <i>v</i>	147
of <i>d</i> before <i>v</i>	148
Loss of <i>g, c, x</i> , before <i>n, m</i> ; of <i>x</i> before <i>l</i> ; of <i>t, d</i> before <i>c</i> ; of <i>s</i> before sonants	148
Loss of <i>s</i> before <i>m</i> ; of <i>s</i> before <i>l, d</i> , and <i>b</i>	149
Loss of <i>r</i> before <i>d</i> ; of <i>r</i> before <i>s</i>	149
Loss of consonants before <i>sc</i> ; <i>st</i> before and beside <i>xt</i> , <i>st</i> , for <i>rst</i> ; loss of <i>c, g</i> , between <i>r, l</i> , and <i>t, s</i>	150
<i>br</i> for <i>sbr, rbr</i> ; <i>nt</i> for <i>nct</i>	150
b. Complete assimilation of a following to a preceding sound	151
<i>ss</i> for <i>st</i> ; <i>rr, ll</i> , for <i>rt, lt</i> ; <i>rr</i> for <i>rs</i> , etc.; <i>ll</i> , etc. perhaps for <i>ly</i> ; <i>ns</i> for <i>nst</i> ; <i>ss, s</i> , for <i>st</i> , from <i>dt, tt</i>	151
c. Partial assimilation of preceding to following sound; sonants before mutes become mutes; labials before <i>n</i> become <i>m</i> ; in the earlier language <i>t</i> before nasals became <i>s</i> ; <i>br</i> for origl. <i>tr</i>	152
d. Partial assimilation of following to preceding sound; <i>t</i> after nasals, liquids and <i>c</i> often becomes <i>s</i>	153
e. Change of <i>s</i> to <i>r</i> between vowels, or between vowels and sonant consonn. and after vowels in termination	153
f. Loss of consonants between vowels	154
g. Insertion of sounds (<i>mps, mpt</i>)	154

TABLE OF CONTENTS.

xxiii

	PAGE
2. Dissimilation; <i>t, d</i> , before <i>t</i> to <i>s</i>	154
Interchange of <i>-alis, -aris</i>	155
Avoidance of two perfectly or partially similar con-	
sonants separated by vowels	155
§ 78. Initial. Consonant-loss <i>in initio</i>	155
<i>m, n</i> , for <i>sm, sn</i> ; <i>r, l</i> , for <i>vr, vl</i>	155
<i>f</i> for <i>sf</i> ; other sporadic cases	156
<i>n</i> for <i>gn</i> ; <i>l</i> for <i>stl</i> ; <i>v</i> for <i>dv</i>	156
<i>y</i> for <i>dy</i> ; <i>v</i> for <i>qv</i> ; <i>u</i> for <i>cu</i>	157
§ 79. Final. Consonant-groups <i>in fine</i> ; no doubling, and no com-	
bination of two momentary sounds in terminations	158
Later fixed system of termination in written language,	
whereas in earlier times most final consonants were	
sometimes written, sometimes omitted	158
Treatment of final <i>s</i>	159
Treatment of final <i>m, t</i>	159
Final <i>nt</i>	160

E R R A T A.

PAG.	LINE.		
10, 11, 12	head	<i>for</i> Origl. language-vowels	<i>read</i> Origl.-language. Vowels.
17	9	<i>for</i> part. perf. pass.	<i>read</i> past part. pass.
18	14	<i>for</i> pf. part.	<i>read</i> „ „ „
25	3	<i>for</i> sub.	<i>read</i> post.
34	13	<i>for</i> τους	<i>read</i> τόνς.
35	1	<i>for</i> κίνημι	<i>read</i> κίνημι.
36	34	<i>for</i> μητερ-	<i>read</i> μητέρ-.
39	22	<i>for</i> μητερ-	<i>read</i> μητέρ-.
47	21	<i>for</i> σέομαι, σγομαι	<i>read</i> -σεομαι, -σγομαι.
48	33	<i>for</i> -	<i>read</i> ι.
54	7	<i>for</i> Old. Lat.	<i>read</i> Old Lat.
ead.	28	<i>for</i> Indo-Germ.	<i>read</i> Indo-Eur.
59	9	<i>for</i> uouos	<i>read</i> nouos.
61	1	<i>for</i> dico	<i>read</i> dīco.
ead.	10	<i>for</i> and	<i>read</i> cf.
64	17	<i>for</i> Sk.	<i>read</i> Gk.
71	4	<i>for</i> φεροντς	<i>read</i> *φεροντς.
72	last	<i>for</i> final <i>ō</i> . . . origl. <i>ö</i>	<i>read</i> final <i>ö</i> . . . origl. <i>ō</i> .
78	16	<i>for</i> πυνζάνομαι	<i>read</i> πυνθάνομαι.
100	3	<i>for</i> ab.	<i>read</i> Zend.
104	last but one	<i>for</i> νεφέλη	<i>read</i> νεφέλη.
115	28	<i>for</i> μήτερ	<i>read</i> μητέρ-
118	last but one	<i>for</i> ήττων	<i>read</i> ήττων.
133	last but one	<i>for</i> δαήρ-	<i>read</i> δαήρ.
148	19	<i>for</i> στίχω	<i>read</i> στίζω.

INTRODUCTION.

I. Grammar forms one part of the science of language: this science is itself a part of the natural history of Man. Its method is in substance that of natural science generally; it consists in accurate investigation of our object and in conclusions founded upon that investigation. One of the chief problems of the science of language is the inquiry into, and description of the classes of languages or speech-stems, that is, of the languages which are derived from one and the same original tongue, and the arrangement of these classes according to a natural system. In proportion to the remainder but few speech-stems have hitherto been accurately investigated, so that the solution of this chief problem of the science must be looked for only in the future.

By grammar we mean the scientific comprehension and explanation of the sound, the form, the function of words and their parts, and the construction of sentences. Grammar therefore treats of the knowledge of sounds, or Phonology; of forms, or Morphology; of functions, or the science of meaning and relation, and syntax. The subject of grammar may be language in general, or one particular language or group of languages; grammar may be universal or special: it will in most cases be concerned in explaining the language as a product of growth, and will thus have to investigate and lay down the development of the language according to its laws. This is its exclusive province, and therefore its subject is the laying-down of the 'life of the language,' generally called historical grammar, or history of language, but more correctly 'science of the life of

a language' (of sound, form, function, and sentence), and this again may be likewise as well general as more or less special.

The grammar of the Indo-European languages is therefore a special grammar: because it treats of these languages as products of growth, and exhibits their earlier and earliest gradations, and would therefore be more accurately called a special historical grammar of Indo-European languages.

Note 1.—By comparative grammar is meant not that grammar which is merely descriptive, but that which throws light on speech-forms as far as possible, because as a rule it is not confined to the treatment of any one particular language.

Note 2.—The following work embraces only two parts, viz. scientific treatment of sounds and of forms. Indo-European function and sentence-formation we are not at present in a position to handle in the same way as in the case of the more external and intelligible branches—sounds and forms.

II. To assume one original universal language is impossible; there are rather many original languages: this is a certain result obtained by the comparative treatment of the languages of the world which have lived till now. Since languages are continually dying out, whilst no new ones practically arise, there must have been originally many more languages than at present. The number of original languages was therefore certainly far larger than has been supposed from the still-existing languages. The easiest preliminary distribution of languages which we can make is suggested by their morphological constitution.

There are—

1. Languages which are simply composed of invariable disjointed meaning-sounds, *Monosyllabic*, e.g. Chinese, Annamese, Siamese, Burmese. Such sounds we denote by *R* (radix). The Indo-European language would be in this stage of development when the word *ai-mi* (I go, εἰμι) was sounded not so, but as *i* or *i ma* (formula *R*, or *R+r*).

2. Languages which can link to these invariable sounds sounds of relation, either before, or after, or in the middle, or

in more than one place at once [denoted here as *s.* (suffix), *p.* (prefix), *i.* (infix)]. These are *Confixative* languages, e.g. Finnish, Tatar, Dekhan, Basque, the languages of the aborigines of the New World, of South Africa (*Bantu*), and most languages in fact. In this step of development the word *ai-mi* would be *i-ma* or *i-mi*.

3. Languages which for the purpose of expressing relation can regularly vary their roots as well as their confixes (which have sprung from independent original roots), and can at the same time preserve intact the means of compounding. These are *Inflexive* languages. Such a root as is regularly varied for the end of expressing relation is here denoted by R^x (R^1 , R^2 , etc.), a similar suffix by s^x .

Hitherto we have become acquainted with only two speech-stems of this class, the Semitic and the Indo-European. The latter has for all words only one formula, viz. $R^x s^x$ (s^x meaning one or more than one regularly variable suffix), and consequently a regularly variable root with a regularly variable expression of relation at the end of the suffix, e.g. *ai-mi*, $\epsilon\lambda\mu$, $\sqrt{i}$.

The Indo-European is therefore a suffix-language, together with the neighbouring languages of the Finnish stem, including Tataric, (Turkish) Mongolian, Tungusian, Samoidish, as also with the Dravidian (Dekhan)—all included in the formula Rs .

Note 1.—The Semitic, which is not akin to the Indo-European, has more word-forms, namely R^x and pR^x , forms quite strange to Indo-European, which has only one. Besides, its vowel-system is perfectly distinct from the Indo-European, not to mention other marked differences. Cf. Aug. Schleicher, 'Semitisch und Indogermanisch' in *Beitr.* ii. 236–244. An attempt to deduce the fundamental language of the Semitic speech-stem has been made by Justus Olshausen in his *lehrbuche der hebräischen sprache*, Brunswick, 1862.

Note 2.—The augment in Indo-European is no relation-affix, no prefix, but an adherent, though originally independent word, which may moreover be omitted.

III. The life of a language (generally called its 'history') falls under two heads—

1. *Development in prehistoric times.* As man has developed, so also has his language, *i.e.* the expression of his thoughts by sounds: even the simplest language is the product of a gradual growth: all higher forms of language have come out of simpler ones, the *Confixative* out of the *Monosyllabic*, the *Inflexive* out of the *Confixative*.

2. *Decline in the historic period.* Language declines both in sound and in form, and in its decay changes of meaning take place alike in function and construction of sentences. The transition from the first to the second period is one of slower progress. To investigate the laws by which languages change during their life is a most important problem in the science of language, for unless we are acquainted with them we cannot possibly understand the languages in question, especially those which are still living.

Through different developments, at different points in the province of one and the same language, the self-same tongue branches out into the ramifications of the second period (whose beginning however is likewise earlier than the origin of historic tradition), and diverges into several languages (dialects): this process of differentiation may repeat itself more than once.

All these changes took place gradually and at long intervals in the life of the language, since generally all changes in language unfold themselves gradually.

The languages which spring immediately from an original language we call *fundamental*; almost every *fundamental-language* has split up into languages; all these last-named languages may further branch into dialects; and these dialects into sub-dialects.

All the languages which are derived from one original-language form together a class of speech or speech-stem;

these again are sub-divided into families or branches of speech.

IV. The name of Indo-European has been given to a distinct set of languages belonging to the Asiatico-European division of the earth, and of a constitution so consistent internally, and so different from all other languages, that it is clearly and undoubtedly derived from one common original language.

Within this Indo-European class of speech however certain languages geographically allied point themselves out as more closely related to one another: thus the Indo-European speech-system falls into three groups or divisions.

These are:

1. The Asiatic or Aryan division, comprising the Indian, Iranian (or more correctly Eranian), families of speech, very closely allied to one another. The oldest representative and fundamental-language of the Indo-European family, and generally the oldest known Indo-European language, is the Old-Indian, the language of the oldest portion of the Vêdas; later on, after it had become fixed in a more simplified form, and subject to certain rules, as a correct written language, in opposition to the peoples' dialects, called Sanskrit. We are not acquainted with Eranian in its original form: the oldest known languages of this stem are the Old-Baktrian or Zend (the Eastern), and the Old-Persian, the language of the Achaimenid cuneiform inscriptions (the western). To this family besides is related the Armenian, which we know only from a later date, and which must have branched off even in early times from the Eranian fundamental-language.

2. The south-west European division, composed of the Greek, next to which we must perhaps place the Albanian, preserved to us only in a later form; Italian (the oldest known forms of this language are the Latin,—especially important for us is the Old-Latin, as it was before the in-

troductio*n* of the correct literary language formed under Greek influence,—the Umbrian and the Oscan), Keltic, of which family the best known, though already highly decomposed, language is the Old-Irish, Erse dating from 700 A.D. Italian and Keltic have more in common with one another than with the Greek.

3. The North-European division, composed of the Slavonic family with its closely-allied Lithuanian,—the most important language for us of this group,—and the German, widely separated from both. The oldest forms of this division are the Old-Bulgarian (Old Church-Slavonic in MSS. dating from 1100 A.D.): the Lithuanian (and of course the High-Lithuanian, South-Lithuanian, Prussian Lithuanian), first known to us 300 years ago, but clearly of far greater antiquity, and the Gothic from the fourth century. Beside the Gothic, however, are the oldest representatives of German and Norse, Old-High-German, and Old-Norse, which we may bring forward when they present earlier forms than Gothic.

The greatest number of archaic particulars in point of sounds and construction of language is found in the Asiatic division, and within it, in the Old-Indian; next in point of archaicisms (*i.e.* preservation of similarity to the original language, by having fewer strongly-developed and peculiar forms) comes the S.W.-division, in which Greek is found to be most faithful; and lastly the N.-European group, which, if regarded as a whole, may be shown to have the most characteristic development, and to be the least faithful to the original language.

By combining these facts with the above-named relationships of the Indo-European languages, and drawing inferences as to the process of separation of the Indo-European body of language in ancient times, we get the following result: The Indo-European original language differentiates first, through unequal development in different parts where it prevailed, into

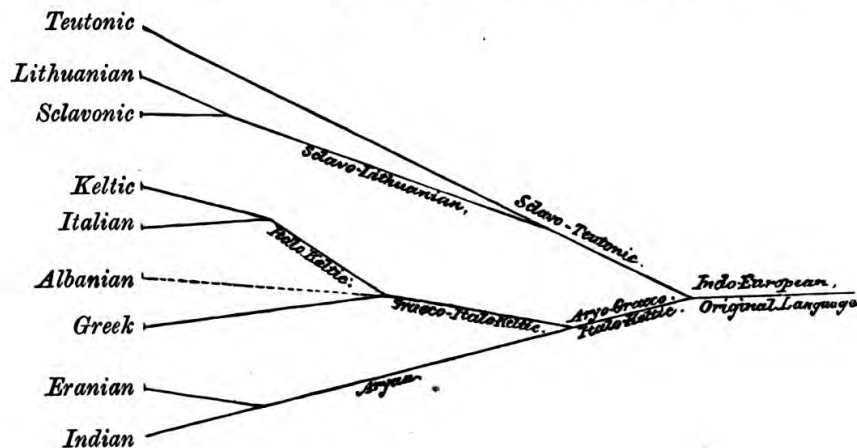
two fundamental-languages, viz. the Sclavo-Teutonic, which afterwards divided itself into Teutonic and Sclavo-Lithuanian, and the Aryo-Graeco-Italo-Keltic, the remaining portion of the Indo-European language, which divided itself into Graeco-Italo-Keltic and Aryan; and the Graeco-Italo-Keltic soon split up into Greek and Italo-Keltic, while the first, the Aryan, remained undivided for some time. Later still the Sclavo-Lithuanian, the Aryan (Indo-Eranian) and Italo-Keltic, further divided themselves. It may be that at most or at all of the divisions there arose more languages than we now know of, since probably many Indo-European languages have died out through lapse of time. The further eastward an Indo-European people lives, the more archaicisms are found in its language: the further westward they have gone, the fewer archaicisms, and the more numerous new-formations are found in the language. From these and other indications we infer that the Sclavo-Teutonic race first began its wanderings westwards; next followed the Graeco-Italo-Keltic; and of the Aryans who remained behind, the Indians journeyed south-eastward, the Eranians south-westward. The home of the Indo-European original race must be sought in the highlands of Central Asia.

It is only of the Indians, who were the last to leave the parent stem, that it is quite certain that they expelled an aboriginal race from their later dwelling-place, a race of whose language much passed into their own: a similar process is highly probable in the case of many other Indo-European peoples.

The most ancient divisions of the Indo-European, up to the origin of the fundamental languages belonging to the families of speech formed from the speech-stem, may be seen in the following table (see next page). The length of the lines shows the duration of the periods, their distances from one another, the degrees of relationship.

Note.—In the present work an attempt is made to set forth the inferred Indo-European original language side by side with its really existent derived languages. Besides the advantages offered by such a plan, in setting immediately before the eyes of the student the final results of the investigation in a more concrete form, and thereby rendering easier his insight into the nature of particular Indo-European languages, there is, I think, another of no less importance gained by it, namely that it shows the baselessness of the assumption that the non-Indian Indo-European languages were derived from Old-Indian (Sanskrit), an assumption which has not yet entirely disappeared. This view has found supporters up to the present date, especially as regards Old-Baktrian (Zend). The term ‘Sanskritist,’ not seldom applied to Indo-European philologists (meaning that we concede to Sanskrit a position which it does not deserve, by deriving other languages from Sanskrit, or explaining them by it, instead of studying them fundamentally), is likewise shown to be quite inapplicable by the plan employed in the Compendium. The disadvantage of having in certain cases Indo-European original forms inferred which are more or less doubtful, does not weigh at all against the advantages which, according to our view, are attained by the arrangement of the subject used hereafter.

A form traced back to the sound-grade of the Indo-European original language, we call a fundamental-form [f.f.] (*e.g.* Lat. *generis*, f.f. *ganasas*; Gk. γένους, f.f. *ganasas*). Hence it is only when forms of different sound-grades are brought to one and the same sound-grade, that we can compare them with one another. When we bring forward these fundamental-forms, we do not assert that they really were once in existence.



GRAMMAR.

PHONOLOGY.

A. VOWELS.

INDO-EUROPEAN ORIGINAL-LANGUAGE. § 1.

Since in the citation of examples we make use not only of vowels but also of consonants, before we treat of the vowels we proceed to set forth a table of the speech-sounds collectively, arranged according to the physiology of sound, followed by the necessary remarks upon pronunciation, etc.

TABLE OF THE SOUNDS OF THE INDO-EUROPEAN ORIGINAL LANGUAGE,
i.e. those sounds from which arose the sounds of the different Indo-European languages, according to the laws of sound-change which come into play during the life of a language, and to which accordingly, they may be traced as to a common source.

CONSONANTS.						VOWELS.	
MOMENTARY SOUNDS.			PROLONGED SOUNDS.				
	UNASPIRATED. mute sonant	ASPIRATED. sonant	SPIRANTS. mute sonant	NASALS. sonant	r-SOUND. sonant		
Gutt.	<i>k</i>	<i>g</i>	<i>gh</i>			<i>a</i>	} <i>aa, āa</i> <i>ai, āi</i>
Pal.			<i>y</i>			<i>i</i>	
Ling.					<i>r</i>		} <i>au, āu</i>
Dent.	<i>t</i>	<i>d</i>	<i>dh</i>	<i>s</i>	<i>n</i>		
Lab.	<i>p</i>	<i>b</i>	<i>bh</i>	<i>v</i>	<i>m</i>	<i>u</i>	

- § 1. *Note 1.*—The three aspirates and the vowel-diphthongs with $\bar{a}$ (thus $\bar{a}a$, $\bar{a}i$, $\bar{a}u$) probably were wanting at an earlier period in the life of the Indo-European original language; in the most archaic state of the language, while it was yet uninflected, all the vowel-diphthongs were absent.

Thus the Indo-European original language probably possessed six momentary sounds, viz. three mutes, and three sonants; six consonantal prolonged sounds, viz. three spirants, and three so-called liquids, *i.e.* the two nasals n , m , and r (l is a secondary offshoot of r), and six vowels. At a later period, shortly before the first separation, there were nine momentary, and nine vowel-sounds. We must not overlook the numerical proportion belonging to the number of sounds.

Note 2.—Sonants (or medials) are those consonants in whose production the glottis gives a simultaneous sound: this is the case with all nasals and r - and l -sounds, whilst the momentary consonants and spirants can be pronounced with or without the accompaniment of the vocal-sound. Sonants thus have something of the vowel in their composition. The aspirates are double sounds; both sounds of which they consist, the preceding momentary consonant and the subsequent aspiration, must be heard in pronunciation.

Note 3.—The momentary consonant which precedes the pronunciation of an initial vowel—the so-called spiritus lenis, the aleph or hamza of the Semitic,—which is formed by the sudden separation of the vocal chords, should properly be represented here and in the other languages in the tables, and expressed by a special character (perhaps, after Gk. analogy). It is a consonant sound produced in the larynx alone, and must therefore be placed in a laryngeal class of sounds (to which h also belongs, v. post. § 4). Nevertheless I have ventured to abide by the majority of Indo-European spelling-systems, and to leave this sound uncharacterized.

§ 2.

VOWELS OF THE INDO-EUROPEAN LANGUAGE.

Fundamental vowel.	1st Step.	2nd Step.
1. a -scale a	$a + a = aa$	$a + aa = \bar{a}a$
2. i -scale i	$a + i = ai$	$a + ai = \bar{a}i$
3. u -scale u	$a + u = au$	$a + au = \bar{a}u$

Note 1.—The second step occurs in the Asiatic, South-European, and North-European divisions of the Indo-European languages, and therefore in all probability traces its existence

from the original language, though the separate languages often § 2. disagree in its use.

Note 2.—*aa* and *āa* were perhaps even in early times both compressed into *ā*. But at the same time the two *ās* which thus arose are distinguished from one another, *e.g.* in Greek and Gothic *ā* of the 1st is distinguished from *ā* of the 2nd step. Notwithstanding that the earliest Indian and the Zend seem to bear evidence against the contraction of both *as*, we have placed throughout hereafter an *ā* for *aa* and *āa* in original Indo-European words, chiefly because it would be impossible to distinguish always between a 1st and a 2nd step-form.

a, the commonest vowel, constitutes a class by itself; *i* and *u* are by nature very similar, and are fundamentally different from *a*. *i* and *u* have the consonants *y* and *v* as collateral relations, and frequently as representatives, whilst *a* cannot pass into any consonantal sound, and has therefore the vowel-nature in a higher degree than the more consonantal sounds *i* and *u*. *a* is by far the most frequent vowel in the Indo-European language, occurring more often than *i* and *u* taken together.

Each vowel can move in its own scale only: this takes place in the root itself for the purpose of expressing relation: the vowels in stem-formative and word-formative suffixes likewise are capable of step-formation, since these suffixes themselves have arisen from roots originally independent. The fundamental-form of the root is always to be cited with the fundamental vowel. Before two consonants the step-formation does not take place; the fundamental vowel *a* (never *i* or *u*) is found in all roots which end in two consonants.

The essence of inflexion depends upon the vowel-system.

Vowel-lengthening must not be conceded to the original language as being of secondary origin.

Note.—Even where the correspondence between different Indo-European languages seems to point to a greater antiquity in the lengthening (*e.g.* in many nom. sing. as Sk. *pitār(s)*, Gk. *πατήρ*, Old-Lat. *patēr*, Goth. *fadar*, i.e. **fathār*; Sk. *dúrmanās*, Gk. *δυσμενής*; Sk. *āçmā*, Gk. *ποιμήν*, Lith. *akmũ*, Lat. *homō*,

§ 2. Goth. *guma*, i.e. **gumā*) we believe that we see an unoriginal phenomenon, which suitably to the nature of the case did not become developed in the different Indo-European languages till after their separation from the original language (not unfrequently the conformity is wanting even in this particular, cf. Sk. *bhāran*, Gr. *φέρων*, Lat. *ferens*, Goth. *batrands*, Slav. *bery*). In the original language we can cite here only the pure fundamental forms, i.e. the word preserved perfectly intact as regards all its parts (thus, e.g. *patars*, *dusmanass*, *akmans*).

EXAMPLES.

1. *a*-scale.

vak-mi (1 sg. pres.), *√rak* (speak), *va-vāk-ma* (1 sg. pf.), *vāk-s* (uox); *bhar-āmi*, *ba-bhar-mi* (I bear), *bhar-ta-s* (borne), *√bhar* (bear), *ba-bhār-ta* (3 sg. pf.), *bhār-a-s* (burden), *bhār-aya-ti* (3 sg. pres. caus. vb.; *φορεῖ*); *da-ta-s*, *da-tā* (datus, data), *√da* (give), *da-dā-mi* (1 sg. pres.); *dha-ta-s*, *dha-tā* (past part. pass. n. sg. m. f.), *√dha* (set), *da-dhā-mi* (1 sg. pres.), etc.

2. *i*-scale.

i-masi (1 pl. pres.), *√i* (go), *ai-mi* (I go); *vid-masi* (1 pl. pres.), *√vid* (see, know), *vaid-mi* (I see), *vaid-aya-ti* (3 sg. pres. caus. vb.), *vi-vāid-ma* (pf.); *√div* (shine), *div-am* (acc. sg. word-st. *div*, light, bright sky, *Ζεύς*), *daiv-a-s* (shining, diuos, deus), etc.

3. *u*-scale.

bhug-na-s (past part. pass.), *a-bhug-am* (1 sg. aor.), *√bhug* (bend), *bhaug-āmi* (1 sg. pres.) *bu-bhāug-ma* (1 sg. pf.); *yug-a-m* (iugum), *yug-ta-s* (iunctus), *√yug* (iungere), *yu-yāug-ma* (1 sg. pf.), etc.

Note.—The agreement of Greek and Gothic proves the 2nd step in pf.; *πέφευγα* gives no evidence against the 2nd step, but is a Graecism for **πέφουγα*; cf. forms like *λέ-λοιπ-α*, *√λιπ*, which therefore would lead us to expect *ου* here, because *ει* corresponds to *ευ*; v. sub Greek vowel-system.

§ 3.

VOWEL SOUND-LAWS

(i.e. influence of vowels and consonants on vowels) were not existent in the original Indo-European language.

A meeting of several vowels occurs but seldom, since hitherto

no consonants have been elided, and prepositions, like separable § 3. adverbs, stand before their verb. Nevertheless, if two vowels do come into contact with one another in consequence of word-formation, hiatus perhaps occurred in the most original state of the language; in early time, however, *a* may have become fused with following vowels: thus probably *i* (and *u*, but examples are wanting) after *a* becomes combined with it into a diphthong, in cases like *bharait* (3 sg. opt.), $\sqrt{bhar}$ (bear), pres. st. *bhara-*, *i* is the sign of the opt.; the opt.-st. is thus *bharai-*, *t*=sf. of 3 sg. But the sequence of two vowels, of which the former is *i* or *u*, will not be considered as a hiatus, e.g. *i* and *u* (so also *ai*, *āi*, *au*, *āu*) remain unchanged before other vowels, as *i-anti* (3 pl. pres. $\sqrt{i}$, go), *ku-kru-anti* (3 pl. pf.) *krau-as* (neut. the hearing, $\sqrt{kru}$, hear).

Note.—The earliest Old-Indian points clearly to the non-avoidance of hiatus between *i*, *u* (and the diphthongs which have these vowels as their key-elements), and following vowels. We may nevertheless suppose that *iyanti*, *kukruvanti*, *krauvas* were pronounced, i.e. that *i* and *u* before vowels split up into *iy*, *uv*, as this pronunciation almost arises from them.

SANSKRIT.

TABULAR VIEW OF SANSKRIT SOUNDS.

§ 4.

CONSONANTS.						VOWELS.
MOMENTARY.			PROLONGED.			
	UNASPIRATED.	ASPIRATED.	SPIRANTS.	NASALS.	r- & l-SOUND.	
	mute	sonant	mute	sonant	sonant	
Gutt.	<i>k</i>	<i>g</i>	<i>kh</i>	<i>gh</i>	° <i>h</i> <i>ñ</i>	<i>a ā</i> } <i>e āi</i> }
Pal.	<i>ḱ</i>	<i>ḡ</i>	<i>ḱh</i>	<i>ḡh</i>	ç <i>y(j)</i> <i>ṇ</i>	<i>i ī</i> }
Ling.	<i>ṭ</i>	<i>ḍ</i>	<i>ṭh</i>	<i>ḍh</i>	ṣ <i>ṇ</i> <i>r l</i>	<i>r ṛ l</i> } <i>ō āu</i> }
Dent.	<i>t</i>	<i>d</i>	<i>th</i>	<i>dh</i>	<i>s</i> <i>n</i>	
Lab.	<i>p</i>	<i>b</i>	<i>ph</i>	<i>bh</i>	<i>v</i> <i>m</i>	<i>u ū</i> }

- § 4. The nasalised pronunciation of vowels (as Fr. *en*, *on*) is indicated by ~ (*â*, *î*, etc.): this pronunciation arises through the change of a following nasal consonant according to sound-laws.

The accented syllable is marked '.

Note 1.—If we compare the above table with the table of Indo-European sounds in § 1, we shall find that the sounds collectively existed in the original language likewise (*ē*=original *ai*, *ō*=original *au*); but in addition to them we shall see a number of very similar unoriginal sounds, which have arisen from those original sounds according to the laws of language, and now stand side by side with them.

Note 2.—The doctrine of the Sanskrit alphabet belongs to Sanskrit special-grammar, as an appendix to the sound-rules.

Pronunciation. Known to us through the Hindu, which is on the whole a very good representative, and by means of the physiology of sounds, and the history of language.

The remarks on the pronunciation of the aspirates in § 1 hold good here also: they are distinct double sounds, and the *h* must be made audible after the momentary sounds.

We are accustomed to pronounce the momentary palatals *k*, *g*, *kḥ*, *gḥ*, like *tsch*, *dsch*, or, more accurately, like French *dj*, *tschh*, *djh*, a pronunciation which is correct only for a later state of the language; in the earlier period the correct pronunciation of *k* and *g* would be a close blending of *ky*, *gy*—almost like *k*, *g*, in German *kind*, *gieng* (in the case of the aspirates the aspiration is still naturally added). Our pronunciation of these sounds is nevertheless clumsy (especially before other sounds than *i*, *e*), and we therefore willingly abide by the somewhat incorrect traditional pronunciation, *i.e.* momentary dental + lingual spirant.

'Lingual,' for want of a better term, is used for that part of the mouth between the palate and the teeth. The momentary linguals are sounds like *t* and *d*, except that they are produced not by the teeth, but much further back towards the palate:

to effect this the tongue must be bent backwards: these sounds are called by the Hindus '*head-sounds*' (which has been mistranslated '*cerebral*'): in the conventional European pronunciation they are not distinguished from the dentals.

Of the spirants, the exact pronunciation of ञ (a variation fr. *s* acc. to sound-laws) is not known; it has no equivalent in sound: we pronounce it either as *h* or not at all.

h is always audible and equivalent to a sonant, and is therefore like our *h*, but must, however, be sounded emphatically. The *h* is a fricative noise formed in the upper part of the larynx, and belongs (like *ʔ*, § 1, Note 3) to the class of laryngeal consonants. For convenience, here and in the other languages where it makes its appearance, we have placed it amongst '*Gutturals*.' *h* can be produced either with or without vibration of the vocal chords, *i.e.* as a *sonant* or as a *mute*.

ञ must be pronounced like *y*, but without its accompanying vocal-sound, and probably somewhat more sharply (with closer contraction of the organ), perhaps like *ch* in *sichel*; the conventional pronunciation as a sharp *sh* is wrong, and must be avoided; ञ has nothing in common with *s*.

ś = Germ. *sch*, Fr. *ch*.

Nasals. ण is the guttural nasal, and must therefore be pronounced like Germ. *n* in *enkel*, or *ng* in *lange*; ण is the pal. nas., which must have been sounded as a close blending of *ny* (as Fr. *gn* in *campagne*); ण, the head-nasal, takes the place of formative *n*, where *t* or *d* follows: our pronunciation of it is unsuccessful, for we usually confuse it with *n*.

r and *l* as vowels are perhaps sounded as in Germ. *hadern*, *handeln*, pronounced with an inaudible *e* as *er*, *el*; the existence of a strong vowel-sound in vowel *r* is expressly attested by Hindu grammarians (Benfey, *Or. und Occ.* iii. 25 *sqq.*). *ṛ* is = long *r*, and should therefore be distinguished from it by a more prolonged pronunciation. Also *r* before consonants was pronounced as a consonant, with a strongly perceptible vibration of

the chords (as in other languages, especially in Zend), which even appears in spelling as a perfect vowel (*a, i*) after *r*. (Benfey, *ib.* p. 32.)

Note.—The Bohemian likewise has *r, l*, as vowels; the Slovak dialect has, moreover, the long form of each sound.

SANSKRIT VOWELS.

Of special importance are the change of *a* to *i, ī*, and *u, ū*, and its total loss (the latter rarely happens in the case of the other vowels). In the latter cases *r* and *l* after consonants form syllables, and count as vowels; *r* is then even capable of being lengthened to *ṛ* (as *i* and *u* to *ī* and *ū*).

Besides short *i* and *u*, Sanskrit has further their unoriginal lengthenings *ī, ū*; *ai* and *au* have been compressed into *ē* and *ō* (through approximation of *a* to *i* and *u*, whereby it became *e* and *o*; and through a further like assimilation of *i* and *u* to *a*, which thus passed into the same vowels *e* and *o*; from *ee, oo* arose *ē, ō*).

Here for the first time we are met by a very important law affecting the life of a language—the law of assimilation (partial and total), and by the no less frequent ‘vowel-weakening,’ a favourite change, especially in the case of *a*. The vowel-scales of the Sanskrit are now therefore as follows:—

	Weakening.	Fund.-vowel.	1st Step.	2nd Step.
1. <i>a</i> -scale loss;	<i>i, u; ī, ū;</i>	<i>a</i>	<i>ā</i>	<i>ā</i>
2. <i>i</i> -scale		<i>i</i>	<i>ē</i>	<i>āi</i>
3. <i>u</i> -scale		<i>u</i>	<i>ō</i>	<i>āu</i>

Note.—The *a*-scale is thus enriched by one member: a negative step-formation (*i.e.* the weakening) has thereby placed itself in a parallel line with the positive.

EXAMPLES.

1. *a*-scale.

The weakening occurs principally through the influence of the accent; a similar influence is likewise exercised by assimilation.

lation to *i*, *u* of the following syllable, or the preceding con- § 6. sonant has an effect equivalent to this assimilation.

Loss of *a* occurs most frequently before *r*, also after *r*, in which cases *ar* and *ra* followed by a consonant become vowel *r*; in parallel cases *al* becomes vowel *l*, *va*=*u*, *ya*=*i*; loss of *a* is however by no means confined to these instances.

Examples of complete loss of *a* are :

r=*ar*; √*bhar* (bear, pres. *bhār-āmi*, φέρω, fero), *bhr-tá-s* (n. sg. masc. part. perf. pass.); √*kar* (make, 3 sg. pres. *kar-ōti*), *krt-á-s* (made), *ka-kr-má* (1 pl. pf.); √*mar* (mori), *mrt-á-s* (mortuos, βροτός=*μρο-το-ς); st. *mā-tár-* (μητέρ-, mater), *mā-tr-bhyas* (matribus), *mā-tr-śu* (μητράσι), etc.

This *r* is subsequently treated acc. to analogy of the other vowels, and thus is also lengthened; e.g. acc. pl. *mā-tr-ś* (matres, μη-τέρ-ας), *dā-tr-ñ* (datores, δο-τήρ-ας), st. *dā-tár-* (dator, δοτήρ).

l=*al* occurs only in √*kalp* (3 pres. med. *kālp-a-tē*, keep oneself right, succeed), which stands for original *karp* (v. 'Consonants'), *klp-tá-s* (n. sg. masc. past part. pass.).

r=*ra*; *prkḥ-āti* (3 sg. pres.), √*prakḥ* (pray, cf. Goth. *frāh*, Lat. *prec*, e.g. in *prak-śyāti*, 3 sg. fut.); *prth-ū-s* (broad), √*prath* (cf. πλατ-ύ-ς, Lith. *plat-ū-s*), etc.

Note.—The Hindu grammarians treat *r*, *l*, as fundamental vowels, *ar*, *al*, as their first step-formations. As a vowel of the first step it is generally=*a* (for it often stands parallel to *ē*, *ō*, also), in the second it is perfectly=*ā*. The first step is called by the Hindu grammarians *guṇá-s* (masc. 'quality'), the second step *vṛddhi-s* (fem. 'increase,' √*vardh*, to increase, fmd. with sf. *ti*), expressions which have often been introduced into European works on language.

Loss of *a*, without admitting vocalisation of consonants, occurs not only before other consonants, but also before *r*, which is capable of being vocalised, in those cases where a vowel follows *r* (from *ar*); in which case, as in all others where *a* is lost before a consonant, the latter alone remains. Examples: *ka-krē*

- § 6. (1. 3. sg. pf. med.), $\sqrt{\text{kar}}$ (make), for **ka-kar-ē*, and this fr. 1. **ka-kar-mē*, 3. **ka-kar-tē*; *ka-kr-ús* (3. pl. pf. act.), fr. **ka-kar-anti*.

Loss of *a* before other consonants, e.g. *ga-ghn-ús* (3. pl. pf.), $\sqrt{\text{han}}$, *ghan* (kill), for *ga-ghan-ús* (sg. *ga-ghān-a*); *ga-gm-ús* (3. pl. pf.), $\sqrt{\text{gam}}$ (go), for **ga-gam-us* (sg. *ga-gām-a*); *s-ánti* (3. pl. pres.), $\sqrt{\text{as}}$ (esse), for **as-anti* (as *s-unt* for **es-unt*); *s-yāti* (e.g. in *vy-ava-syāti*, he determines), for **as-yati*, $\sqrt{\text{as}}$, *sa*, so too *ṣ-yāti* for **aṣ-yati*, f.f. **ak-yati*, $\sqrt{\text{aṣ}}$, *ṣa* (acuere); *á-pa-pt-at* (3. sg. aor.) for **a-pa-pat-at*, $\sqrt{\text{pat}}$ (fall, fly, *πτ-έσθαι*), etc.

u=va (*a* is lost and *v* becomes *u*); *uk-tá-s* (n. sg. masc. past part. pass.), $\sqrt{\text{vak}}$ (speak, 3. sg. pres. *vák-ti*), *u-vāk-a* (3. sg. pf.) for **va-vāk-a*, *ūk-ús* (3 pl. pf.) for **va-vāk-ús*, f.f. **va-vak-anti*, *ávōkam* for **a-va-uk-am* (1. sg. aor.), f.f. **a-va-vak-am* (Gk. *ἐλπον* fr. **é-Fe-Feπ-on*); *sup-tá-s* (pf. part.), $\sqrt{\text{svap}}$ (sleep; *sváp-iti* 3. sg. pres., *á-svap-am*, 1. sg. aor.); *urú-s* (wide, *εὐρύς*) for **varú-s* (comp. st. *váriyās-*, superl. *váriṣṭha-*), etc.

i=ya (*a* is lost and *y* becomes *i*); *iṣ-tá-s* (past part. pass.) for **yag-ta-s*, $\sqrt{\text{yag}}$ (offer, worship; 3 sg. pres. *yág-ati*), *i-yág-a* (3 sg. pf.) for **ya-yág-a*, *īg-ús* (3 pl. pf.) for **ya-yág-ús*, f.f. **ya-yag-anti*; *vidh-yati* (3 sg. pres.), $\sqrt{\text{vyadh}}$ (wound, slay), *vi-vidh-ús* (3 pl. pf., 3 sg.=*vi-vyádh-a*), etc.

- § 7. Weakening of *a*—1. to *i* and *u* occurs before *r*, sometimes with assimilation to vowel of following syllable; weakening of *a* to *i* often occurs without influence of following sounds. *u* in certain cases corresponds to original *an*, *am* (the nasal is lost, after dulling the preceding *a* into *u*).

Examples. *gir-í-s* (mountain), $\sqrt{\text{gar}}$ (be heavy), Zend *gairis*, both from **gar-i-s* (cf. Scl. *gor-a*, with another st.-termn.); *gur-ú-s* (heavy), cf. Gk. *βαρ-ύς*, f.f. of both **gar-ú-s*, the original $\sqrt{\text{fm. gar}}$ comes to light only in the Sk. step-forms of this word, e.g. *gár-iṣṭha-s* (superl. of *gurú-s*); *kur-ú* (2 imper. act.), *kur-u-tē* (3 sg. pres. med.), and other like forms of $\sqrt{\text{kar}}$ (make),—these stand for **kar-u*, **kar-utē*, etc., whilst the latter again stand for **kar-nu*, **kar-nutē*, etc. (v. post. 'Rules of Con-

jugation'), *kur-más* next for **kur-umas*, fr. **kar-nu-mas*, where, § 7. as in the similar forms, the *u* which caused the assimilation is lost; *pur-ú-s* (many), f.f. and Old-Persian *par-u-s*, cf. πολ-ύ-ς, √*par* (fill), *pur-á-m*, *pur-í* (state), from same √*par*, with *a* changed to *u* before *r*, without assimilating influence (cf. πολ-ι-ς, f.f. *par-i-s*).

Weakening of *a* to *i* is frequent, e.g. *kir-áti* (3 sg. pres.), √*kar*, pf. *kā-kār-a* (pour out); *gir-áti* (3 sg. pres.), √*gar*, pf. *gā-gār-a* (throw); *ṣiś-más* acc. to sound-laws for **ṣis-mas* (1 pl.), beside *ṣās-mi* (1 sg.), pres. st. and √*ṣās* (pure √fm. *ṣas*, bid). This weakening occurs especially in the case of roots in *a* (which by-the-by we find wrongly classified with √termns. *ā*, *ē*, *āi*, *ō*, acc. to the system of the Hindu grammarians), e.g. *sthi-tá-s* (*sta-tu-s*, στα-τό-ς), √*stha* (stand); *hi-tá-s* for earlier (Vêd.) *dhi-tá-s* (θε-τό-ς), √*dha* (set); *mi-tá-s* (like the preceding, past part. pass.), √*ma* (measure); st. *pi-tar-* for **pa-tar-*, cf. πα-τέρ-, *pa-ter-*, √*pa* (protect); further in pres. redupln. e.g. *bi-bhār-mi*, √*bhar* (bear), *tī-ṣthā-mi* = ἴστημι, f.f. of both is **sti-stā-mi*, earlier **sta-stā-mi*, √*stha* (stand; cf. Sk. *dā-dhā-mi*, *dā-dā-mi*, and Gk. τί-θη-μι, δί-δω-μι, where the Sk. does not yet show that weakening which has occurred in Gk.).

u=*an*, *am*, e.g. in termn. of 3 pl. -*us*, fr. -*anti*, -*ant*, e.g. *bhārēy-us*=φέποιεν=**bharay-ant* (3 pl. opt. pres. act.), *babhrús*=**babharanti* (3 pl. pf. act.), *ubhā*, *ubhāu*=ἄμφω, *ambō*; thus later languages show the more original form, etc.

2. *a* becomes weakened to *i*, *ū*, likewise in the combination *ar*, so that *īr*, *ūr*, the latter after labial consonants, are considered as of the same force as vowel *r*; the weakening to *i*, however, occurs not only before *r*, but also not seldom in other cases.

ūr=*r* (vowel)=*ar* after labial initial √sounds, e.g. *pūr-ṇá-s* (plenus) for **pr-na-s*, Zend *pere-na-s* (Zend *ere*=Sk. vowel *r*), f.f. **par-na-s*, √*par* (fill), etc., yet also *kañ-kūr-*, intensive pres. st. √*kar* (go), and the like.

īr=*r* (vowel)=*ar* after all except labial initial sounds, e.g.

§ 7. *stīr-ṇá-s* (past part. pass.) for *str-ṇá-s*, f.f. *star-na-s*, √*star* (strew); *dirghá-s* for **drgha-s* (long), Zend *daregha-s*, Gk. *δολιχό-s*, etc., f.f. **dargha-s*, cf. compar. and superl. formed in Sk. with step-fmn. of √vowel *a*, compar. st. *drāgh-īyās-*, superl. st. *drāgh-iṣṭha-*.

i as a weakening of *a* often occurs, especially in cases of roots in *a* (like its weakening to *i*), nevertheless it also often occurs in the case of a non-radical *a* belonging to formative affixes, e.g. *hī-ná-s* for **ha-na-s* (past part. pass.), √*ha* (leave, 3 sg. pres. *gá-hā-ti*); *pī-ta-s* (past part. pass.), √*pa* (drink, 3 sg. pres. *pība-ti* for **pī-pa-ti*, fr. **pa-pa-ti*); *yu-nī-más* for **yu-na-mas* (1 pl. pres.), cf. *yu-nā-ti* (3 sg. pres.), pres. st. *yu-na-*, √*yu* (iungere), etc.

Note 1.—Through this weakening are developed also roots with *i*, which originally were in *a*, e.g. Sk. *kri* (buy), e.g. pres. *kri-ṇā-ti*, fut. *krē-ṣyāti*, pf. *kikrāy-a*, etc., thus with pure *i*, seems nevertheless to have come from original *kra=kar*, cf. Gk. *πέρ-νημι*, Lith. *perkù* (buy), where the √ with *k* is a further formation. The weakenings of original *a* are altogether not rarely formed by steps like original *i* and *u*; e.g. fr. *pī-tā-mahá-s* (masc. grandfather; on *pī-tar-*, √*pa*, v. supr.) is formed a st. *pāi-tā-maha-* (adj. grandfatherly); fr. st. *dhīr-a-* (adj. firm, stable), √*dhar* (hold), weakened to *dhīr*, sf. *-a-*, *dhāir-ya-m* (neut. stability); fr. *pur-ṇá-māsa-s* (masc. full-moon; on *pūr-ṇá-*, √*par*, v. supr.), *pāur-ṇa-māsa-* (adj. of a full-moon), etc. A change of *a*-scale to *i*- and *u*-scales is accordingly seen, especially in later formations, having arisen after the language-instinct had lost the root-forms.

Note 2.—Cf. the cases where *i* apparently stands for *a*, though it really is a contraction of *ya*, *yā*, or an auxiliary vowel, § 15, c, f.

§ 8. The fundamental vowel *a* appears in Sk. as the commonest vowel in roots and relation-sounds, e.g. *ád-mi* (1 sg. pres.), √*ad* (edere); *ás-ti* (3 sg. pres.), √*as* (esse); *bhár-asi* (2 sg. pres.), *á-bhar-at* (3 sg. impf.), *bhár-antas* (φέρωντες, n. pl. masc. pres. part. act.), √*bhar* (bear); *áp-as* (opus), *áp-as-as* (operis); *mán-as* (μέν-ος), *mán-as-as* (**μεν-εσ-ος*, μένους); *áṣ-va-s*, f.f. *akvas* (equos, ἵππος for **ικFος*); *sa* (ὁ), *ta-m*, (τό-ν, is-tu-m); *ṣata-tamá-s* (centesimus), etc.

The step-formation of *a* to *ā* cannot further be analysed § 9. into first and second steps (as in Gk., Lat., Goth.), and, moreover, can scarcely—only by means of the analogy of completely corresponding words in *i* and *u*—be distinguished from lengthening. Therefore we hesitate to make the distinction between lengthening and step-formation in the case of f. vowel *a*, and accordingly probably admit many forms as steps, which would be more accurately denoted as lengthenings. The step-formation of *a* to *ā* occurs in roots and in relation-sounds.

Examples of step-formed roots with √vowel *a* are *ba-bhār-a* (3 sg. pf.) bes. *bhār-āmi* (1 sg. pres.), √*bhar* (bear); *u-vāk-k-a* (3 sg. pf.) bes. *vāk-ti* (3 sg. pres.), √*vak* (speak); *vās-as* (uestis) bes. *vas-tē* (3 sg. pres. med.), √*vas* (clothe); *kār-āyati* (3 sg. pres. causat. vb.) bes. *kar-ō-ti* (3 sg. pres.), √*kar* (make), etc.

Note.—The roots which end in *a* occur mostly in step-raised forms [whence arose the grammatic rule that roots in *a* appear only in pronominal functions, as *ta* (n. sg. masc. *sa*, acc. *ta-m* dem.), *ya* (n. sg. masc. ntr. *ya-s*, *ya-t* rel.), *ka* (n. acc. sg. masc. *ka-s*, *ka-m*), etc., whilst all verbal roots end in *ā*—acc. to Hindu grammarians in *ā*, *ē*, *āi*, *ō*]. Also the un-raised forms, indeed the shortened forms of these roots are not rare, e.g. *gī-gā-ti*, *gā-gā-ti* (3 sg. pres.), but *ga-tā-s* (past part. pass.), *ga-hi* (2 sg. imper.), *gā-kkhati*, f.f. *ga-skati* (3 sg. pres.), cf. *βέβαιμεν*, *βάρης*, √*ga* (go); *dā-dā-mi* (1 sg. pres. *δί-δω-μι*), but *da-d-mās* for **da-da-mas* (1 pl. pres.), cf. *δί-δο-μεν*, *δό-σις*, *δο-τήρ*, *dāmus*, √*da* (give); *dā-dhā-mi* (1 sg. pres.), but *da-dh-mās*, fr. **da-dha-mas*, cf. *τί-θε-μεν*, *θέ-σις*, *θε-τός*, √*dha* (set); *ā-pā-t* (3 sg. aor.), *pā-syā-ti* (3 sg. fut.), but *pī-ba-ti* for **pī-pa-ti*, fr. **pa-pa-ti* (3 sg. pres.), cf. *πέ-πο-μαι*, *πό-σις*, √*pa* (drink); *pī-ti* (3 sg. pres.), but *pā-ti-s*, cf. *πό-σις*, Goth. *fā-th-s*, i.e. **fā-di-s*, Lith. *pā-t-s*, for **pa-ti-s* (lord), with weakening of *a* to *i* in *pi-tar-* (n. *pitā*), cf. *πα-τήρ*, f.f. *pa-tar-*, √*pa* (protect); *tī-śthā-mi*, *ἵ-στη-μι* (1 sg. pres.), but *tī-śtha-ti* for **sti-sta-ti*, fr. **sta-sta-ti* (3 sg. pres.), with weakening of *a* to *i* in *sthi-tā-s*, f.f. **sta-tā-s*, cf. *στᾶ-τός*, *stā-tu-s*, √*stha*, original *sta* (stare), etc. Here accordingly, as in many other like cases, the root-forms are evidently *ga*, *dha*, *da*, *pa*, *pi*, *stha*; so too *a* is everywhere to be assumed to be the root-sound, even where it happens that the raised forms only are seen in

§ 9. the existing language. Cf. my treatise on 'a-roots in Indo-germanic,' Beitr. ii. 92-99.

a as a sound expressing relation is found raised in termin. *a* of pres. st. *bhārā-mi* (1 sg. pres.), *bhārā-masi* (1 pl. pres.) bes. *bhāra-si* (2 sg. pres.), *bhāra-ti* (3 sg. pres.), etc., *bhāra-* is pres. st. of √ *bhar* (bear); in almost all cases of the fem. of *a-* st., e.g. *nāv-ā nāv-ām* (n. acc. sg. fem. nou-a, *véFa*) bes. *nava-s nava-m* (n. acc. sg. masc.), st. *nava-* (nouos); *āṣ-vā* (equa) bes. *āṣ-va-s* (equos), st. *āṣ-va-* (*ak-va-*), and generally before certain case-sff., e.g. *dēvā-s*, earlier *dē-vā-sas* (n. pl.) bes. *dēvā-s* (n. sg.), st. *dēvā-* (deus); further in final syllables of sundry consonantal noun-stems before certain case-sff., e.g. *dā-tār-am* (acc. sg.), *dā-tār-as* (n. pl.), fr. st. *dā-tār-* (da-tor), which appears pure in e.g. *dā-tār-i* (loc. sg.), in *dā-tr-bhis* (instr. pl.), *dā-tr-ē* (d. sg.), and others it is weakened to *dā-tr*.

§ 10. 2. *i*-scale.

Fundamental vowel *i*; *i-más*, cf. *ἰ-μεν* (1 pl. pres.), √ *i* (*i-re*); *vid-más* (1 pl. pres.), cf. *ἴδ-μεν*, Hom. *ἴδ-μεν*, √ *vid* (*uid-ere*, *scire*); *viṣ-āti* (3 sg. pres.), *viṣ-as* (n. pl. people, husbandmen), √ *viṣ* (*go in*, *dwell*); *div-am div-ás* (acc. g. sg. of n. *dyāu-s*, sky), √ *div* (*shine*; cf. *ΔιF-ός*, similarly fr. *Ζεύς* = **Δγευς*); *pák-ti-s* (fem. coctio), cf. *πέπ-σις* for **πεπ-τις*, √ *pak*, *πεπ*, origl. *kak*, cf. Lat. *coo*, Lith. *kep* (*coquere*), formed through sf. *-ti-*, f.f. therefore *kak-ti-s*.

ī is not seldom a lengthening of genuine *i*, just as we have already found it to be a lengthening of *i* = *a*. The laws under which this lengthening takes place are not discovered in every instance. The lengthened *ī* is often interchanged with the unlengthened *i*, and is subject to step-formation and change (to *iy*, *y*), like the latter.

In cases like *pāti-n* (acc. pl. msc.), f.f. *pati-ms*, st. *pāti* (lord); *pákti-s* (acc. pl. fem.), f.f. *pakti-ms*, st. *pákti-* (coctio), we clearly see a compensatory lengthening, v. post. (§ 15, d), where also the lengthening bef. *y* is yet to be mentioned (§ 15, a), as

e.g. *i-yāt* bes. *i-yāt* (3 sg. opt.) $\sqrt{i}$ (ire). Bef. final *r* in noun-§ 10. stt., as bef. *r* folld. by a sf. which begins with a conson., lengthening occurs in the case of *i* and *u*, e.g. st. *gir-* (speech; acc. sg. *gir-am*), n. sg. *gīr* for **gir-s*, loc. pl. *gīr-śú*, instr. pl. *gīr-bhis* for **gir-su*, **gir-bhis*.

So also in roots *i* appears bes. *i*, and is grammatically arbitrary, since in these cases the $\sqrt{fm}$. is usually characterized by the long vowel, as e.g. $\sqrt{bhi}$, not *bhī* (frighten), cf. *bi-bhi-más* and *bi-bhī-mas* (1 pl. pres.; 3 sg. *bi-bhē-ti*); in other roots it happens that only the lengthened vowel appears, e.g. *nī-tá-s* (past part. pass.), $\sqrt{ni}$ (*nī* acc. to Grammarians and Dictt.; 'lead'); *pri-tá-s*, $\sqrt{pri}$ (*pri*, delight), etc.

Note 1.—Root-fms. with final vowels are particularly often mentioned in the lengthened fm. in gramm. and dictt., because the lengthening was particularly popular in these cases. On the unoriginality of *i* and *ū* in Indo-Eur., cf. my remarks in Beitr. i. 328–333.

Note 2.—On *tr-tīya-s* (*ter-tiu-s*), in wh. *tr* can be taken as a weakening fr. *tri* (st. of numeral 3), v. sub. 'Numerals.'

The 1st step of *i* is in Sk. *ē*, e.g. *ē-mi* (*ēl-μi*), f.f. *ai-mi*, § 11. $\sqrt{i}$ (ire); *vēd-a* (*Foīḍa*), *vēd-a-s* (n. sg.; sacred writings of the Hindus, Vēda), $\sqrt{vid}$ (see, know); *vi-vēṣ-a* (3 sg. pf.), *vēc-a-s* (n. sg. house, cf. *Foīk-o-s*, *uīc-u-s*), f.f. *vaik-a-s*, $\sqrt{viṣ}$ (go in); *dēv-á-s* (deus), f.f. *daiv-a-s*, $\sqrt{div}$ (shine); *pák-tē-s* (g. sg.), *pák-ti-s* (coctio), *pát-ē-s* (g. sg.), *pát-i-s* (lord); *bi-bhē-ti* (3 sg. pres. redupl.), $\sqrt{bhi}$ (frighten); *nē-tra-m* (eye, lit. 'the guiding one'), *náy-ati* (3 sg. pres.), *nay*=*nē* (v. post. § 14, d), $\sqrt{ni}$ (lead); *cē-tē* (*κεi-ται* 3 sg. pres. med.), $\sqrt{ci}$ (rest, lie), etc.

The 2nd step of *i* is in Sk. *āi*, e.g. *vāiṣ-ya-s* (man of third caste), $\sqrt{viṣ}$ (go in; cf. *viṣ-as* and *vēṣ-a-s*); *vāid-ya-s* (vēdic, learned), $\sqrt{vid}$ (see, know; cf. *Vēd-a-s*); *dāiv-a-s* (godly), whence *dāiv-a-m* (destiny), st. *dēv-á-* (deus), $\sqrt{div}$ (shine); *ṣāiv-a-s* (belonging to the god Ṣiva, Ṣiva-worshipper), fr. *Ṣivá-s* (the god Ṣiva); *vāiṣṇavá-s* (belonging to Vishnu, Vishnu-worshipper

§ 11. fr. *Viṣṇu-s* (the god Vishnu) ; bef. vowels not *ai* but *ay* is found (§ 14), e.g. *nāy-aka-s* (masc. leader), *nāy-āya-ti* (3 sg. pres. causat. st.), *√ni* (lead), etc.

§ 12. 3. *u*-scale.

This scale, in all its parts, runs parallel to the *i*-scale, also the lengthening of *u* to *ū* occurs here, like *i* to *ī* above.

Fund. vowel *u*, e.g. *buddhá-s* for **budh-ta-s* (past part. pass.), *bu-budh-é* (1, 3 sg. pf. med.), *√budh* (learn, know); *tud-āti* (3 sg. pres.), *√tud* (thump); *yug-á-m* (iugum, ζυγόν), *yuk-tá-s* (past part. pass.) for **yug-ta-s* (iunctus), *á-yuḡ-at* (3 sg. aor.), *√yuḡ*, *yug* (iungere); *su-tá-s* (past part. pass.), *√su* (produce, sow); *ṣru-tá-s*, κλυ-τό-ς (past part. pass.), *ṣru-dhī* (vēd. 2 sg. imper. aor. κλῦ-θι), *√ṣru* (hear), etc. In pres. st. *ṣr-ṇu-*, e.g. *ṣr-ṇó-mi* (1 sg. pres.), *√ṣru* (hear), *ru* is exceptionally weakened to *r*, by complete loss of *u*.

The lengthening of *u* to *ū* occurs here, just as in the *i*-scale *i* becomes *ī*, e.g. *á-bhū-t* (ἔ-φύ(τ), 3 sg. aor.), *bhū-tá-s*, *bhū-tá-m* (masc. ntr. past part. pass.), *√bhu* (*bhū*, be), cf. *φῦ-τό-ν*, *fū-turu-s*; *sū-nú-s* (son), cf. Lith. *sūnūs*, Goth. *sunus*, *√su* (bear, sow, sts. also given as *sū*); *sū-nú-n* fr. **su-nu-ns* (acc. pl.), Goth. *sununs*, st. *sūnú-* (n. sg. *sū-nú-s*, cf. § 15, d). Like *i*, so *u* bef. *r*, and bef. *r*+conson. in noun-stt. is lengthened (§ 10), e.g. st. *dhur-* (fore-part of a coach-pole, e.g. acc. sg. *dhūr-am*), n. *dhūr* for **dhur-s*, instr. pl. *dhūr-bhis* for **dhur-bis*, etc.

§ 13. 1. step *ō*, e.g. *bódh-ati* (3 sg. pres.), *√budh* (learn, know); *pra-tōd-a-s* (masc. goad), *√tud* (push); *yu-yōḡ-a* (1, 3 sg. pf.), *yōḡ-a-s* (joining, speculation), *√yuḡ* (iungere); *bhāv-ati* (3 sg. pres.), *á-bhav-at* (3 sg. pf.), *bhav=bhō* (v. § 14, d), *√bhu* (be); *sōṣ-yāti* (3 sg. fut.), *√su* (bring forth); *cró-tra-m* (ntr. ear), *√ṣru* (hear), *sū-nó-s* (g. sg.), st. *sūnú-* (n. sg. *sū-nú-s*, son), cf. Lith. *sūnaús*, Goth. *sunaus*, etc.

2. step *āu*, e.g. *bāuddhá-s* (masc. Buddhist) fr. *buddhá-s* (past part. pass. n. propr. *Buddha*), *√budh* (know); *á-tāut-sam* for **a-tāud-sam* (1 sg. aor.), *√tud* (push); *yāug-ika-s* (adj. fr. *yōḡa-s*

supr.), st. *yōga-*, √*yug* (iungere); *bhāv-a-s* (being, nature), § 13. *bhāv*=*bhāu* (v. § 14, d), √*bhu* (be); *sāu-ti* (3 sg. pres.), *su-śāv-a* (1, 3 sg. pf.) for **su-sāv-a* (v. sub. consonn.), *sāv*=*sāu* (v. § 14, d), √*su* (bring forth); *á-ṣrāu-śam* (1 sg. aor. compos.), √*ṣru* (hear), etc.

Note.—"i and ū are subject to step-formation only when they are at the end of roots," is the rule of Sk. grammar, i.e. they are in these cases lengthenings of real *i*, *u*; as medial root-sounds however, they are felt by the language-instinct to be unorigl., and are therefore not treated like genuine *i*, *u*. Real *i* and *u* appear besides only before root-termns. which consist of one consonant.

VOWEL SOUND-LAWS.

§ 14.

Note.—Only the most important Sk. sound-laws are here mentioned—those which operate within the word: the changes undergone by the termn. of a word in consequence of its place in a sentence belong to the department of Sk. special-grammar, not to the Indo-Eur. (the so-called 'Comparative') Grammar.

1. Laws of the concurrence of vowels.

Fundamental law: Sk. permits hiatus in its earliest remains of language alone (in the Vēdic hymns), where we find even two like vowels in juxtaposition. In classical Sk. hiatus is avoided, a. by contraction, b. by loss of the former vowel, c. by separation, d. by change of vowel to corresponding spirant.

Contraction occurs when *a* happens to stand before another vowel, except in those cases where *a* is lost bef. the following vowel. Change to the consonn. takes place when *i*, *u* (including their furthest formations *ē*[=*ai*], *ō*[=*au*], *āi*, *āu*). This contrast between *a* and *i*, *u*, arises from the fact that *a* has no corresponding spirant, whereas *i*, *u*, have by their side *y*, *v*, which are only different from them through a slight distinction in pronunciation; the change from *i*, *u*, to *y*, *v*, is through intermediate *iy*, *uv*.

a. Exx. of contraction: pres. st. *bhāra*+*i* of opt. mood=*bhārē-*, e.g. *bhārē-t* fr. **bhara-i-t* (3 sg. opt. pres., √*bhar*, bear);

§ 14. noun st. *áçva-*+*i* of loc. case=*áçvê* (loc. sg. of n. sg. *áçva-s*, equos), etc.

Note.—v. older peculiar contractions post. (§ 15, c).

b. Loss of *a* occurs e.g. in cases like *dhanin-* (rich, n. sg. masc. *dhaní*), fr. st. *dhána-* (neutr. n. sg. *dhána-m*, wealth)+sf. *in*; only bef. sf. *ya* is *a* regularly lost, e.g. st. *dhán-ya-* (adj. rich, n. sg. masc. *dhán-ya-s*), from same st. *dhána-*. Roots in *a* do permit this loss of *a* not unfrequently, e.g. *da-d-más*, *da-dh-más* (1 pl. pres. act.), fr. pres. stt. *da-da-*, *da-dha-* (1 sg. *dá-dā-mi*, *dá-dhā-mi*), $\sqrt{da}$ (give), $\sqrt{dha}$ (set); so also in pf. they lose their termn., and subsequently even assume an auxil. vowel *i*, as if they ended in a conson., *da-d-i-má*, *da-dh-i-má* (1 pl. pf.), like *tu-tud-i-má*, $\sqrt{tud}$ (push), so that it becomes probable that *a* was lost bef. *i*, and not *ma*, but *ima*, etc., was considered to be the termn.

c. The splitting-up of *i* and *u* (and of their lengthenings *ī*, *ū*,—perh. it is more correct to suppose no lengthening to take place before vowels) to *iy*, *uv*, is retained where these vowels are radical in monosyll. words, more rarely also in ordinary Sk. otherwise, i.e. when two consonn. stand before the vowel.

Exx.: *bhiy-i* (loc. sg.), cf. n. sg. *bhī-s* (fear), st. thus *bhī-*; *iy-āy-a* (3 sg. pf.), $\sqrt{i}$ (go), fr. **i-āi-a*; *āi* is $\sqrt{i}$ in 2nd step, *i* in fund. fm.

çu-çruv-ús (3 pl. pf.), $\sqrt{çru}$ (hear), f.f. *ku-kru-anti*; *āp-nuv-ānti* (3 pl. pres. fmd. by *nu* fr. $\sqrt{āp}$, work); *bhruv-i* (loc. sg.), n. sg. *bhrū-s* (*ō-φρύς*), st. therefore *bhrū-*.

Note.—*y-anti* (3 pl. ind. pres.), $\sqrt{i}$, contrary to rule where we should have expected *iy-anti*; *i* is here exceptionally treated according to the plan laid down below.

d. The change into corresponding semi-vowel is regular in ordinary Sk., that is, occurs exclusively in the case of *i* and *u* as 2nd part of diphthongs *e* (= *ai*), *āi*, *ō* (= *au*), *āu*, e.g.

pāktī-ā (instr. sg. of n. sg. *pākti-s*, coctio) for **pakti-ā*, *nī-ny-ē* (1, 3 sg. pf. med.), $\sqrt{nī}$ (*nī*, lead) for **nī-nī-ē*.

náy-ati (3 sg. pres.), $\sqrt{ni}$ (lead), here raised to 1st step *nē*, § 14. i.e. *nai*.

ni-nāy-a (1, 3 sg. pf. act.), $\sqrt{ni}$, *nāi*=2nd step of *ni*.

ṣr-ṇv-ánti (3 pl. pres. act.), $\sqrt{\text{ṣru}}$ (hear), pres. st. $\sqrt{\text{ṣr-ṇu-}}$ (cf. § 12) for **ṣr-ṇu-anti*, f.f. *kru-nu-anti*; cf. supr. *āpnuv-ánti*, with splitting of *nu* into *nuv*, whereas here two consonn. stand before *u*.

ṣráv-ana-m (the hearing, ear; n. sg. ntr.), $\sqrt{\text{ṣru}}$ (hear), raised to *ṣro*=*ṣrau* + sf. *ana*; *ṣráv-as* (ntr. the hearing, ear = *κλέφος*, Scl. *sloves-*), likewise fr. same root + sf. *as*.

ṣu-ṣráv-a (1, 3 sg. pf.), $\sqrt{\text{ṣru}}$ (hear), here raised to 2nd step *ṣrāu*.

Note 1.—The earlier lang. shows the splitting-up only in the case of *i*, *u*. The scale of variation is as follows: 1. *i*, *u* + vowel, e.g. *pákti-ā*; but there arises very easily, 2. *iy*, *uv* + vowel, e.g. *pákti-y-ā*; and finally the vowel element is lost entirely, 3. *y*, *v* + vowel, e.g. *pákti-y-ā*.

Note 2.—The fms. explained in § 6, such as *ūk-ús*, *īg-ús*, form no exception to the laws above laid down, and are prob. not contracted fr. **uuk-ús*, *iīg-ús*, but rather arise fr. resolution of *v*, *y*, into *u*, *i*; **va-vak-us*, **uvakus*, **uvkus*, *ūk-ús*; **ya-ya-g-us*, **iyag-us*, **iīg-us*, *īg-ús*, are the gradations of change here to be understood.

2. Vowel-change caused by the neighbouring consonn. § 15.

Note.—A single instance had to be mentioned as early as § 7, as *pūrnás* with *ū* on acct. of *p*; generally the weakenings of *a* bef. *r* are intrinsically caused by this conson.

a. *y* often lengthens preceding *u*, *i*, *a* (for splitting-up of *y* to *iy*, *īy*, v. supr. § 14, 1, c.), e.g. *crū-yá-tē* (3 sg. pres. pass.), $\sqrt{\text{ṣru}}$ (hear); *gī-yá-tē* (3 sg. pres. pass.), $\sqrt{\text{gi}}$ (conquer, e.g. in *gi-tá-s*, past part. pass., *gáyati* 3 sg. pres.); *gā-ya-tē* (is born, 3 sg. med.), $\sqrt{\text{ga}}$ (generally *gan*, and thus means bring forth, bear; cf. Zend *za-yē-itē*, f.f. therefore *ga-ya-tai*), etc.

Note.—Bef. *y*=*i*, *ī* also may be explained as splitting-up of *i* to *iy*. Perh. fr. this source arise also the lengthenings of *u* to *ū*, and *a* to *ā*, bef. *y*. Cf. sq.

§ 15. b. *iy* sometimes occurs instead of *y*, and also *īy* with the favourite vowel-lengthening bef. *y*.

After *a* in certain cases *iy* (with *a* or *ā* therefore *ēy*) instead of *y* (with *a* or *ā* therefore *ay*, *āy*), e.g. pres. st. in *a* + opt. element *ya* forms not *-a-ya*, but *-a-īya*, i.e. *-ēya*, e.g. *bōdhēyam* for **bōdha-ya-m* (1 sg. opt. pres.), pres. st. *bodha-*, √*budh* (learn, know); *dē-ya-s* (part. necessitatis, n. sg. masc.) for **dā-ya-s*, st. *dā-ya*, consisting of step-formed √*da* (give), and sf. *ya*; *gāṅgēya-s* (found in or on the Ganges), fr. *gāṅgā* (nom. pr. Ganges), step-fmd. *gāṅgā* + sf. *ya*, for **gāṅgā-ya-s*.

Also after consonn. occurs *īy* for *y*, thus in compar. st. fmd. with origl. sf. *yans*, e.g. st. *lāghīyās-* (n. sf. masc. *lāghīyān*), fr. *laghú-s* (light) = *é-λαχύ-ς*, for **lagh-yās-*, cf. *é-λάσσων* for **λαχ-yōn*, and superl. *lāgh-iś-tha-s*, *é-λάχ-ισ-το-ς*, where *is-* is a relic of *-yas-*, *-yās-*. So moreover the sf. *ya* has also a fm. *īya*, e.g. st. *karaṇ-īya-* (faciendus) for **karan-ya-*, st. *kāra-ṇa*, which loses its termn. bef. *ya* (§ 14, 1, b), etc.

Note.—*īy=y* is not developed in Indian until after the division of Aryan into Ind. and Eran.; the Zend, which stands so close to Old-Ind., still has *y=Sk. īy*.

c. *yā* was sometimes compressed into *ī*. So esp. in fem. stt. in *ī*, which prob. can only be = *yā*, e.g. *bhārantī* (the bearing one, f.) = **bharant-yā* = *φέρουσα* = **φερωντ-yā*; *gānitṛī* = **gānitṛ-yā* fr. **gān-i-tar-ya* (genetrix) = *γενέτειρα*, i.e. **γενετερ-ya*, etc., *ya-* stt. fr. usual masc. stt., Sk. *bhārant-*, *gāni-tār-*, Gk. *φέρωντ-*, *γενε-τήρ-*; *dēvī* = **daivyā* (dea), cf. Lith. *deivė*, i.e. **deivyā*, f.f. *daiv-yā* (once 'goddess,' now = 'ghost'), later fmn. fr. st. *dēvā-*, Lith. *dėva*, f.f. *daiva-* (deus); Vēd. *āvī* (instr. sg. for Sk. *āvy-ā*, both fr. *āviā* (*āvi-s*, ouis, *ā* sf. of instr. sg.), etc.: *ī* is clearly a weaker vowel-fm. for *yā* in opt., e.g. 3 sg. act. *bibhr-yā-t*, but 3 sg. med. *bibhr-ī-ta*, √*bhar* (bear, pres. st. *bibhar-*), etc.

Sometimes *ī* is a product of a similar earlier contraction of *i-a* or *ya* after loss of conson. betw. *i* and *a*, as in *sīd-āti* (3 sg. pres.), fr. **si-adati* for **si-sad-ati*, √*sad* (sit, pf. *sa-sād-a*, aor.

á-sad-at), like *ἴζω* fr. **iḗζω* = **si-sed-yō*, f.f. *si-sad-yami*, Lat. *sīd-o* § 15. fr. **sisdo* for *si-sed-o*, f.f. **si-sad-ami* (with not unfreq. pres. redupln.), also the *īr* now used as a root, e.g. *īr-tḗ* (3 pres. med., rises, causat. *īr-áyati*, he arouses), is recognized as a product of pres. redupln.; *īr* = **i-ar*, **iyar*, *√ar* (go), etc.

d. Compensatory lengthening. Esp. in declens.-fms. (n. sg., acc. pl.) is found lengthening of the foregoing vowel after loss of conson. Exx.:

N. sg. *rājā́* for **rā́jan-s*, st. *rā́jan-* (masc. rex) + nom. sf. *s*, cf. *ποιμήν* for **ποιμεν-s*; *धानी́* for **dhanín-s*, st. *dhanín-* (rich); *माता́* for **mātar-s*, st. *mātar-* (mater), cf. *μήτηρ* for **μητερ-s*; *दूर-माना́s* for **dur-manas-s* (masc. fem. evil-minded, compounded of *dus*, evil, *mānas* ntr. mens), cf. *δυσμενής* for **δυσ-μενεσ-s*; *अग्निमान्* for **agnimant-s* (fiery, st. *agni-*, ignis + sf. *-mant*). Notice *bhāran* without compens. lengthening for **bharant-s* (n. sg. part. pres. act., whilst the corresponding Gk. *φέρων* for **φεροντς* has the lengthening).

Acc. pl. *अश्वान्* for **aśvan-s*, n. sg. *अश्वा-s* (equos); *पतिन्* for **patin-s*, n. sg. *पतिs* (lord); *सुनुन्* for **sūnun-s*, n. sg. *सुनु-s* (son); *मतिs* for **matin-s*, n. sg. *मति-s* (fem. thought): *धेनुs* for **dhēnun-s*, n. sg. *धेनु-s* (milch cow).

Bef. sonant consonn. we ought prob. to consider *ō* to be a compens. lengthening = *as*, with dulling of the vowel, e.g. *मानोbbhis*, instr. pl. for **manas-bhis*, fr. *mānas-* (neutr. mens, μένος) and *bhis* (sf. of instr. pl. consisting of *bhi* + pl. sf. *s*), etc. This change of *as* to *ō* often takes place in case of final *as*.

Note.—In the case of compens. lengthening in Sk. and in the other languages, we might make a more accurate distinction as follows: 1. $\sim + \text{conson.} = \bar{\sim}$ (cf. O.-Bulg. instr. sg. *-mǝ* = origl. *bhi*, bes. instr. pl. *-mi*, i.e. *-mǝ* = origl. *-bhis*), in terminations; medially this case is not found: 2. $\sim + \text{conson.} 1 + \text{conson.} 2 = \bar{\sim}$ (e.g. *mātā* for **mātars*) in termn.: 3. $\sim + \text{conson.} 1 + \text{conson.} 2 = \bar{\sim} + \text{conson.} 2$, final and medial (e.g. *matīs* for **matin-s*; Gk. *εἰμί* for **ἔσμι*; a subdivn. forms here $\sim + \text{cons.} 1 + \text{cons.} 2 + \text{cons.} 3 = \bar{\sim} + \text{cons.} 3$ (e.g. *ιστάs* for **ισταντς*): 4. $\sim +$

§ 15. conson. 1 + cons. 2 = ⁻ + cons. 1 (e.g. *μήτηρ* for **μητερς*), or ⁻ + cons. 1 + cons. 2 + cons. 3 = ⁻ + cons. 1 (e.g. *φέρων* for **φεροντς*, finally and medially, the latter, e.g. Gk. *ἔφηνα* for **ἐφανσα*). The physiological explan. of this sound-process is difficult, esp. in case No. 4.

e. Dulling of *ā* to *ē* and *āu* bef. lost conson. and in *fine*. For *ā* there occurs a dulled fm. in *ē*, in certain cases in the middle of a word, when *ā* has been produced through compens. lengthening (§ 15, d), in the case of unusual and late consonantal loss: in termn. it occurs, but is likewise confined to certain cases; also we find *ē* for *ā*, like *āu* for *ā*, the latter of which is retained in the old lang. Exx.:

ē for *ā* when consonn. have been lost; thus in imperat. pres. *ēdhi* for **ā-dhi*, **as-dhi* (√ and pres. st. *as-*, esse, *dhi* termn. of 2 sg. imper.); *dhēhi* for **dhāhi*, with asp. (v. § 59) for Vēdic *daddhi* for **dadh-dhi* (pres. st. *dadh*, √*dha*, set); *dēhi* for **dāhi*, fr. **dadhi* for *daddhi* (pres. st. *dad*, √*da*, dare); in pf. fm. as Sk. *pēt-i-mā* for **pāt-i-ma*, Vēd. *papt-i-mā* fr. **pa-pat-ma* (1 pl. act.; pf. st. *papat-*, √*pat*, fly, fall); *tēn-i-rē* for **tān-i-rē* fr. older *ta-tn-i-rē* (3 pl. med.; pf. st. *tatan-*, √*tan*, stretch), etc.; finally in voc. of fem. *a-* st., e.g. *āçvē* (but earlier still *āçvā*), voc. of *açvā* (equa). *āu* for earlier *ā* (cf. *ō* for *as* in termn. bef. sonants, § 15, d) occurs in n. acc. dual, e.g. *āçvāu*, earlier *āçvā* (n. *āçvas*, equos); further in 1, 3 sg. pf. act. of roots in *a*, e.g. *dadāu*, archaic *dadā*, √*da* (dare).

f. An auxil. vowel *i*, *ī*, occurs betw. stem-termns. and termns. which begin with a conson. in word-fmn., esp. in conjugation fms., in which origly. and partly still in the earlier lang., the termn. was added immediately to the stem-termn., e.g. pres. fm. of single vbs., as *svāp-i-mi*, *svāp-i-ši*, *svāp-i-ti*, *svāp-i-mās* (1, 2, 3 sg., 1 pl. pres.), etc., for **svap-mi*, etc., √*svap* (sleep); in pf. this occurs regularly in case of certain persons, e.g. 1 pl. *tutud-i-mā*, √*tud* (tundere), etc. Here we often see even now the older fms. without inserted *i*, partly even in ordinary Sk., as e.g. *kakār-tha* (2 sg. pf.), √*kar* (facere), partly in the earlier lang.

of the Vēdas, in which a fm. *tutudmá*, etc., may be found. In § 15. fut. e.g. *gam-i-śyāmi* (1 sg. fut.), $\sqrt{\text{gam}}$ (ire); in part. pres. pass., e.g. *vid-i-tá-s*, $\sqrt{\text{vid}}$ (see, know), and many similar fmns., this insertion of *i* occurs in certain roots.

ī occurs as auxil. vowel in aor.-fms., e.g. 2 sg. *á-nāi-ś-ī-s*, $\sqrt{n}$ (*nī*, lead), bes. 1 pl. *ánāi-ś-ma*; in pres. fms. as 1 sg. *brāv-ī-mi*, 3 sg. *brāv-ī-ti*, bes. 1 pl. *brū-más*, $\sqrt{\text{bru}}$ (*brū*, speak), and in impf. fms., as *á-brav-ī-s*, *á-brav-ī-t* (2, 3 sg.) (id.); *ās-ī-s*, *ās-ī-t* (2, 3 sg.), $\sqrt{\text{as}}$ (esse), etc.; *ghr-ī-tá-s* past part. pass., $\sqrt{\text{grah}}$ (grasp), has likewise this *ī*, which is therefore used just like *i*, only not so often.

The Vēd. *ās* for **ās-t* (acc. to a sound-law of Old-Ind., which must be discussed under 'Consonants'), instead of later *ās-ī-t*, favours the view that *ī* is an auxil. vowel inserted at a later time.

Note.—Since beside *sváp-i-mi* for **svapmi*, etc., we see *svápāmi*, etc., we must simply suppose that here, as often elsewhere, beside the pres. st. *svap-*, there was a pres. st. in *a*, *svapa-*.

GREEK.

§ 16.

SUMMARY OF SOUNDS.

CONSONANTS.						VOWELS.
MOMENTARY SOUNDS.			PROLONGED SOUNDS.			
	UNASPIRATED. mute sonant ¹	ASPIRATED. mute	SPIRANTS. mute sonant ¹	NASALS. sonant ¹	r- & l-sounds. sonant ¹	
Gutt.	κ γ	χ	‘	γ		a ā } ε η } ι ī } ο ω } υ ū } (ov) }
Pal.						
Ling.					ρ λ	
Dent.	τ δ	θ	σ	ν		
Lab.	π β	φ	(F)	μ		

¹ Or medial.

§ 16. In this table only the indivisible sounds are mentioned.

ζ is a consonantal diphthong, namely *d* with the sonant dental spirant (e.g. Slavonian *z*). ψ, ξ, are only characters for two sounds πς, κς. The vowel-diphthongs are *αι, ει, οι*; *αυ, ευ, ου* (older pronunciation); *υι*; also *α, η, ω* (older pronunciation, by which the *ι* was still heard); *ᾱυ* (perhaps in the word γρᾱῦς [γρῆυς], perhaps pronounced distinctly from *αυ* with short *a*), *ηυ, ωυ*.

Note 1.—*υ* at an earlier period of the language was equivalent to *u*, but became pronounced like *y, ü*, as early as classical times; *ου* in the earlier language was the genuine diphthong *ou*, but even in the classical period it had become equivalent to *ü*, as indeed it did in other languages, e.g. French, the older *ou* became *ü*, whilst the spelling retains the earlier sound-grade.

To pronounce Old-Greek after the fashion of modern Greek is a mistake, which arises from utter ignorance of the laws of development and phonology of a language.

We should be careful to distinguish *αι* from *ει* in pronunciation, because they are distinct sounds: they are pronounced as they are written, i.e. *αι* like German *ai* or *ei*, but *ει* like *e + i* tacked on, a diphthong, which is found dialectically in German, and characterized in other languages by *ey (ej)* (cf. Curt. Erl. § 8 sqq.).

Note 2.—Like most other written languages, the Greek does not characterize its long vowels throughout; in earlier Greek, however, they were not indicated at all: *α* serves as *a* and *ā*, *ι* for *i* and *ī*, *υ* for *ü* and *ū*, in the earlier writing *ε* for *e* and *ē* (*η*); *ο* for *o* and *ō* (*ω*). These incomplete indications of sounds have nothing to do with the language itself, *τες*, e.g., must be read *τῆς*, *τει* = *τηι*, i.e. *τῆ*, *τοι* = *τωι*, i.e. *τῶ*, etc.; in all cases the long vowels are derived from the original language. Cf. 'Declensions.'

The system of Greek writing belongs to Greek special-grammar, as an appendix to the phonology.

§ 17.

THE GREEK VOWEL-SYSTEM.

The most important deviation from the original language lies in the colouring of *a* into *e* and *o*, which takes place alike in the case of *a* and *ā* by the side of the original vowel pre-

served : the archaic dialects (Dôric) have remained most faithful § 17. to the older order of sounds : *o* has a double duty ; it is not only 1. the representative of the original *a*, but also 2. (opposed to $\epsilon=a$) the representative of the original $\bar{a}$.

Through the differentiation of $\bar{a}$ into *o*, $\bar{a}$, η , ω , it became possible to separate ω as the second step from the first *o*, *a*, η .

The weakening of *a* into *ι* and *υ*, as well as loss of *a*, occurs comparatively seldom.

This same colouring of the *a*-sound into *e* and *o* occurs when it is combined with *i* and *u* in a diphthong ; here too $\epsilon (=a)$ is the first, *o* ($=\bar{a}$) the second step, which however is replaced in the *u*-scale almost always by the first step ($\epsilon\iota$, $\epsilon\upsilon$ =original *ai*, *au* ; *oi*, *ou*=original $\bar{a}i$, $\bar{a}u$). It is only wherever the language has lost the living variability of the vowels according to their scales, *ai* and *au* appear as steps raised from *ι* and *υ*.

A large number of vowel-sounds, especially diphthongs and long vowels, arise in Greek through the elision, permutation, and change of position of the original spirants *y*, *v*, *s*, which were entirely, or in certain combinations, unbearable to Greek pronunciation. The vowel-sounds so formed are consequently entirely unoriginal, being products of the peculiar sound-laws of the Greek language, and foreign to the original state of the language.

The Greek vowel-system, in many parts differing from the original one, reminds us in several respects of the Zend ; whilst we find on the other hand the greatest conformity with that of the Latin language.

The vowel-scales of the Greek language are then as follows :

	Weakening.	Fundamental-vowel.	1st Step.	2nd Step.
<i>a</i> -scale	loss <i>ι, υ</i>	ϵ, o, a	<i>o, ā, η</i>	ω
<i>i</i> -scale		<i>ι</i>	$\epsilon\iota$ (<i>ai</i>)	<i>oi</i>
<i>u</i> -scale		<i>υ</i>	$\epsilon\upsilon$ (<i>au</i>)	<i>ou</i> ($\bar{a}u$)

Note.—More than one sound accordingly occurs here in different functions, as is the case with *i* and *u* in Sanskrit, and

§ 17. partly also in Zend. In the Greek, however, we meet with the ambiguity of the sounds for the first time to a greater extent; we may here therefore speak of it briefly. Besides the permutations shown above, *ι*=original *i* and *a*; *υ*=original *u* and *a*; *ο*=original *a* and *ā*: that is, the diphthongs are ambiguous because they stand, sometimes for scale-sounds, sometimes for results of contraction, sometimes for protracted vowels. e.g. *ει* in *εἶμι* (*eo*, *ibo*), fundamental-form *ai-mi*, originally distinct from *εἰμί* (*sum*), from **έσμι*, fund.-form *as-mi*; *ει* in *εἶπον* (*dixi*), fr. **έεπον*, **FeFeπον*, *√Feπ*; *ει* in *εἶην* (opt. pres.) for **έσγην*, f.f. *as-yā-m*; *κτείνω* (*kill*) for **κτενγω*; *ου* in *σπουδή* (*haste*; raised to *ευ* in *σπεύδω*, *√σπυδ*) is altogether different, as *ου* in *πούς* (*foot*) for **ποδ-ς*, f.f. *pad-s*; *ου* in *τούς* for *τους* (acc. pl. of *το-*), f.f. *tams*; *ου* in *νέου*, fr. **νέοο*, for *νέοιο*, **νεΦοσγο*, f.f. *navasya* (gen. sing. masc. and n. fr. *νεο-*, *young*); *ου* in *γουνός* for **γουνΦος* (gen. sing. fr. *γόνυ*, *knee*):—similarly in the case of *οι*, *λοιπ-ός* (*remaining*), *√λιπ*, but *μοῖρα* (*lot*, *fate*) for **μορ-γα*, *√μερ* (*divide*); *οἷς*, fr. *δῖς* (older form *δῖς*, Lat. *ouis*); *αι* in *αἶθω* (*burn*), *√ιθ*, but *μέλαινα* (nom. sing. fem. st. *μελαν-*, *black*) for *μέλανγα*, etc.

§ 18.

EXAMPLES.

1. *a*-scale.

Weakening. Loss. e.g. *γί-γνο-μαι* (*become*) for **γι-γέν-ομαι*, *√γεν*, original *gan*; *πί-πτ-ω* for **πι-πετ-ω*, *√πετ*, original *pat* (*fall*); *έ-σχ-ον* (1 sing. aor.), fund.-form *a-sagh-am*, *√σεχ*, original *√sagh*; *έ-σπ-όμην* (1 sing. aor. *έπ-ομαι*), *√σеп* (*follow*), original *√sak*, etc.

There takes place not unfrequently a complete loss of an original *a* in the elements of stem-formation, e.g. *πα-τρ-ός*, *πα-τρ-ί*, from stem *πατέρ-* (*father*), original *pa-tar-*, thus stand for *πατέρ-ος*, *πατέρ-ι* (*Homêric*), f.f. *patar-as*, *patar-i*, etc.

Note.—Loss of initial *a* in Greek is not common, cf. *έσ-μέν* (*we are*), f.f. *as-masi*, Sansk. *s-más*, and Lat. *s-umus*; *εἶην*=**έσγην*, f.f. *as-yām*, Sansk. *s-yām*, Lat. *s-iēm*; *εὔ* (*εύ*) for **έσύ*, f.f. *asu*, Sansk. *su* (*well*).

The weakening of original *a* to *ι* (cf. Curt. Gk. Et., p. 641 sqq.) is not frequent or regular in roots, and occurs most often before two consonn., e.g. *ἰσ-θι*, f.f. *as-dhi* (2 sing. imper.),

√*ēs*, origl. and Sansk. *as* (to be); *πίτ-νημι* beside *πετ-άννυμι* § 18. (spread out), cf. *pateo*; *πιτ-νέω* (fall), √*πετ*, Sk. *pat*; *κιρ-νημι* beside *κερ-άω*, *κερ-άννυμι* (mix); *τίκ-τω* (bring forth), √*τακ*, origl. √*tak*, cf. *ἔ-τεκ-ον*, *τέ-τοκ-α*; *ἵππος* for **ἵκ-Φος*, Sk. *āḥ-vas*, Lat. *eq-uos*, f.f. *ak-vas*, √*ak* (run). The passing of original *a* into *i* is through intervening *e*, to which fact the examples cited bear witness.

This weakening of the fundamental *a* into *i* occurs regularly in the reduplicated form of the present, e.g. *τί-θη-μι*, Sk. and origl. *dā-dhā-mi*, √*θε*, Sk. and origl. √*dha* (place); *δί-δω-μι*, Sk. and origl. *dā-dā-mi*, √*δο*, Sk. and origl. *da* (give); *γί-γν-ομαι*, √*γεν*, origl. *gan* (bring forth); *πί-πτ-ω*, √*πετ*, origl. *pat* (fall). This *i* (weakened from *a*) occurs lengthened to *ī*, e.g. in *πί-νω* (drink), √*πο* (*πό-σις*, *πο-τήριον*, *πέ-πω-κα*), origl. *pa*; *παρθεν-οπ-ίπ-ης* (looker-at-maidens), cf. *ὀπ-ωπ-ή* (sight), √*ὀπ*, origl. *ak* (see); *ὑσ-μύνη*, *ὑσ-μῖνι* (loc. sing. moil), f.f. *yudh-manā*, *yudh-mani*, the latter to the st. *yudh-man-*, √*yudh* (join battle), suff. *man*.

Dialectically (in Dôric, Aiolic) this weakening of origl. *a* to *i* is more common; e.g. Dôr. *ἴσ-τία*, Iôn. *ἴσ-τή*, for *ἑσ-τία* (hearth), origl. √*vas*; *ἰν* Arkad. and Kuprian for *ἐν* (in), related to the pronoml. stem *an*; Boiôtian *ἰών*=Iôn. *έών* for **ἑσ-ων* (n. sing. masc. part. pres. act.), √*έσ-* (be), etc. Through the dulling of *a* to *o*, and further of *o* to *u*, a change of origl. *a* to *u* takes place.

This weakening of *a* to *u* (cf. G. Curt., p. 644 sqq.) occurs merely unconnectedly, in most cases through the influence of a nasal or *r*, *l*; and herein we must not forget that *u* represents an older *u*, so that in Greek we have the same weakening from *a* to *u* as in Lat. and German, etc., e.g. *νυκτ-ός* (gen. sing.), stem *νυκτ-* (night), (Sk. adv. *nákt-am*=*noctu*), Lat. stem. *noct-*: the root-vowel thus is *a*, and the root clearly √*nak* (necare, nocere); in *ὄνυξ* (stem *ὄνυχ-*, nail), root *νυχ*, cf. Goth. *nag-ls*, Sk. *nakh-ás*, etc., the origl. vowel is no doubt *a*; *γυνή* (woman),

§ 18. $\sqrt{\gamma\alpha\nu}$ (bring forth), cf. Sk. *gán-a-s* (mensch), *gánī* (wife), Gothic *kven-s* (wife, spouse); *κύκλος* (ring), cf. Sk. *kakrá-m*; *μύλ-ος*, *μύλ-η* (*mola*), $\sqrt{mal}$ fr. *mar*, cf. *mola*, *molere*, Lith. *malù*, Gothic *malan*; *ἄν-ώνυμος* (nameless) beside *ὄνομα* (name), f.f. *gnāman*, etc.

Dialectically this change is more frequently observed, esp. in Aiolic, e.g. *ὄνυμα*=*ὄνομα*; *ὕμοιος*=*ὅμοιος*, f.f. *samaias*, from stem *sam*=Gk. *όμο* (*όμός*, like), the origin of which is found in the pronoml. origl. $\sqrt{sa}$ =Gk. *ό*; Aiolic locative *ἄλλυι*, *τυῖδε*, for *ἄλλοι* (*ἄλλο-*, other), *τοιῖδε* (*το-* demonstr. pronoml. st.); Boiōtian *τύ* for **τυι=τοι* (n. pl. masc. same st.), *τύς ἄλλυς*=**τυις ἄλλυις=τοις ἄλλοις* (dat. loc. pl.), by contraction of *υι* to *υ*.

Note.—I hold it inadmissible to separate from the rest those cases in which original *ka*, *ga*, become *κυ*, *γυ*, and to explain them collectively from *kva*, *gva*, with loss of *a*; neither will a fm. **κFακλος* seem to me to be Gk., and yet we must suppose some such form. No one, so far as I know, has had recourse to a fm. **νFαξ*, **ὄνFαξ*, **μFαλη*, in order to explain the *υ* in these words. Here *υ* must have arisen from *a* without passing through *va*, and the same process must have taken place after gutturals.

§ 19. Root-vowel *a* in the original language.

As a rule, *ε* is the representative of origl. *a* in roots; whilst *ο* generally takes its place in the stem-formative and word-formative particles, *a* is found in roots; in word-formative additions it is mostly dependent on a nasal now lost, but once in existence.

ε=a. *ἔδ-ω*, Sk. *ád-mi* (eat), $\sqrt{éd}$, origl. *ad* (edo); $\sqrt{éd}$ in *ἔζ-ομαι*=**σεδ-γομαι* (*sed-eo*), *ἔδ-ος* (*sed-es*), origl. *sad* (*sit*); $\sqrt{\gamma\epsilon\nu}$ in *γέν-ος* (*gen-us*), origl. *gan* (*gi-gu-ere*) of *gan-as*; *έσ-τι*, Sk. and origl. *ás-ti* ($\sqrt{és}$, origl. *as*, *esse*); *φέρω*, Sk. and origl. *bhár-āmi*, *ἔφερ-ον*, Sk. and origl. *á-bhar-am*, $\sqrt{\phi\epsilon\rho}$, origl. *bhar* (*ferre*), etc. So also *ε* is common in elements of relation, e.g. st. *πα-τέρ-* (n. sing. *πατήρ*, father), origl. *pa-tar-*; st. *μη-τέρ-* (n. sing. *μήτηρ*, mater), origl. *mātar-*; st. *μέν-εσ-* (n. sing.

μένος, might), Sk. and origl. *mán-as*; φέρ-ετε, Sk. *bhár-atha*; § 19. origl. evidently *bhar-a-tasi* (2 pl. pres. act.), etc.

o=*a*. ποδ-ός, Sk. and origl. *pad-ás* (g. sing.), st. and $\sqrt{pad}$ (foot, go), where of course, in accordance with the sensibility of the Greek, the *o* may also be considered as a raised step from *ε* in πεδ; ό, τό, origl. and Sk. *sa, ta-t*, root and st. *sa, ta* (pron. dem.); πό-σι-ς (lord)=origl. and Sk. *pá-ti-s* (lord); μέν-ος (n. acc.), μέν-ους (gen. sing.) for *μένεσ-ος, Sk. and origl. *mán-as, mán-as-as*; similarly in *a*-stems, *a* changes to *o*, as νέFo-ς (n. sing. masc.), νέFo-ν (acc. sing.)=Lat. *nouo-s, nouo-m*, Sk. and origl. *náva-s, náva-m*, etc.

Dialectically *o* takes the place of *a*. Aiolic βροχέως for βραχέως (adv.), from st. βραχύ- (brevis=*breguis*, short); Arkadian έκοτόν for έκατόν (100), f.f. of -κατον is *kata-m* or *kanta-m*, cf. Sk. *catá-m*; Kuprian κόρζα=καρδία (heart), cf. Lat. *cord-*, f.f. of this stem is *kard-*; st. τεκταν- in τέκταινα, i.e. *τεκτανυα (fem.), τεκταίν-ομαι (build), i.e. *τεκτανυομαι stands by the form τέκτον- (n. sing. τέκτων, builder), f.f. *taktan-*; the older *a* is preserved in the Dôric *Έκατι* for the newer Attic *είκοσι* (twenty), f.f. of the second part of the word is (*da*)*kati*; in δια-κάτιος for διακόσιοι (200), -κατιοι is derived from an origl. stem *kata-* or *kanta-* (100).

a=*a*. άκ-ωκ-ή (point), st. άκ-οντ- (n. άκων, dart), origl. $\sqrt{ak}$ (Lat. *ac-*, *ac-utus*); άγ-ω (lead)=Lat. *ago*, Sk. *ág-āmi*, origl. $\sqrt{ag}$; άχος (grief), άχ-νυμαι (am grieved), origl. $\sqrt{agh}$; έ-λαχ-ύς (little), Sk. *lagh-ús* (old *ragh-ús*) (light); πλατύ-ς (broad, wide), Sk. *prthú-s*, origl. *pratu-s*; λα-μ-β-άνω (take), έ-λαβ-ον, Sk. *á-labh-am*, $\sqrt{lab}$, Sk. *labh-* (get); δάκ-νω (bite), έ-δακ-ον, cf. Sk. *dás-āmi*, f.f. $\sqrt{dak}$; έ-λακ-ον (I spoke), cf. Lat. *loq-uor*, Sk. *láp-āmi* (cry out), $\sqrt{lak}$, origl. *rak*; st. πα-τέρ- (father)=Lat. *pa-ter-*, origl. *pa-tar-*, $\sqrt{pa}$ (protect).

a stands beside *ε*, e.g. έ-ταμ-ον beside έ-τεμ-ον (τέμ-νω, cut), in έ-τραφ-ον, έ-τραπ-ον, έ-κταν-ον beside τρέφ-ω (cherish), τρέπ-ω (turn), κτείν-ω (kill) (= *κτεν-γω). We cannot trace herein a

- § 19. step from *ε* to *α*, but only a vowel-colouring, originally merely dialectic, which indeed was used in Greek for the purpose of expressing the relation of the aorist. As *ἐ-ταμ-ον* is to *ἐ-τεμ-ον*, so are the present forms *τέμνω*, *τρέφω*, *τρέπω* to the Dôric *τάμνω*, *τράφω*, *τράπω*, which we have to consider as the presents corresponding to the aorists *ἔταμον*, *ἔτραφον*, *ἔτραπον*; *κρείσσω* (better) (i.e. **κρετ-γων*) beside *κράτ-ιστος* (best). Cf. Dôric *ā*=Iôn. Attic *η*.

a=*a*+nasal. *πόδα* (acc. sing.), Sk. and origl. *pád-am* (ped-em), *πόδ-ας*, Sk. *pád-as*, origl. *padam-s*; *φέρον-τα*, Sk. and origl. *bhāran-tam* (feren-tem), *φέρου-τας*, Sk. *bhārant-as*, origl. *bharant-ams* (acc. pl. ferent-es); *ἐπτά*, Sk. and origl. *saptán* (septem); *δέκα*, Sk. *dācan*, origl. *dakan* (decem); *-σα* (1 sing. aor. in comp.) =Sk. and origl. *-sa-m*, cf. *ἔ-δειξα* (=ἔ-δεικ-σα) and Sk. *á-dik-ṣa-m*, *√dīc*, origl. *dik* (show).

- § 20. Step-formation in the *a*-scale. Rule for the first step is: radical *ε* is raised to *ο*, *a* to *ā* (i.e. *η*). There are, however, exceptions to this rule.

1. *ε:ο*. *φόρ-ο-ς* (tax), *φορέω* (bear (durative), wear)=Sk. and f.f. *bhār-a-s* (burden), *bhār-āyāmi* (causat.) beside *φέρ-ω*, Sk. and f.f. *bhār-āmi* (fero); *φόχ-ο-ς* (waggon), Sk. *vah-a-s*, f.f. *vāgh-a-s* (waggon), *√Fex*, Sk. *vah*, origl. *vagh* (vehere), which, however, as a verb becomes intermixed with *√σεχ*, Sk. *sah* (have, hold); *μέ-μον-α* (strive), f.f. *ma-mān-a*, beside *μέν-ος* (might), Sk. and f.f. *mān-as*, *√μεν*, origl. *√man* (think); *γον-ή* (birth), *γόν-ο-ς* (thing born, bairn), *γέ-γον-α*, f.f. *ga-gān-a*, Sk. *gāgāna*, beside *ἐ-γεν-όμην*, *γέν-ος* (genus), Sk. *gān-as*, f.f. *gan-as*, *√γεν*, origl. *√gan* (gi-gn-ere); *τόκος* (thing born, bairn), *τοκ-εύ-ς* (parens), beside *τεκ-έσθαι*, *τίκ-τω*, *√τεκ* (produce); *τέ-τροφ-α* beside *τρέφ-ω*, *ἐ-τράφ-ην*, *√τρεφ* (nourish); *ἔ-κτον-α* beside *κτείν-ω* (i.e. **κτεν-γω*), *ἔ-κταν-ον*, *√κτεν* (kill); *εἰ-λοχ-α*, *λόγ-ος*, beside *λέγω*, *√λεγ* (legere); *ἔ-φθορ-α*, *φθορ-ά*, beside *φθείρω*, i.e. **φθερ-γω*, *√φθερ* (destroy); *ὄψ* (voice), i.e. *φόπ-ς*, origl. *vāk-s*, Sk. *vāk* for **vāk-s* (cry), beside *φέπ-ος* (word),

origl. *vāk-as*, Sk. *vaḥ-as*, origl. $\sqrt{vak}$ (cry); γόν-υ, gen. γόνατος, § 20. older (Iôn.) γούνατος=*γον^υ*φ*ατος, γουνός=*γον^υΦος, cf. Sk. *gānu* (genu); ὄ-νο-μα, older (Hom.) οὖ-νο-μα (name), from ὄ-γνο-μα, cf. Lat. *gno-men*, (Sk. *nām-an*, also, with root-vowel raised).

In Greek, on account of the prosodic quantity of *o*, this step is possible only before two consonants, e.g. δέδορκα=Sk. *da-dārç-a*, origl. *da-dark-a*, beside δέρκ-ομαι, ἔ-δρακ-ον, $\sqrt{δερκ}$, origl. *dark* (see).

Note.—The same kind of step-formation of *e=a* to *o=ā* occurs in Latin, also in Slavonic, e.g. O.-Bulg. *vez-a*=original *vagh-āmi*, Lat. *ueho*, bes. *voz-ū*=original *vāgh-a-s*, Gk. *Φόχ-ο-ς*, v. infr.

2. *a:ā, η*. two equivalent sounds. e.g. λέ-ληκ-α, λέ-λᾱκ-α, beside ἔ-λακ-ον, $\sqrt{λακ}$ (cry out), cf. Sk. *lap*, origl. *rak*; κέ-κληγ-α beside ἔ-κλαγ-ον, κλάζω=*κλαγ-γω, $\sqrt{κλαγ}$ (sound); λέ-ληθ-α, Dôr. λέ-λαθ-α, λήθη (forgetfulness), beside ἔ-λαθ-ον, λα-ν-θ-άνω, $\sqrt{λαθ}$ (escape notice); εἰ-ληχ-α beside ἔ-λαχ-ον, λα-γ-χ-άνω, $\sqrt{λαχ}$ (get by lot); δέ-δηχ-α beside δάκ-νω, ἔ-δακ-ον, $\sqrt{δακ}$ (bite); εἰ-ληφ-α, λήψ-ις (i.e. ληπ-σις=ληβ-τις), beside ἔ-λαβ-ον, λα-μ-β-άνω, $\sqrt{λαβ}$ (take); κέ-κρᾱγ-α beside κράζω, *κραγ-γω, $\sqrt{κραγ}$ (cry aloud); ἔ-ᾱγα, Iôn. ἔ-ηγ-α, i.e. *Fe-Fāγ-a*, f.f. *va-vāg-a*, beside ᾗγ-νυμι, $\sqrt{Fay}$ (break); st. μῆ-τερ-, origl. and Sk. *mā-tar-*, etc.

In elements belonging to the formation of words, *o* will be found raised to *η, ā*: this rule is observed regularly in the stem-termination *o=a* in such stems as are raised in the feminine termination, e.g. νέο-ς (n. sing. masc.), νέο-ν (n. sing. neut.), origl. and Sk. *nāva-s, nāva-m* (nouo-s, nouo-m), but fem. νέ-α, Iôn. νέη=origl. and Sk. *nāvā* (noua). In ἡ, 'ā, origl. and Sk. *sā*, beside ὁ, origl. and Sk. *sa* (pron. demonstr.), and other pronominal stems, is found radical *o* raised to *η, ā*, the root being equivalent to the stem as often.

Note 1.—μέ-μηλ-α beside μέλ-ει, $\sqrt{μελ}$ (be a care to), shows also the raising of *e* to *η*.

§ 20. *Note 2.*—Sometimes $\bar{a}$ is shortened to $\check{a}$, e.g. *Φάστυ* (city), Sk. *rās-tu* (house), Sk. and original $\sqrt{vas}$ (inhabit); similar shortenings often occur in the *a*-termn. of feminine stems.

Note 3.—The laying-down of the laws for the use of $\bar{a}$, η , belongs to the special-grammar of Greek: the Dôric predilection for the more ancient $\bar{a}$ and that of Iônia for η are well known. In Attic likewise $\bar{a}$ changes to η , yet *a* repeatedly occurs, owing to the surrounding sounds, especially in the case of ρ , ϵ , η , ι , υ (i.e. ζ , $\sigma\sigma$, $\lambda\lambda$, etc.), preceding, and ϵ , η , following, when its change to η is stopped.

For the second step we have ω in examples such as $\check{\epsilon}\rho\text{-}\rho\omega\gamma\text{-}\alpha$, $\rho\acute{\omega}\xi$, $\rho\omega\gamma\text{-}\acute{\omicron}\varsigma$ (cleft), beside $\rho\acute{\eta}\gamma\text{-}\nu\mu\iota$, $\sqrt{Fpa\gamma}$ (break), cf. Goth. *brak*, Lat. *frag*; $\pi\tau\acute{\omega}\xi$, i.e. $\pi\tau\acute{\omega}\kappa\text{-}\varsigma$, gen. $\pi\tau\omega\kappa\text{-}\acute{\omicron}\varsigma$ (cowering), $\pi\tau\acute{\omega}\sigma\sigma\omega$, i.e. $^*\pi\tau\acute{\omega}\kappa\text{-}\gamma\omega$ (cower), beside $\pi\tau\acute{\eta}\sigma\sigma\omega = ^*\pi\tau\acute{\eta}\kappa\text{-}\gamma\omega$, $\check{\epsilon}\text{-}\pi\tau\alpha\kappa\text{-}\omicron\nu$, $\sqrt{\pi\tau\alpha\kappa}$ (cower), clearly a further formation from $\sqrt{\pi\tau\alpha}$, cf. $\pi\epsilon\text{-}\pi\tau\eta\text{-}\kappa\acute{\omega}\varsigma$; $\acute{\alpha}\rho\omega\gamma\text{-}\acute{\omicron}\varsigma$ (helper) beside $\acute{\alpha}\rho\acute{\eta}\gamma\text{-}\omega$ (I help). From these examples we gather an equation $\eta:\omega::\epsilon:\omicron$.

Also where there is no parallel first step to ω , we must hold it to be in the position of a second step, e.g. $\tau\rho\acute{\omega}\gamma\text{-}\omega$ beside $\check{\epsilon}\text{-}\tau\rho\alpha\gamma\text{-}\omicron\nu$, $\sqrt{\tau\rho\alpha\gamma}$ (gnaw, chew); $\delta\delta\text{-}\omega\delta\text{-}\alpha$ beside $\delta\acute{\zeta}\omega = ^*\delta\delta\text{-}\gamma\omega$, $\delta\delta\text{-}\mu\acute{\eta}$, $\delta\sigma\text{-}\mu\acute{\eta}$, $\sqrt{\delta\delta}$ (smell); $\acute{\omega}\kappa\text{-}\acute{\upsilon}\varsigma = \text{Sk. } \acute{a}\varsigma\text{-}\acute{\upsilon}\varsigma$, origl. $\acute{a}\kappa\text{-}\acute{\upsilon}\varsigma$ (sharp), $\acute{\alpha}\kappa\text{-}\omega\kappa\text{-}\acute{\eta}$ (point), $\sqrt{\acute{\alpha}\kappa}$, cf. $\acute{\iota}\pi\pi\omicron\varsigma$ (equos), origl. $\acute{a}\kappa\text{-}\acute{\upsilon}\varsigma$; $\acute{\omega}\text{-}\acute{\omicron}\nu$, better $\acute{\omega}\acute{\omicron}\nu$ (Sappho, $\acute{\omega}\iota\omicron\nu$ acc. to Ahrens, $\acute{\omega}\beta\epsilon\omicron\nu$ Hésuch.), origl. $\acute{a}\nu\gamma\alpha\text{-}\mu$ (ouom, *lit.* bird-, of a bird), from origl. $\acute{a}\nu\iota\text{-}\varsigma$, Sk. $\acute{v}\iota\text{-}\varsigma$ (auis); $\acute{\alpha}\gamma\text{-}\omega\gamma\text{-}\acute{\eta}$ (leading), $\acute{\alpha}\gamma\text{-}\omega\gamma\text{-}\acute{\omicron}\varsigma$ (leader), beside $\acute{\alpha}\gamma\text{-}\alpha\gamma\text{-}\acute{\epsilon}\iota\nu$, $\acute{\alpha}\gamma\text{-}\acute{\epsilon}\iota\nu$ (lead); $\delta\acute{\iota}\text{-}\delta\omega\text{-}\mu\iota$ beside $\delta\acute{\iota}\text{-}\delta\omicron\text{-}\mu\epsilon\nu$, $\sqrt{\delta\omicron}$ (dare); $\acute{\epsilon}\delta\text{-}\omega\delta\text{-}\acute{\eta}$ (food), $\sqrt{\acute{\epsilon}\delta}$, Lat. *ed*, origl. and Sk. *ad* (eat); $\gamma\upsilon\omega\text{-}\tau\acute{\omicron}\varsigma$ (known), $\gamma\iota\text{-}\gamma\upsilon\acute{\omega}\text{-}\sigma\kappa\omega$ (learn, come to know), cf. Lat. $(g)n\acute{o}\text{-}tus$, $(g)n\acute{o}\text{-}sco$, $\sqrt{gna}$, from *gan*.

Note.—Dialectically *ou* occurs for ω , i.e. $\bar{u}$, in isolated instances (a weakening which occurs also in Lat.). $\omega:ou(\bar{u})::\omicron:v(u)$, e.g. Thessal. $\gamma\nu\acute{\omicron}\mu\alpha = \gamma\nu\acute{\omega}\mu\eta$ (insight, opinion), $\sqrt{\gamma\nu\omicron}$, original *gna* = *gan* (learn); $-\omicron\nu\nu = -\omega\nu$, fund. $-\bar{a}m$ in gen. pl., cf. Lat. $-um$, etc.

§ 21. 2. *i*-scale.

Root-vowel ι . $\acute{\iota}\text{-}\mu\epsilon\nu$, $\acute{\iota}\text{-}\theta\iota$, Sk. *i-más-i*, *i-hí*, origl. *i-masi*, *i-dhi*, $\sqrt{i}$ (ire); $\check{\epsilon}\text{-}\lambda\iota\pi\text{-}\omicron\nu$, $\sqrt{\lambda\iota\pi}$, Lat. *lic*, Sk. *rik*, origl. *rik* (leave); $F\delta\text{-}\mu\epsilon\nu$

=Sk. and origl. *vid-mási*, st. *Flσ-τορ*- [n. sing. *ΐσ-τωρ* and *ΐσ-τωρ* § 21. (knower, witness)], for **Fιδ-τορ*-, f.f. *vid-tar*, √*vid* (know); *ἔ-πιθ-ον*, *ἐ-πιθ-όμην*, *πίσ-τις* (faith), for **πίθ-τις*, √*πιθ* (persuade), and element of stem-formation *τι*; *σχίδ-η* (splinter), *σχιζω* (split) = **σχίδ-yω*, √*σχιδ* = Sk. *khid*, Lat. *scid*, origl. *skid* (scindere); *ὀ-μιχ-εῖν*, √*μιχ* = Sk. *mih*, origl. *migh* (mingere); *λίχ-νος* (daintiness), *λιχ-μάω*, √*λιχ*, Sk. *lih*, *rih*, Lat. *lig*, origl. *righ*; *στίχ-ος* (rank), *ἔ-στιχ-ον*, √*στιχ* (march, tread), Goth. *stig*, Sk. and origl. *stigh*; *τίς*, fund. *ki-s*, Lat. *qui-s*, Goth. **hi-s*, pronl. root, origl. *ki* (dem. and interrog.), etc.

Lengthened *ī* is a parallel form to *i* (often depending on fixed proportion of sound), e.g. Hom. *ΐ-ομεν* and *ΐ-ομεν* beside *ΐ-ωμεν* (1 pl. pres. conj.), origl. *i-a-mas*, √*i* (ire); *ἰδ-ος* (ntr. sweat), *ΐδ-ω* (I sweat), √*ιδ*, origl. *svid*, cf. Sk. *svīd-yāmi*; *πί-νω* (*πῖνε*), *πίθι*, beside *ἔ-πιθ-ον*, √*πι* (drink), cf. Sk. *pī* beside *pa*.

i raised by steps.

§ 22.

1. *i* raised to *ei*; e.g. *εἶ-μι* (go), Sk. *ē-mi*, origl. *ai-mi*, √*i*; *πείθ-ω* (1 sing. pres.), √*πιθ*, so *λείπ-ω*, √*λιπ*; *λείχ-ω*, origl. *raigh-āmi* (1 sing. pres.), √*λιχ*, origl. √*righ*; *στείχ-ω*, origl. *staigh-āmi*, √*στιχ*; *Feíd-εται*, *εἶσομαι* (for **Feid-σομαι*), *Feīdos* (ntr. outward-form), √*Fιδ*; *εἰκ-ών* (likeness) beside *ἔ-ικ-τον*, *ἐ-ίκτην*, √*Fικ*, clearly (=resemble); *κεῖ-ται* (3 sing. pres. med.) = Sk. *ḡē-tē*, √*ki* (lie), etc.

ai occurs in the main perhaps only as a lifeless step-formation where the language has lost all sense of the derivation, and hence for the most part no *ι*, *ει*, or *οι*, is parallel to *αι*, e.g. *αἶθ-ω* (I kindle), *αἶθ-εσθαι* (burn), *αἶθ-ήρ*, *αἶθ-έρος*, (aether), *αἶθ-ουσα* (porch), cf. Lat. *aed-es*, *aid-ilis*, √*ιθ* = Sk. *idh*, *indh* (burn), Germ. *it*, in O.H.G. *eit* (fire); *αἶ-Fών*, origl. *ai-vān-s* (time, long time), cf. Lat. *ae-uo-m*, origl. *ai-va-m*, Sk. *ē-va-s*, origl. *ai-va-s* (a going), Goth. *aiv-s*, f.f. *āi-va-s* (time, long time), with other step-forms, √*i* (go), with sf. *van*, *va* (here the language no longer felt the connexion with *ΐ-μεν*, *εἶ-μι*, *οἶ-μος*); *και-ρός* (point of time), cf. Goth. *hvei-la* (hour, time, Engl. 'while'), origl. *kai-rā*, origl. √*ki*.

§ 22. *Note.*—In medial termns., e.g. *φέρο-μαι*, **φερε-σαι*, *φέρε-ται*, *φέρον-ται*, *αι* is not a step-form, but the product of a contraction from f.f. *bharā-mami*, *bhara-sasi*, *bhara-tati*, *bhara-ntanti*, v. sub. ‘Conjugation.’

2. *i* raised to *οι*, e.g. *οἶ-μος*, *οἶ-μη* (road, a going), cf. *αἶ-Φών*, *εἶ-μι*, *ἴ-μεν*, $\sqrt{i}$ (go); *πέ-ποιθ-α* beside *πείθ-ω*, $\sqrt{\pi\theta}$ (*ἐ-πέ-πιθ-μεν*); *λέ-λοιπ-α*, *λοιπ-ό-ς* (left, remaining), beside *λείπ-ω*, *ἔ-λιπ-ον*, $\sqrt{\lambda\pi}$; *Φοῖδ-α* (know)=Sk. *véd-a*, with the 1st, Goth. *vait* with 2nd step, beside *Φεῖδ-ος*, $\sqrt{F\iota\delta}$ (*Φιδ-μεν*); *ἔ-οικ-α* (seem) beside *εἰκ-ών*, for *ΦέΦοικα*, $\sqrt{F\iota\kappa}$, (*ἔ-ικ-τον*, *ἐ-ίκ-την*); *Φοῖκ-ο-ς* (house), cf. Sk. *vṛ̥ḥ-a-s*, Lat. *uīc-u-s*, i.e. **ueic-o-s*, with 1st step, $\sqrt{F\iota\kappa}$ =Sk. *viḥ*, origl. *vik* (settle); *Φοῖν-ο-ς* (wine), cf. Lat. *uin-um*, Germ. *wein* with 1st step; *λοιβ-ή* (lib-atio) beside *λείβ-ω* (pour), and *λίβ-ο-ς* (drop), *λιβ-άς*, *-άδ-ος* (moisture), $\sqrt{\lambda\beta}$; *στοῖχ-ος* (rank) beside *στείχ-ω*, *ἔ-στιχ-ον*, $\sqrt{\sigma\tau\chi}$; *αἵματο-λοιχ-ό-ς* (blood-licking) beside *λείχ-ω*, *λίχ-νος*; *κοίτ-η* (bed), *κοι-μᾶσθαι* (sleep), beside *κεῖ-ται*, $\sqrt{ki}$, etc.

Note.—In opt. *φέρ-οις* (etc.)=fund. *bhar-ai-s*, also in nom. pl. e.g. *οἶ*, original *sai* (*tai*), *οι* is the result of a contraction, not a step of a vowel-scale; v. ‘Conjugation and Declension.’

§ 23. 3. *u*-scale.

Radical *υ*, e.g. *ἔ-φυγ-ον*, *φυγ-ή* (fug-a), $\sqrt{\phi\upsilon\gamma}$, Sk. *bhuḡ* (*bhug-ná-s*, bent), Goth. *bug* (bend), Lat. *fug* (only here and in the Greek with a narrower sense); *ζυγ-όν* (yoke)=Lat. *iug-um*, Sk. and origl. *yug-ám*, $\sqrt{yug}$ (join, iungere); *ἐ-ρυθ-ρό-ς* (red)=Sk. *rudh-irá-s*, f.f. *rudh-ra-s*, $\sqrt{\rho\upsilon\theta}$, origl. and Sk. $\sqrt{rudh}$, Goth. *rud* (be red), etc.; *σύ*, *τύ* (thou, du), cf. Sk. *tv-am*, Lat. *tu*, Lith. *tu*, Slav. *ty*; *κλύ-ω* (hear), $\sqrt{\kappa\lambda\upsilon}$, Sk. *ḥru*, Goth. *hlu* (Eng. *loud*, *lud*=voice), origl. *kru*; *ῥυ-τό-ς* (flowing), $\sqrt{\rho\upsilon}$, Sk. and origl. *sru* (flow), so *ῥῥύ-ην*=**ἐ-σρυ-ην*, Germ. *stru* (in *ström*, *stream*, with inserted *t*); *φύ-ω* (am), *φύτ-ον* (being), $\sqrt{\phi\upsilon}$, Sk. *bhu*, Lat. *fu*, origl. *bhu* (be); *κέ-χυ-μαι* (perf.), $\sqrt{\chi\upsilon}$, Goth. $\sqrt{gu-t}$ (pour) (with a *t* for further formation); *ἔσ-συ-μαι*, (pf.), *σύ-το* (aor.), $\sqrt{\sigma\upsilon}$ (rush); *ὤκ-ύ-ς*=Sk. *āḥ-ú-s*, origl. *āk-u-s*

(sharp); πλατ-ύς, Sk. *prthús*, origl. *prat-u-s* (broad), sf. *u*; § 23. ἄσ-τυ (city)=Sk. *vās-tu* (house); βοη-τύς (shout), μάρ-τυς (witness), etc., with sf. -τυ, Sk., Lat., origl. *tu*. The lengthening of *υ* to *ῡ* is not uncommon, e.g. ὕδωρ, cf. Sk. *ud-a-m*, *ud-aká-m*, Lat. *unda*, with inserted nasal, Sk. $\sqrt{ud}$ (be wet); κλῡ-θι (imper. aor.)=Sk. *ḥru-dhí*, origl. *kru-dhí*, cf. κέ-κλῡ-θι, κλῡ-τός, $\sqrt{κλυ}$, origl. *kru* (hear); πέ-πνῡ-μαι, πε-πνῡ-μένος (prudent), $\sqrt{πνυ}$ (blow); ξῡ-ω, $\sqrt{ξυ}$ (shave); ὕς and σῡς (swine), cf. Lat. *sūs*, Sk. *sū-kara-*, O.H.G. *su*, $\sqrt{su}$; δρῡ-ς (tree), Goth. *triu* (arbor). We cannot decide with any certainty where origl. *au* stands as a lengthening for a root-vowel, and where it stands for a step of a vowel-scale. In the last-mentioned examples perhaps originally a step-form was in existence.

Note 1.—The older sound *u* has been kept in Boiôt. (τού=σú, κούνες=κύνες, etc.), and in diphth. *au*. The later *υ*=*ü* occurs proportionately early, however. The same transition of sound occurs also in other languages. Lat. *una* became Fr. *une*, pronounced *ün*.

Note 2.—In Greek as well as in Umbr., *ι* occurs as a weaker representative form of *υ*. In mod. Gk. it is well known that *υ* has universally become *ι*. So φῑ-τυ-ς (father, begetter), φῑ-τύ-ω (beget)=Lat. *fu-tu-o*, $\sqrt{φυ}$, original *bhu*; δρί-ον, also δρί-ος (forest), and δρῡ-ς (tree), cf. Sk. *dru-*, masc. n. wood, m. tree), Goth. *triu* (tree); σῑ-αλο-ς (hog) and σῡς. Curt. Gk. Et.² p. 647 sqq.

Step-formation of *u*.

§ 24.

1. step *ευ*, e.g. φεύγ-ω (flee), πέ-φευγ-α, $\sqrt{φυγ}$; ἐλεύ[θ]-σομαι (shall come), $\sqrt{ελυθ}$ in ἤλυθον=*ἐ-ελυθ-ον; κλέF-ος=Sk. *ḥráv-as* (fame), origl. *krav-as*, $\sqrt{κλυ}$; πλέF-ω (sail)=Sk. and origl. *pláv-āmi*, $\sqrt{πλυ}$; ῥεῦ-μα (stream), ῥεύ-σομαι, ῥέF-ω (flow)=Sk. and origl. *sráv-āmi*, $\sqrt{ρύ}$, origl. and Sk. $\sqrt{sru}$ (flow); πνεῦ-μα (breath), πνεύ-σω, πνέF-ω (blow), $\sqrt{πνυ}$; σεύ-ω (rush), $\sqrt{συ}$; χέF-ω (pour), $\sqrt{χυ}$; ξέF-ω (I scrape), $\sqrt{ξυ}$; Ζεύ-ς (nom. propr. God), for *δγευ-ς, in Sk. with 2nd step *dyāu-s* (heaven), in the other cases from $\sqrt{div}$, $\sqrt{διF}$ =*dyu*, *δγυ, ζυ, etc.

au is here too a lifeless step-formation, e.g. αῦ-ω for *αῡσ-ω

§ 24. (kindle), *ἔν-αυσ-μα* (tinder), cf. *εὔ-ω*, Lat. *uro*=**ous-o*, **eus-o* (see Lat. 'Vowels'), Sk. *ḍś-āmi*, origl. *aus-āmi*, √*uś*, origl. *us*; *αὐγ-ή* (glance), √*ύγ*, cf. Sk. *ḍgas* (force); *αὐξ-άν-ω*, i.e. **αὐγ-σανω* (make to grow), cf. Lat. *aug-eo*, √*ug* (which occurs pure in Lith.).

2. Second step *ou* occurs seldom, espec. when *u* is medial (no **πε-φουγ-α*=Goth. *baug*,=**bu-bāuga*, like *λέλοιπα*), while we find it compensated for by the first step, yet cf. *εἰλήλουθα* (Hom.) from √*έλυθ*, cf. *ἦλυθον* and *ἐλεύ(θ)σομαι* [origl. √*ελ*=*ēr*, origl. *ar* (go), in *ἔρ-χομαι* (come, go), f.f. *er-skomai*, further formed in Greek by sf. *υ* (*προς-ήλυ-τος* *ἔπ-ηλυσ*, newly come), to which is added the frequent accompaniment of a verb-stem *θ* (v. sub. 'Formation of Present-stem'); the secondary √*έλυθ* so formed sts. was treated as if the √vowel was really *υ* (exx. in text), sts. is merely equivalent to an auxiliary vowel (§ 29), which moreover may disappear, *ἦλθον*]; *ἀ-κόλουθος* (follower), and *κέλευθ-ος* (way); *ῥούσ-ιος* (reddish), for **ῥουθιος* (or perhaps **ῥουθ-τιος*, **ῥουθ-σιος*?), beside *ἐ-ρεύθ-ω* (blush), and *ἐ-ρυθ-ρός* (red); *σπουδ-ή* (haste) beside *σπεύδ-ω* (hasten); *λοῦσσον*=**λουκ-γον* (white pith of deal), cf. *λευκ-ός* (white), *ἀμφι-λύκ-η* (twilight), *λύχ-νος*. More often beside final *υ*, e.g. *πνοF-ή* (blast) beside *πνέF-ω*, √*πνυ*; *ῥοF-ή*, *ῥόF-ος* (stream), beside *ῥεῦ-μα*, √*ρύ*; *χοF-ή* (outpouring) beside *χέF-ω*, √*χυ*; *πλόF-ος* (voyage) beside *πλέF-ω*, √*πλυ*; *θόF-ος* (swift) beside *θέF-ω*, √*θυ*, Sk. and origl. *dhu*; *ξοF-ίς* (chisel), *ξόF-ανον* (carved-work), beside *ξέF-ω*, √*ξυ*; *σόF-ος* (quick motion), *σοῦ-μαι*=**σοF-ομαι* (Trag. haste), beside *σεύ-ω*, √*συ*.

In separate instances also *av* (*āv*) is a second step fr. *u*, e.g. *ναῦς* (*navis*) (i.e. *ναῦς* on acct. of *νηῦς*)=Sk. *nāu-s*, Iôn. *νηF-ός*, Dôr. *nāF-ός*, Sk. *nāv-ás*, point to √*nu*.

ων is only Iôn.=*av*, e.g. *θωῦ-μα* (wonder)=*θαῦ-μα*, *θέFa*, *θεFά-ομαι* (show, gaze), point to √*θυ*.

ω also occurs sts. as second step from *υ*, e.g. *ζω-μός* (broth), cf. *ζύ-μη* (yeast), Sk. *yū-śa-m*, Lat. *iū-s*, similarly belonging to

√*yu*, Gk. ζυ (with which ζέ-ω (cook) for *ζεσ-ω, cf. ἔ-ζεσ-μαι, § 24. ζεσ-τό-ς, has no connexion, cf. O.H.G. √*jas*, cook); ζώ-ννυμι (gird), √ζυ, origl. *yu* (join); χό-ννυμι, √χυ, χέω (pour). If we compare πλώ-ω for πλώFω, Iôn. parallel-form to πλέF-ω, Dôr. βῶς=βοῦς=Sk. *gāus*, and Iôn. ωυ=αυ, hence we infer in Greek a step-formn. ου, ου=origl. *āu*, *āv*, where the 2nd element has become assimilated to the first, so that only *ō*, ω (=ωο, ου) remains.

Note 1.—Cases such as οὐρανός (heaven) beside Sk. *váruna-s* (name of a deity); οὐλ-ή (scar) beside Lat. *uolnus*, Sk. *vranam* and *vranas* (wound); εὐρύς (wide) beside Sk. *urú-s* for **varú-s*, show ου, ευ, in place of the expected Fo, Fe. The explanation of this is difficult; perhaps it is to be considered less as a transposition of Fo, Fe, to ου, ευ, than a shortening fr. original *va* to *u* and a step-formation from the latter.

Note 2.—There are three roots θυ in Gk.: 1. θύω, hasten; 2. θύω, offer; 3. in θαῦμα, θεάομαι, gaze.

Note 3.—All vowel-sounds which do not appear in the vowel-scales are therefore unoriginal products of the sound-laws (especially of contraction after the elision of consonants).

SOUND-LAWS OF VOWELS.

§ 25.

The laws laid down in ordinary Greek grammars, i.e. the laws of contraction, etc., may be passed over as already understood.

At first sight we are struck by the frequently occurring hiatus which arises from elision of spirants *y*, *s*, *v*, and their vocalisation, and which is not by any means invariably obviated by contraction; thus arise forms such as Homéric δηϊόφεν, five vowels (together), 3 pl. opt. from δηϊώω (slay), fr. δήιος (hostile); δήιος evidently=*δησιος=Sk. *dāsya-s* (hostile), adjectival form in *ya*, fr. *dāsa-s* (demon, slave, originally 'foe'), whence **dāsya-yā-mi* (=δησιο-γω-μι, whence δηϊώω), of which 3 pl. f.f. *dās-ya-yai-nt*, in Gk. with superfluous unoriginal *ε* before personal termination, **dāsya-yai-ant* as f.f.=δηιο-οι-εν, and in that case with φ=αι, in consequence of an unoriginal lengthening of *οι* to *ω*, comes δηϊόφεν. (Acc. to Aufrecht in Kuhn's Zeitschrift, vii. 312,

§ 25. sqq., *δήιος* proved to be Aiolic in *δάϊος* belongs to $\sqrt{\delta\upsilon}$; f.f. accordingly of *δήϊος*, *δηϊόφεν* = **dāvya-s*, **dāvya-yai-ant.*) Diphth. *α*, *η*, *ω*, are only secondary products of contraction.

Whilst the termination (except a few instances, e.g. partial shortening of *ā* to *ǣ* in fem. and the like, cf. § 20) does not yet exercise a destructive influence on the vowels,—and also the vowels of syllables which follow medially upon one another (excepting the working of the *ι* of *σι* on the vowel of the preceding syllable) have no essential influence upon one another,—we perceive a variation of the older vowel-system, caused by consonantal influence,—a variation of considerable importance and characteristic of the language.

Important above all are the changes in consequence of the Greek distaste for the original and frequent Indo-European spirants *y*, *v*, *s*; *y* and *v* become *ι* and *υ*, *y* also becomes *ε*; *v* and *y* as *ι* and *υ* change position from a following to a preceding syllable; *y*, *v*, and *s*, further fall out from between two vowels. After the disappearance and softening of consonants, frequent vowel-lengthening takes place. A consonantal sound in the beginning of a word is not unfrequently accompanied by an introductory vowel-sound, and besides occurs the so-called vowel-insertion between two consonants.

§ 26a. Introduction of *i* into a preceding syllable in case of termn. -*σι*. e.g. (1.) loc. dat. pl. *ταῖσι*, Iôn. *τῇσι*, thence *ταῖς*, fr. **tāsi* (pronoml. st. *ta* raised to *tā*, and loc. termn. pl. *si*), and also *τοῖσι*, *τοῖς*, fr. **to-si*, **tā-si* (although another explanation offers itself here, v. sub. 'Declension'). (2.) 2 sing. ind. and conj. act., e.g. *φέρεις* (indic.), fr. **φερεισι*, **φερε-σι*, f.f. *bhara-si*; *φέρης* (conj.), fr. **φερησι*, **φερησι*, **φερησι*, f.f. *bharā-si*.

§ 26b. Vocalisation and transposition of *y* and *v*.

1. *y* changes to *ι* and *υ* to *υ*, e.g. original stem-formative particle *ya* = Gr. *ιο*; *πάτρ-ιο-ς* (paternal), cf. *patr-ius*, st. *πατέρ-*, cf. Sk. *pitr-ya-s*, origl. *patar-ya-s*; *ἅγ-ιο-ς* (holy), cf. Sk. *yağ-ya-s* (to revere); compar. suff. -*ιον*, origl. -*yans*, e.g. *ἡδ-ίων*, st.

ἡδ-ίον- (ἡδ-ύ-ς, sweet), f.f. *svād-yāns*, st. *svād-yans-*, cf. ἐλάσσων §26b. for *ἐλαχγων, f.f. *lagh-yāns* (ἐλαχ-ύ-ς, small, f.f. *lagh-u-s*), in the latter of which instt. *y* as such has disappeared; pres.-st.-suff. origl. *ya*, e.g. ἰδ-ί-ω (sweat), f.f. *svid-yāmi*, δα-ί-ω (kindle), fr. *da-yāmi*, cf. κράζω (howl), for *κραγ-γω, with same suff. which here has retained *y*; in Dôr. fut. form. -σίω for *σγω, origl. *syāmi*; in gen. sing. masc. neut. of *a*-stem, origl. *-asya* (Gr. with loss of *σ*, *οιο*), e.g. ἱππο-ιο fr. *ἱκFοσ-γο = Sk. *ácvasya*, origl. *akva-sya*; optat. particle *ιη*, origl. and Sk. *ya*, e.g. εἶην for *ἐσ-γη-μ = origl. *as-ya-m*, with *s* lost between two vowels; perf. part. act. fem. *υια* fr. origl. *-vant-yā*, *-vans-yā*, from the latter form with elision of *an* came *-*vyā*, hence *-usyā* = Gk. **υσια* = *υια*; δύο, δύω = *δFω, cf. δώδεκα fr. *δFωδεκα, Sk. and origl. *dva*.

Note.—Esp. in Lesbo-Aiolic *υ* between two vowels is preferred to be = *v*, e.g. χε-ύ-ω = χέFω (pour), √χυ; so πνεύ-ω = *πνέFω (breathe), √πνυ; θεύω = θέFω (haste), √θυ, etc.

2. Further, *ε* occurs sts. undeniably for *y* (not however for *v*, *F*) especially after consonants; in the cases from *y* there remains only the accompanying vowel-sound itself, as a short and indeterminate vowel which is nearly = *ε*, e.g. *ε* = *y* in fut. forms, πλευσούμαι, φευξούμαι = σέομαι, *σγομαι, fund. f. *-syāmai*; further in κενέος (empty), Aiol. κέννος, both fr. *κενγος, f.f. *kvanyas*, Sk. *ṣūnyās*; ἐτεός (true) = Sk. *satyās*; στερεός (firm, solid) beside στερρός, f.f. *στεργος, *staryas*, fem. *στεῖρα*, *staryā*; Epic ἡνορ-έη = ἀνδρ-ία (manliness), f.f. of suff. is *yā* (st. ἀνέρ-, ἀνδρ-), n. sing. ἀνήρ (man).

Note 1.—In cases of declens., e.g. πόλεως, *ε* is not = *y*, but there was a step-raising of *ι* to *ει*, and the representative *y* was lost; e.g. πόλεως = πόλεος, fr. *πολεγ-ος, st. *πολι* (city), f.f. *parai-as*, st. *pari*.

Note 2.—Original *v* also does not change to *ι*. In poetry perhaps the metrical forms such as πλείειν for πλεύειν (sail), √πλυ, raised to πλευ, πλεF, may be traced to a present st. in *ya*, which the Gk. has strangely liked, thus πλείω = *πλεF-γω, while πλέω = πλέFω; νεῖος beside νέFος (new), νειός beside νεFός

§26 b. (fallow), brings us to a f.f. *nauyas*, which clearly occurs in Lith. *nau-yas*, Goth. *niuyis*, st. *niuya-* (new). From such cases *ei* may have become a more widespread representative of *ε* by analogy. In *πνοιή* for *πνοή*, we find *ya*-stems, whilst *πνοFή* ($\sqrt{\pi\nu}$) has suff. *a*, *πνοιή*=**πνοFιή*=**πνοFyη*, suff. *ya*.

Note 3.—*έός*=*έF-ός*, Lat. *sou-os*, *suus*, f.f. of both **sev-os*; *τεός*=*τεFός*, Lat. *touos*, *tuus*, f.f. **tevos* (yet *σός*, fr. *σFος*=**τFος*, not raised from $\sqrt{\tau\nu}$); through the Latin the Italograec f.-forms are made clear. In forms like *ήδεία*, fem. of *ήδύς* (sweet), there is a clear step-raising, thus f.f. is *ήδεF-ια*=*svā-dav-yā*, diverging from the unraised Sk. *svādvī*, fr. **svādvīyā*.

Note 4.—G. Curt. Gr. Et.² p. 500 sqq., treats of *o*, *ω*, as representatives of original *v*. This occurs on the whole but seldom, and mostly in words of uncertain etymology, e.g. *δοάν* (Alkman), for **δFav*, **δFην*, *δήν* (long while), and these must stand for **διFa-v*, **διFη-v*, acc. of a st. **διFa-*=Lat. **diue-*, in *die-s*=**dive-s* (day, for meaning cf. Lat. *diu*, long).

3. When *y* and *v* stand after *ν*, *ρ*, they regularly occur as *ι* and *υ* before the consonants: in Aiolic dialects, however, assimilation takes place to the preceding consonant: this assimilation occurs in the case of *λ* in the other dialects, transposition in the case of *λ* is merely the exception. The origin of the transposition we must hold to be this, that at first, whilst *y* and *v* were yet in existence, an *i* and *u* arose by assimilation in the foregoing syllable (as in Zend), and that long afterwards the *y*, *v*, disappeared.

y; e.g. *κτείνω* (kill), Aiolic *κτένω*, for **κτεινω*, fr. **κτεινω*; *μέλαινα* (fem. fr. stem *μέλαν-* black), fr. **μελανγα*; *χείρων* (worse), Aiol. *χέρρων*, for **χειρ-γων*, fr. **χεργων*; *φθείρω* (destroy), Aiol. *φθέρρω*, for **φθεργω*; *κλίνω* (lay), Aiol. *κλίννω*, for **κλινγω*; *κρίνω* (sift), Aiol. *κρίννω*, for **κρινγω*; *πλύνω* (wash), for **πλυνω*, **πλυνγω*, **πλυνγω*, contrn. of *υ* and *υι* to *-* and *ῡ*.

In the case of *λγ* the assimln. occurs outside the Aiolic dial., *οφείλω*, however, for **οφελγω*, Hom. *οφέλλω* (ought).

Note 1.—After *ν*, *ρ*, *λ*, original *y* very often=*ι*, e.g. *χρόν-ιo-s*,

ἐλευθέριο-ς, μακάριο-ς, παράλιο-ς, collectively constructed with § 26b. original suff. *γα*.

Note 2.—For epenthesis of *y* beside other consonants, we have good instances in *μείζων* (greater) for **μειγ-γων*, fr. **μεγ-γων*, *μεγ-* with compar. suff. original *-yans*; ζ=γγ, consequently this is a clear case of genuine epenthesis; *κρείσσω* (stronger, better) for **κρειτ-γων*, fr. **κρετ-γων* (*κρέσσω* preserved in diall.); σσ=τυ (v. post.) formed just like *μείζων*; *πείκω* (beside *πέκω*, comb) for **πεκγω*, which by the laws of sound (*κγ*=σσ) must coincide with *πέσσω* (cook) in form; st. *γυναικ-* (*γυναικός*, gen. fr. *γυνή*, woman) for **γυνακι*, cf. *φυλακίς* (female-guard); st. *αἴγ-* (n. sing. *αἴξ* for *αἴγ-ς*, goat) for **ἀγι-*, cf. Sk. *agá-s* (stag), *agá* (goat) (Curt. Gr. Et.² p. 608). It cannot be denied that *πείκω* for **πεκ-γω* is very doubtful phonetically.

v; e.g. *γουνός*, *γούνα* (Aiol. *γόννος*, *γόννα*), *γούνατος*, for *γουνFός*, *γόνFa*, *γόνFaτος*, st. *γόνυ* (knee); *οὔλος*, Ion.=*ὄλος* (all), fr. *ὄλFος*, cf. Sk. *sárva-s* (every, all), Lat. *saluo-s*, *sollus* (Fest. totus), fr. **soluo-s*; *παῦρο-ς* (small, few) fr. **παρFo-ς*, cf. Lat. *paruo-s*; *νεῦρο-ν* (sinew) fr. **νερFo-ν*, cf. Lat. *neruo-s*.

In consequence of the evanescence of *y*, *v*, *s*, vowel-§ 27. accumulation and contraction occur frequently.

Thus *s* disappears, e.g. in *φέρη* fr. **φέρεσαι* (2 sing. pres. med. fr. *φέρω*, bear), Sk. *bhārasē*; *μένους* (gen. sing. fr. *μένος*, might) fr. **μενεσος*, Sk. *mānas-as*; *εἶην* (1 sing. pres. opt. of *ἐσ-*, *esse*) fr. **ἐσ-γην*, f.f. *as-yā-m*; *εἰπόμην* fr. **ἐ-σεπ-ομην*, *ῥέπ* (follow), i.e. *σεπ*, Sk. *saḥ*, Lat. *seq*, in *ἔπομαι*; *εἶρπον* fr. **ἐ-σερπ-ον*, *ῥερπ* (crawl), Sk. *sarp*, Lat. *serp-o*; *πεποιθυῖα* (fem. part. pf. act.) fr. *-υσια*, and the latter fr. *v(an)tyā*, etc.

F disappears in *εἰργασάμην* (*Φεργάζομαι*, work) fr. **ἐ-Feργ-ασαμην*; *εἶπον*, *εἰπεῖν*, older *ἔ-ειπον*, fr. **ἐ-Fe-Feπ-ον*=f.f. *a-va-vak-am*, redupl. aor. of *ῥFeπ* (speak), Sk. *vaḥ*, Lat. *uoc*, f.f. *vak*, etc.

Loss of *y* is common above all in the stems whence arise the contr. vbs. in *έω*, *άω*, *όω*, fr. **εγω*, **αγω*, **ογω*=Sk. and origl. *-ayāmi*, e.g. *φορῶ*, *φορέω* (bear)=Sk. *bhārāyāmi*, etc.

Note.—The sound-laws by which concurring vowels are regulated in different dialects do not belong in this place;

- § 27. because they extend to explain the Greek forms alone. The fundamental-forms, however, in the commonest and most important cases, conform to the rules laid down in the construction of stems and words.

The forms peculiar to the Greek, e.g. *ὀρώω, ὀράας*, by assimilation for *ὀράω, ὀράεις*; *δρώωσι* beside *δράουσι, δρώσι*, etc., frequently offer difficulties in their explanation.

- § 28. After the evanescence and medial and final loss of consonants, there often occurs a compensatory lengthening.

1. *n* lost before *s*, followed by lengthening of preceding

o to *ou*—e.g. *φέρουσι* (they bear)=**φερονσι* fr. *φέροντι*=*bháranti*, *φέρουσα*=**φερονσα* fr. **φεροντγα*, etc.; *λύκους* (acc. pl. st. *λυκο-*, wolf)=**λυκο-νς*, cf. Goth. *vulfa-ns*; Krêtan *τό-νς*=*τούς* (acc. pl. st. *το-* demonstr.), f.f. *ta-ns, ta-ms*.

ε to *ει*—e.g. *τιθείς* (n. sing. m. part. pres. act. fr. *τίθη-μι*, place, $\sqrt{\theta\epsilon}$)=Krêtan *τιθένς* fr. **τιθεντ-ς*; *χαρίεις* (n. sing. masc. conn. c. *χάρις*, grace)=**χαρι-Feντ-ς* (but fem. *χαρέσσα*=**χαρι-Feτγα*, without *ν*, cf. Sk. sf. *-vant*, fem. *-vatî*=*vatyā*, likewise with loss of *n*), etc.

a to *ā*—e.g. *ίστάς* (n. sing. m. part. pres. act. *ἵστη-μι*, place, $\sqrt{\sigma\tau\alpha}$)=**ίστανς* fr. **ίσταντ-ς*, etc.

υ to *ū*—e.g. *δεικνύς* (*δείκνυ-μι*, show)=**δεικνυνς* fr. **δεικνυν-τς*, etc. Similarly *εἰμί* (am) for **ἐσ-μι*, by compensatory lengthening (cf. Aiol. *ἐμμί* by assimiln.), Sk. and f.f. *ás-mi*; *ὄρεινός* (mountainous) for **ὄρεσ-νος*, Aiol. *ὄρεν-νός* (fr. *ὄρος*, mountain, Iôn. *οὔρος*, therefore older **ὄρ-Fos*, $\sqrt{\delta\rho}$, or-iri, exsurgere), st. *ὄρες-*, with sf. *-νο-*, etc.

2. Moreover medial compensation is found in the formn. of 1 aor. after the loss of *σ*, preceded by *λ, μ, ν*, e.g. *ἐνείμα* (*νέμω*, distribute) for **ἐνεμ-σα*, cf. Aiol. *ἐ-νέμμ-ατο*, by assimiln.; *ἔφηνα* (*φαίνω* for **φανγω*, point out) for **ἐφαν-σα*, *ἔστειλα* (*στέλλω* for **στελγω*, send) for **ἔστελ-σα*, Aiol. representation of compensation, *ἔστελλα*, etc.

3. Compensation by lengthening is frequently found in nom. sing. masc. of consonantal stems to compensate for lost

final *s* or *τς*, e.g. ποιμήν (shepherd) for *ποιμεν-*s*, cf. Sk. *rāḡā* § 28. for **rāḡan-s*, Lat. *homo* for **homon-s*, Goth. *guma* (man), i.e. **gumā* for **guman-s*; μήτηρ (mater) for *μητερ-*s*, cf. Sk. *mātā* for **mātar-s*; πατήρ (father) for *πατερ-*s*, cf. Sk. *pitā* for **pitar-s*, Old Lat. *patēr* for **pater-s*, Goth. *fadar*, i.e. **fadār*, for **fadar-s*; εὐμενής (well-meaning) for *-μενεσ-*s*, cf. Sk. *sumanās* for *-*manas-s*; φέρων (bearing) for *φεροντ-*s*; πεποιθώς (perf. pt. act. πέποιθα, trust) for *πεποιθ-*Fo-τς*.

Vowel insertion and addition.

§ 29.

1. Vowel insertion occurs in Gk. in the same way as in Oscan and O.H.G., only less regularly. Acc. to G. Curtius, Gr. Et.² 656, sqq., this change takes place only in the neighbourhood of *r*, *l*, and nasals, so that it clearly arises from the vowel-sounds contained in these consonants. *a* and *e* occur most frequently, *o* and *ι* are rarer, *υ* rarest, as vowels attached to these consonantal sounds: e.g. ὀ-ρέγ-ω (reach, stretch), √ὀρεγ fr. ὀργ, cf. Sk. *arḡ* (reach), beside ὀριγ-νάομαι (stretch) and ὀρό-γ-υια beside ὀργ-υιά (fathom), where clearly ὀρεγ, ὀριγ, ὀρογ=ὀργ, origl. *arg*; ταρασσω =*ταραχ-γω (make uneven, disturb), beside τέ-τρηχ-α (perf.) and τραχ-ύς (rough, uneven), √τραχ, therefore; ἀλεγ-εινός (painful) beside ἄλγ-ος (pain); δολιχ-ός (long)=Sk. *dīrgh-ás*, √*dargh*, beside ἐν-δελεχ-ής (unbroken, uninterrupted), fr. same root; ἡλυθ-ον beside ἡλθ-ον (v. supr. § 24); χάλαζα (hail), i.e. *χαλαδγα, cf. Skl. *grad-ŭ*, Lat. *grand-o*, Sk. *hrād-unī* (storm); κολεκ-άνος, κολοκ-άνος (lank), κολοσσός (colossus) for *κολοκ-γος, cf. Sk. *krç-á-s* (lank), √*karç* (make lean), Lat. *crac-entes* (graciles), origl. √*krak*, *kark*; κούς, pl. κούιδ-ες (dust, nits), cf. O.H.G. *hniç*, Bohem. *hnid-a*. Even long vowels clearly arise in this way, e.g. ἐρωδ-ιός (heron), Lat. *ard-ea*.

Note.—But *e* is no auxiliary vowel in such forms as ἡδεῖα, i.e. *ἡδεF-ια (v. supr. § 26 b. 2, n. 2): and also in ἐπέεσσι fr. *ἐπεσε-σσι, *ἐπεσε-σFi, κύνε-σσι, loc. pl. st. ἐπες- (ἔπος, word), κυν- (κύων, dog, g. κυν-ός), and other loc. pls. in consonantal stems. These are probably constructed on the analogies of the *ι*- and *υ*-stems, cf. πόλε-σι, st. πόλι- (state), γλυκέ-σι, st. γλυκύ- (sweet), as

§ 29. doubtless in other languages consonantal stems have often become allied to vowel stems, especially to the *i*-stem (e.g. Lat. *pedi-bus*, st. *ped-*). [Curt. has suggested doubts which I do not understand, especially on account of the Hêrakl. *πρασσόντ-ασσι*; he maintains a helping-vowel in these cases.] Less still do futs. of verb-stems in λ, μ, ν, ρ, belong here, e.g. *τενῶ* fr. **τενεσω*, **τενεω*; *βαλῶ* fr. **βαλεσω*, **βαλεω*. In these cases we come upon the verb-stem -*εσω*, original *asyāmi*, fut. of *√as* (esse) (v. sub. 'Conjugation').

2. Vowel addition (prefix).

This phenomenon of sound also is to be referred to the slight development of the vocal-sound before the following consonants. Acc. to G. Curtius (Gr. Et.² p. 649, etc.) prefixed-vowels are very rare before simple momentary sounds; they never occur before τ, π, φ, but on the contrary, most frequently before more than one consonant, before liquids, and before nasals. Exx. a) before two consonants, *ἀ-στήρ* (star), cf. Latin *stella* for **sterula*, Goth. *stairnō*, Sk. st. *star-*; *ὀ-φρύς* (brow), Sk. *bhrū-s*, O.H.G. *brāwa*, Skl. *brŭvŭ*; Lesb. Aiol. *ἄ-σφε*, *ἄ-σφι*=*σφέ*, *σφί*, origl. st. *sva*; *ἐ-χθές* beside *χθές* (yesterday), Sk. *hyas*, etc.

b) before λ, μ, ν, ρ; *ἐ-λαχύς* (small), Sk. *laghūs*, Lat. *leui-s*, fr. **legu-is*; *ἐ-μέ*, *ἐ-μοί*, beside *μέ*, *μοί*, origl. st. *ma* (pron. 1 pers.); *ὀ-μιχέω* (mingo), *ὀ-μίχ-λη* (mist), origl. *√migh*, cf. Sk. *mih* (mingere), Lat. *mig*, *mi-n-go*, etc.; *ἀ-νήρ* (man), Sk. st. *nar-*, Umbr. *ner* (prince); *√ἐ-νεκ-* (bear), in *ἡνέχ-θην*, *ἡνεγκ-ον*; *δι-ηνεκ-ής* (thorough), for *νεκ*, cf. O. Bulg. *nes-ti*, Lith. *nèsz-ti* (bear); *ἐν-νέφα* (nine), with redupld. ν, cf. Lat. *nouem*, Sk. *nāvan*, etc.; *ὀ-νυξ* (nail), st. *ὀνυχ-*, Sk. *nakha-s*, *nakha-m*, O.H.G. *nagel*; *ὀ-νομα*, name, cf. Lat. (*g*)*nōmen*, Sk. *nāman-*, Goth. *naman-*, where in the Gk. the *o* did not arise until the origl. initial *g* had disappeared, *ἐ-ρυθρός* (red)=Sk. *rudhirás*, Lat. *ruber*, fund.-fm. *rudh-ra-s*, *√rudh*; *ἐ-ρεβος* (n. lower-world, gloom), Sk. *ragas* (gloom), Goth. *rikvis* (dimness); *ἐ-ρεύγ-εσθαι* (belch), cf. Lat. *ructare* for *rug-tare*, etc.

c) before origl. *v*; *ἐ-Φέργ-ειν* beside *Φέργ-ειν* (keep in), cf. Sk. *varḡ* (keep off); *ἐ-Φέρση* (Il. xxiii. 598), Krêt. *ἄ-Φερσα* beside

Fέρση, έρση (ros, dew), cf. Sk. *√varš* (rain); *έ-Feίκοσιν* (Il. vi. § 29. 217) beside *είκοσι* (twenty), Boiôt. *Φίκατι*, Sk. *vīçāti*, Lat. *uiginti*; the initial was origly. *dv* (*dvi*=two), the *ε* was not prefixed until the *d* had disappeared (cf. *δ-νομα*); and more frequently in the case of *F*.

d) before other consonants; *δ-δούς* (tooth), st. *δ-δοντ-*, cf. Lat. st. *dent-*, Sk. st. *dant-* and *danta-*, Goth. *tunthu*; in this word the *o* arises clearly, I think, from the vowel-sound of *δ*, and my view is confirmed by the consonance of the *o* with the *o* of the second syllable, as well as by the agreement of all the other languages in initial *d*. [*εδ-οντες* in Aiolic should, I think, be separated fr. *οδόντες*, and be regarded as a poetical expression; it is a part. of *εδω* (eat), 'the eating ones,' i.e. 'teeth'; the origl. *dant-* (tooth) may arise from *√ad, da* (eat), but in my opinion *da-nt-* more probably belongs to *√da, ad*, 'separate, cut'; cf. Zend st. *dā-ta-*, 'tooth.'] *α-δαγ-μός* (itch), *δ-δάξω, α-δαξέω* (bite, itch), fr. *√δακ* in *δάκ-νω* (bite), Sk. *daç*. For other inst. of prefixed-vowel before other mom. consonn., more or less probable, see Curt. Gr. Et.² p. 653.

LATIN.

§ 30.

TABLE OF SOUNDS IN THE LATIN LANGUAGE.

CONSONANTS.					VOWELS.
MOMENTARY SOUNDS.			PROLONGED SOUNDS.		
	UNASPIRATED. mute sonant	ASPIRATED. mute sonant	NASAL. sonant	r- & l-sound. sonant	
Gutt.	<i>c, q g</i>	<i>h</i>	<i>n</i>		<i>a, ā</i> } <i>i, ī</i> } <i>e, ē, ae</i> <i>r, l</i> } } <i>o, ō</i> } <i>oe</i>
Pal.		<i>j</i>			
Ling.				<i>r, l</i>	
Dent.	<i>t d</i>	<i>s</i>	<i>n</i>		
Lab.	<i>p b</i>	<i>f v</i>	<i>m</i>		
				<i>u, ū</i>	

§ 30. *Note 1.*—I have placed *h* amongst the mute spirants, because it is nowhere pronounced with a vowel-sound except in *Sk*.

Note 2.—Guttural *n* has no peculiar character; *n* is gutt. before gutt. consonn. *c*, *q*, *g* (*n adulterinum*), but not after *g*, where, contrary to the German usage, it must be pron. like ordinary dental *n*.

Diphthongs, almost exclusively peculiar to Old. Lat., are *ai* (*ae*), *au*, *ei*, *eu*, *oi* (*oe*), *ou*, *ui*.

§ 31.

LATIN VOWEL-SYSTEM.

The Lat. vowel-system has suffered frequent changes in the course of time. Classical Lat., like Umbrian, shows a distaste for diphthongs, and these have changed to more compact sounds: the old diphthongs are vouched for by Old Lat., and esp. by Oscan. In the above cases the Lat. is insensible to vowel-development. A movement of root-vowels in their scales (confined, however, generally to two steps only) is not still shown except in a few roots.

The influence of final sounds, and further of sounds generally on one another (of consonant upon vowel, vowel upon vowel), has reached a high pitch in Lat. Unoriginal shortenings and lengthenings also occur frequently, so that the vowel-system of the Latin has diverged very widely from the original sounds. Besides, Old-Lat. and Osc. (both Italic languages with more origl. vowel-systems) have reached us only in a very fragmentary condition, while Classical Lat. has the characteristics of a written language which became stereotyped under foreign influence, and Umbr. is in the highest degree unoriginal in its vowels. Accordingly, of all Indo-Germ. languages, Lat. offers the greatest difficulties to a scientific investigator.

a is frequently weakened to *u* and *i*, and passes in a great measure into *e* and *o* (later generally to *u*), as in Gk.; similarly *ā* into *ē* and *ō*, only in Lat. the influence of neighbouring sounds is clearly the reason for vowel-colouring. In consequence of the full and thorough conformity of the Lat. with

the Greek vowel-scales, we are probably entitled to treat *ō* in § 31. Latin also as a vowel of the second step.

The *i*- and *u*- scales were in the oldest form of the language exactly like the Greek, especially in the distinction of *ai* and *au* from *ei* and *eu*. In the *u*-scale the second step takes throughout the place of the first, whilst *e* before *u* (*v*) passes into *o*, according to Lat. sound-laws (vid. § 34) [as in Gk. the converse takes place]. The later language, however, has preserved only *au* of the old diphthongs; yet even this diphthong shows a marked tendency to become a simple sound in certain cases.

Latin vowel-scales (Old Lat. sounds distinguished by upright characters):

	Weakening.	Fund.-vowel.	1st Step.	2nd Step.
1. <i>a</i> -scale loss.	<i>i, u</i>	<i>e, o, a</i>	<i>o, ē, ā</i>	<i>ō</i>
2. <i>i</i> -scale		<i>i</i>	<i>ei ī ē, ai ae</i>	<i>oi oe ū</i>
3. <i>u</i> -scale		<i>u</i>	<i>eu au ō</i>	<i>ou ū</i>

In Class. Lat. *eu* no longer exists as a vowel-step, but has become *ou* (i.e. *ū*).

The change from diphth. to monophth. is capable of simple physiological explanation (assimilation of both sounds, each to the other, e.g. *ei* to *ē*, *ai* to *ae*, *oi* to *oe*, *au* to *ō*, or of one to the other, as *ei* to *ī*, *ou* to *ū*), the change from *oi*, *oe* to *ū*, is caused by the common passing of *o* into *u* (change-scale *oi*, *ui*, *ū*; possibly also *oe*, *ue*, *ū*).

EXAMPLES.

§ 32.

1. *a*-scale.

Weakening. 1. Loss of radical *a*, e.g. *sum*, *sumus*, *sunt*, *siēm*, etc., for **es-um* fund.-fm. *as-mi*, **es-umus* f.f. *as-masi*, **es-unt* f.f. *as-anti*, **es-iēm* f.f. *as-yām* (√*es*, to be, cf. Gk.); *gigno* (produce, cf. γί-γνο-μαι), fr. **gi-gen-o*, √*gen* (cf. *gen-ui*, *gen-us*), origl. *gan*; especially in the second member of compounds is this loss frequent, as in *malq* fr. **maulo*, and this again fr. **mage-uol-o*

§ 32. (magis uolo), and in like cases (v. 'Sound-laws,' § 42): sf. *-br-um* (in part at least fr. **ber-um*), √*ber*, origl. *bhar* (ferre), so that here we have a compound, not a stem-formative sf.; the same remark applies to *-gnus* fr. **-genus* (√*gen*, *gi-gn-ere*), e.g. *mali-gn-us* (ill-disposed, malus, evil), and others, and *-gium* in *iur-gium* (lawsuit) for **iur-igium*, cf. *rem-ig-ium* (rowing), √*ag* (agere), etc.

In stem-formative suffixes, loss of origl. *a* occurs, as in the kindred languages, e.g. *patr-is*, older **patr-us*, **patr-os*, for *pater-os*, st. *pater*, f.f. *patar-as* (gen. sing.), and in many other cases.

2. Weakening of *a* to *i* is very frequent, esp. in the second member of a compound, e.g. *ac-cipio* (receive) beside *capio* (take); *per-ficio* (complete) beside *facio* (make); *as-sid-eo* (sit by), √*sad*, Lat. *sed*; *me-min-i* (bring to mind), √*man*; *co-gni-tus* (known), √*gna*, fr. *gan*; *in-si-tus* (implanted), √*sa*, etc.; moreover in stem- and word-formative particles, e.g. *ueh-is*, *ueh-it* (2, 3, sing. pres., √*ueh*, carry), for **ueh-isi*, **ueh-iti*, origl. *vagh-asi*, *vagh-ati*; *nō-min-is* (gen. sing. *nōmen*, name), origl. *gnā-man-as*, etc.

It occurs even in the accentuated syllable of the word (as in Germ.), e.g. *in-ter* (between), Umbr. *an-ter*, compar. of pronoml. st. *an*, cf. Sk. *an-tār*, *án-tara-s* (inter, interior), Gk. *ἐν-τέρα*; *in-* (neg.), Umbr. *an-*, Sk. *an-*, Gk. *ἀν-*; *igni-s* (fire), Sk. *agnī-s*; *quin-que* (five), f.f. *kankan*, Sk. *pánkan*.

In the reduplication-syll. of pres. stems fr. roots in root-vowel *a*, this weakening takes place regularly, e.g. *gi-gno* (beget) fr. **gi-gen-o*, f.f. *ga-gan-āmi*, cf. Gk. *γί-γν-ομαι*, √*gan*; *ser-o* (sow) = **siso* (*i* changed to *e* on acct. of the *r*), f.f. *sa-sā-mi*, √*sa*; *si-st-o* (set), f.f. *sta-stā-mi*, √*sta*; *sīdo* (set myself) fr. **si-sdo*, **si-sed-o*, f.f. *sa-sad-āmi*, √*sad*.

Note.—The lengthening of *e* weakened from origl. *a* into *ī* (*ei*) is hardly susceptible of proof: *scribo* (write) beside *γράφω*, since both words are generally akin, we must perhaps assume to be a case of *a*-scale passing into *i*-scale, as often in Slavonic.

Teutonic: in cases such as *uirī-tim* (man by man) fr. st. *uiro*-§ 32. (*uir*, man), the analogy of other forms (verbal stems) is followed (cf. *tribu-tim*, etc.).

3. Weakening of *a* to *u* is common, esp. in stem- and word-formative elements, but also in roots, through the influence of certain consonants. *i* is clearly the furthest weakening from *a*, for *u* through intermediate *ü* ("medius quidam inter *i* et *u* sonus—pinguius quam *i*, exilius quam *u*—sonum *y* Graecae uidetur habere" Gramm.; imp. Claudius Caesar ordered the character $\vdash$ to be used for this sound) often changes to *i*, whilst older forms in *u* exist beside later ones in *i*; *u* is also an unimportant representative of weakening from *a* through *o*, the older lang. very often retaining *o* where later *u* occurs. The vowel-scale of change from *a* to *i* is therefore evidently: *a*, *o*, *u*, *ü*, *i*. Thus, e.g. a f.f. *ap-tama-s* becomes **op-tomo-s*, *op-tumu-s*, *op-tümü-s*, *op-timu-s* (best), Ital. *ottimo*; *dakama-s*, **decomo-s*, *decumu-s*, *decimu-s* (tenth), Ital. *decimo*; beside *cap-io* (take), *man-cup-ium* (property; Plaut.), *oc-cup-are* (seize), *in-cip-ere* (begin), *man-cip-ium*; *con-cut-io* (shake violently) beside *quat-io* (shake), *in-sul-sus* (unsalted) beside *salsus* (salted), etc. *u* is frequent as a merely later change fr. older *o* (cf. Gk., where *o* remains), especially in word-formative elements, e.g. nom. acc. sing. masc. neut. of origl. *a*-stem *-u-s* fr. Old-Lat. *-o-s*, Gk. *o-s*, origl. *-a-s*; *-u-m*, Old-Lat. *-o-m*, Gk. *-o-v*, origl. *-a-m*, e.g. *da-tu-s* (given) fr. *da-to-s*, Gk. *δο-τό-ς*, origl. *da-ta-s*; acc. *da-tu-m* fr. *da-to-m*, Gk. *δο-τό-ν*, origl. *da-ta-m*. Lat. *os*, *us*, generally represents origl. final *as*, e.g. *gen-us* (race), earlier *gen-os*=*γέν-ος*, Sk. *gán-as*, origl. *gan-as*; *op-us* (work), Old-Lat. *op-os*, Sk. and origl. *áp-as*; *-bus* (sf. dat. abl. pl.), earlier *-bos* for *-byos*, Sk. *bhyas*; *ferunt* (they bear), Old-Lat. *fer-ont*, *fer-onti*, Gk. *φέρ-οντι* (*φέρ-ουσι*), Sk. and origl. *bhár-anti*; also in pres. part. *o* clearly is the form of the earlier lang., cf. *e-unt-em* (him who goes), i.e. *e-ont-em*, where beside *e*, *o* has become *u*, whilst *e* regularly occurs; *uol-unt-arius* (willing)

- § 32. points to a once-existing **uolont-*, **uolunt-*, beside usual *uolent-* (willing), etc.

After consonantal *u*, *o* remains, e.g. *uolt* (later *uult*, he will), Sk. and origl. $\sqrt{var}$; *loquontur* (*loquuntur*, they speak); *quom* (*quum*, conj. 'when,' 'since,' cf. *quon-iam*), f.f. *kam*; *quo-d* (which), f.f. *ka-t* (but *is-tu-d*, f.f. *ta-t*); *nouo-s*, new (*nouus*), Sk. and f.f. *náva-s*, etc.

Note.—Through the older *o*-forms, Latin approaches near to Greek.

- § 33. The root-vowel of the *a*-scale, origl. *a* is represented by—

1. *a* preserved in a very few cases, appearing by preference before *g*, *c*, e.g. *ac-us* (needle), *ac-ies* (point), *ac-erbus* (sour), $\sqrt{ac}$, Sk. *aç*, origl. $\sqrt{ak}$; *ag-o* (drive), $\sqrt{ag}$ - ω , Sk. *ág-āmi*, $\sqrt{ag}$; *mag-is* (more), *mag-nus* (great), $\mu\acute{\epsilon}\gamma$ -*as*, Sk. st. *mah-ánt-* (n. sing. masc. *mah-án*), Goth. *mik-ils*, $\sqrt{mag}$, Sk. *mah* fr. *magh*; *frag-ilis* (breakable), *frag-or* (crash), *fra-n-go* (break), Goth. $\sqrt{brak}$ (pres. *brik-a*, pf. *brak*); *ang-uis* (snake), Sk. *áh-is*, Gk. $\epsilon\chi$ -*is*, Germ. *unk*; *ans-er* (goose) for **hans-er*, Germ. *gans*, Sk. *hās-ás*, f.f. *ghans-*; *al-ius* (other), $\alpha\lambda\lambda\omicron\varsigma$ =* $\acute{\alpha}\lambda$ -*yoç*, Goth. *al-is*; *ap-iscor* (get), *ap-tus*, cf. Sk. *āp-nō-mi* (1 sing. pres. ind. adipiscor) $\sqrt{ap}$; *sta-tus* (placed), Gk. $\sigma\tau\alpha$ -*τός*, f.f. *sta-tas*, $\sqrt{sta}$; *sa-tus* (sown), $\sqrt{sa}$; *da-tus* (given), *da-tor* (giver), Gk. $\delta\omicron$ -*τός*, $\delta\omicron$ -*τήρ*, $\sqrt{da}$, etc.

2. Origl. *a* appears as *o*, especially in roots before and after *v*, and further in stem- and word-formative elements.

After *v*, as *uom-o* (spue), Gk. $\Phi\epsilon\mu$ - $\acute{\epsilon}\omega$, Sk. *vám-āmi*; *uol-o* (will), *uol-t*, *uol-im*, later *uult*, *uel-im*, cf. Sk. *vár-āmi* (*vr-ṛāmi*, *vr-ṛāmi*), $\sqrt{var}$; *uoc-are* (call), Sk. $\sqrt{vak}$, Gk. $\Phi\epsilon\pi$, origl. *vak*; *uort-o* (turn), later *uert-o*, cf. Sk. *várt-atē* (3 sg. pres. med. uertitur, est), $\sqrt{vart}$; *uo-s* (you), *uoster* (your), later *uester*, cf. Sk. *vas* (uos, uobis); *uolu-ere* (twirl), Goth. *valv-yan* (uoluere); cf. *quatuor* (four) for **quatuors*, **quatuores*, beside $\tau\acute{\epsilon}\sigma\sigma\alpha\rho\epsilon\varsigma$ =* $\tau\epsilon\tau\Phi\alpha\rho\epsilon\varsigma$, f.f. prob. *katvāras*; even *uocuus* (empty) in inscrr. for *uacuuus*.

Origl. *sva* is regularly so in Lat., prob. fr. *suo* for *sue*, origl.

sva, by the above rules; *u* falls out, as in *te* (thee), *se* (himself), § 33. etc., for **tue*, **sue*, e.g. *socer* (father-in-law) fr. **suocer*, **suecer*, Gk. ἐκύρος for *σφεκύρος, Sk. *sváçuras* (written *çvácuras*), Goth. *svaihra*, cf. *socrus* (mother-in-law), Sk. *sváçrūs* (written *çvácçrūs*); *sorōrem* (sister, acc.), Sk. *svásāram*, f.f. *svastāram*; *sop-or*, *somnus* (sleep), for **sop-nus* (cf. ὕπ-νος), Sk. and f.f. *sváp-nas*, *sváp-i-mi* (I sleep); *son-us* (sound), Sk. *sván-as*.

Before *v*, e.g. *ou-is* (sheep), Gk. ὄψις, Sk. *áv-is*, Lith. *av-īs*; *uou-os*, later *nou-us* (new), Gk. νέψ-ος, Sk. *náv-as*; *nou-em* (nine), Gk. ἐν-νέψα, Sk. *náv-an*.

In other combinations, e.g. *mor-ior* (die), origl. and Sk. √*mar* (*mori*); *dom-are* (tame), Gk. √*δαμ* (ἐ-*δαμ-ον*), Sk. *dam*, Goth. *tam*, H.G. *zam*; *op-us* (work), Old-Lat. *op-os*, Sk. *áp-as*; *loq-uor* (speak), cf. Gk. ἔ-*λακ-ον*, Sk. √*lap*; *po-tis* (powerful), *po-tens* (mighty), *po-tiri* (become master of), cf. Gk. πό-σις (lord), Sk. and origl. *pá-tis* (master) [perh. in these instances the lab. *m*, *p*, and the lab. vowel which in Lat. accompanies *l*, are the causes of *o* representing *a*]; *coq-uere* (cook), Gk. √*πεπ*, Sk. *paḱ*, Lith. *kep*, etc., origl. *kak*.

In terminal particles (stem- and word-formative) *o* is remarkably regular before *s* and *m* (as in Gk.); for later weakening of *o* to *u*, v. sup. §§ 32, 3); e.g. suff. *-to* in n. sing. m. and acc. masc. and neut. *-to-s*, *-to-m*, Gk. -το-ς, -το-ν, Sk. *-ta-s*, *-ta-m*, e.g. *in-chu-to-s* (famed), acc. *chu-to-m*, cf. Gk. κλυ-τό-ς, κλυ-τό-ν, Sk. *çru-tá-s*, *çru-tá-m*, origl. *kru-ta-s*, *kru-ta-m*; neut. termn. *-os*, later *us*, e.g. *gen-os* (*gen-us*, race), Gk. γέν-ος, Sk. *gán-as*, origl. *gan-as*, so also *Ven-os* (prop. n. fem., *-os* authenticated); Lat. pl. *-bos* (*-bus*), Sk. *-bhyas*, etc.

3. *a* passes into *e* very frequently, without assignable reason, in neighbouring sounds: e.g. *fer-o* (bear), √*fer*, Gk. φέρ-ω, Sk. and origl. *bhár-āmi*, √*bhar*; *es-t* (he is), √*es*, Gk. ἐσ-τί, Sk. and f.f. *ás-ti*, √*as*; *sed-eo* (sit), √*sed*, Sk. and origl. *sad*; *gen-us* (race), Old-Lat. *gen-os*, √*gen*, √Gk. γέν-ος, Sk. *gán-as*, origl. *gan-as*, √*gan*; *ueh-it* (he carries), √*ueh*, Sk. *váh-ati*, f.f.

§ 33. *vagh-ati*, √*vagh*; *pecu-* (cattle), Sk. st. *paçú-* (n. sing. masc. *paçú-s*), f.f. stem *paku-*; *eq-uos* (horse), √*ec*, Gk. ἵππος = *ἵκ-*Fos*, Sk. *áč-vas*, √*aç*, f.f. *ak-vas*, √*ak*; *dec-em* (ten), Gk. δέκα, Sk. *dáçan-*, f.f. *ðakan-*; *septem*, Gk. ἑπτὰ (seven), Sk. and f.f. *saptán-*; *dent-em* (tooth, acc.), ὀ-δόντ-*a*, Sk. *dánt-am*; *men-te-m* (mind, acc.), f.f. *man-ti-m*, √*man*; *fer-ent-em* (bearing, acc.), φέρ-οντ-*a*, Sk. and f.f. *bhár-ant-am*; the origl. sound-combn. *ant* also becomes *ont*, *unt*, in Lat., e.g. *fer-unt* (they bear) fr. **fer-onti*, Sk. and origl. *bhár-ant-i*, *e-unt-em* (going, acc.; cf. § 32), beside *fer-ent-em*; st. *pa-ter-* (father), *mā-ter-* (mother), origl. *pa-tar-*, *mā-tar-*; (*g*)*nō-men* (name), Sk. *nā-man-*, f.f. *gnā-man*, etc.

e is often an evident weakening from *a*, e.g. *per-fec-tus* (made thoroughly) beside *fac-tus* (made), etc.

e has proceeded from *o* in cases such as *uert-o*, *ueter*, etc., fr. older *uorto*, *uoster*, f.f. *vart-ā-mi*, Sk. and origl. √*vart*, Goth. *varth*; *uos-ter*, cf. Sk. *vas* (uos, vobis) (cf. § 33). Accordingly *e* comes after *a* and *o* as a lighter vowel.

§ 34. Step-formation of *a*.

1. Corresponding to *e* we find *o* as the equivalent heavier vowel, and *o* sometimes occurs as a step-formn. fr. *e=a* (cf. Gk. and Slav.); thus in these cases *o=ā*; *e:o=a:ā*, e.g. *mon-eo* (warn), i.e. *mān-āyami*, caus. vb. fr. origl. √*man* (think, thus simply=make to think), beside *mens* (mind) for **ments*, **men-ti-s*, f.f. *man-ti-s* (sf. *tī*), fr. √*man*, cf. *me-min-i* (I remember), later with weakening of *e* to *i*; *noc-eo* (hurt), f.f. *nāk-ayāmi*, caus. vb. fr. origl. √*nak*, Sk. √*naç* (die) (so simply 'make to die'), *nex*, *nec-is* (death), *per-nic-ies* (ruin), *nec-are* (kill), cf. *véκ-us*, *νεκ-ρός* (corpse); *tog-a* (wrapper) beside *teg-o* (cover), √*tag* (H.G. *tak*), prob. for *stag*, cf. *στέγ-ω*, Sk. *sthág-āmi* (cover), in Lith. *steg-iù* (cover) stands beside *stóg-as* (tectum); *socius* (comrade) beside *seq-ui* (go with), *ad-sec-la* (escort); *doc-eo* (teach), caus. f.f. *dāk-ayāmi*, beside *di-dic-i*, *disco* (learn) for **dic-sco*, prob. for **di-dac-sco*, cf. δι-δά(κ)-σκω (teach) beside διδάξω, i.e. διδάκ-σω, διδαχ-ή (teaching), √*dak* (not *dic*, as in

dic-o, δεικ-νυμι, which must be kept distinct); *proc-us* (wooer) § 34. beside *prec-ari* (beg); *for-s* (chance), *for-dus* (pregnant), beside *fero* (bear), √*fer*, origl. √*bhar*.

When *o* is short, the step-formations can take place also before two consonants, e.g. *pond-us* (n. weight) beside *pend-ère* (weigh); *ex-torr-is* (exile), *torr-eo* (roast)=**tors-eo*, cf. *tos-tus* (p. part. pass. torreo) for **tors-tus*, beside *terra* for **ters-a* (the 'dry land' in contrast to the 'water'), √*tars*, Goth. *thars* (in *thairsan*, roast, *thaur̥syan*, thirst, vb.), Sk. *tarś* (thirst). Beside *a*, *o* occurs in *scob-s* (sawdust), *scob-ina* (rasp), and *scāb-o* (scratch); *port-io* (share) beside *part-em* (*pars*, part), *im-pert-io* (give, share).

2. *ē* is not common, e.g. *tēg-ula* (tile) beside *tēg-o* and *tōg-a*; *rēg-em* (*rex*, king), cf. Sk. *rāj-am*, *rāj-ānam* beside *rēg-o* (rule); *lēg-em* (*lex*, law), *col-lēg-a* (comrade in office) beside *lēg-o* (pick out, read), *sēd-es* (seat) beside *sēd-eo* (sit), √*sad*; *sē-men* (seed) beside *sā-tus*, so chiefly as a step-formn. of *e*; *ē* corresponds to origl. *ā* in *plē-nus* (full), f.f. *prā-nas*, √*pra*, *par* (fill); *ēd-i*, cf. Sk. *āda*, i.e. **aāda* (perf.), fr. *ēd-o* (eat), Sk. *ād-mi*; *sēmi* (half), Gk. ἡμι-, Sk. *sāmi*-, O.H.G. *sāmi*-; *siēm*, *siēt* (1, 3, opt. fr. *es*, be), cf. εἶνν, εἶη, Sk. *syām*, *syāt*, origl. *as-yā-m*, *as-yā-t*, in which cases perh. *i* has had an assimilating influence.

3. As *ē* is to *ē*, so is *ā* to *a* in the sound-scale, which, therefore, occurs most often before guttural consonants, e.g. *āc-er*, *āc-ris* (sharp), beside *āc-ies* (point); *plāc-are* (appease) beside *plāc-ēre* (please); *pāc-em* (*pax*, peace), thence *pāc-are* (to pacify), beside *pāc-isci* (bargain); *māc-ero* (soften) beside *māc-er* (thin): *amb-āg-es* (roundabout-way), cf. *amb-īg-ere* (be in doubt), fr. √*ag* in *āg-o* (drive, lead), Gk. ἄγω, Sk. *āg-āmi*, origl. *ag-āmi*; st. *con-tāg-io-* (*con-tāg-iu-m*, contact), and further formed from it the commoner *con-tāg-iōn-* (n. sing. *con-tāg-io*), fr. √*tag* in *tango* (touch), *tac-tu-s* (past part. pass.) for **tag-tus*, cf. *con-tingo* (touch, hit); st. *suf-frāg-io* (*suffrāg-ium*, origly. 'sherd'; vote) beside *frāg-or* (crash), √*frag*, cf. *fra-n-go* (break), *in-fri-n-go*

§ 34. (break into); *sāg-ire* (perceive), *sāg-us* (sooth-sayer), *sāg-a* (witch) beside *sāg-ax* (knowing); *pāg-ina* (page, leaf), *com-pāg-i-* (compages, union), *com-pāg-in-* (compago), fr. $\sqrt{\text{pag}}$ in *pa-n-g-o* (fix), cf. *com-ping-o* (fix together); *uād-o* (go) beside *uād-o-* (uadum, ford); *lāb-i* (glide) beside *lāb-are* (totter); *dā*, *dā-s*, beside *dā-tus*, $\sqrt{\text{da}}$ (give); *fā-ri* (speak), *fā-ma* (fame), *fā-cundus* (eloquent), beside *fā-teri* (own to), origl. $\sqrt{\text{bha}}$; *mā-ter* (mother), Sk. *mā-tar-*, $\sqrt{\text{ma}}$; *frā-ter* (brother), Sk. *bhrā-tar-*, $\sqrt{\text{bhra}}$, transposed fr. *bhar*.

The fem. of the *a*-st. had origly. in the Lat. also long *a*, e.g. *nou-ā*, *coc-tā*, origl. *nav-ā*, *kak-tā*, cf. Sk. *nāv-ā*, **pak-tā* (this form does not happen to occur, but is replaced by an entirely different form *pak-vā*), Gk. *véF-ā*, *πεπ-τή*, fr. *nou-a-s*, *coc-to-s*, *nou-u-s*, *coctus*, origl. *nav-a-s*, *kak-ta-s*, Gk. *véF-o-ς*, *πεπ-τό-ς*. Remains of this *ā* have been preserved in Latin.

4. Not unfrequently *ō* is a step-formation from *a*, especially beside *o=a*, and where *a* is a root-termn., further in stem-formative elements, e.g. *per-sōn-a* (mask) beside *sōn-us* (sound), *sōn-are* (sound), Sk. and origl. $\sqrt{\text{svan}}$; *sōp-io* (put to sleep), i.e. Sk. and origl. *svāp-āyāmi*, causat. verb, beside *sōp-or* (sleep), Lat. $\sqrt{\text{sop}}$, Sk. and origl. *svap*; *uōc-em* (*uox*, voice)=Sk. *vāk-am*, Gk. *Fóπ-a*, origl. *vāk-am* beside *uōc-o* (call), origl. $\sqrt{\text{vak}}$ (speak); *ōc-ior* (swifter), comp. fr. lost adj. corresponding to Gk. *ὤκ-ύ-ς*, Sk. *āṣ-ú-s* (swift) (perh. sounded **oquis*), origl. $\sqrt{\text{ak}}$; *dō-num* (gift), Sk. and f.f. *dā-na-m*, *dō-te-m*, n. *dōs* (dowry, = *dō-ti-s*), f.f. *dā-ti-m* beside *dā-tus*, $\sqrt{\text{da}}$; *gnō-sco* (*nō-sco*, learn), *gnō-tus* (known, cf. *γι-γνώ-σκω*, *γνώ-τός*), *gnō-men* (name) beside (*g*)*nōta* (mark), *co-gni-tus* (known), $\sqrt{\text{gna}}$, fr. *gan* (as later forms show); *pōd-ex* beside *pēd-o* and *pēd-ico*, Sk. and origl. $\sqrt{\text{pard}}$, Gk. *περδ*, H.G. *farz*; *da-tōr-em* (giver, acc.), Sk. *dā-tār-am*, Gk. *δο-τήρ-a*, origl. suff. *tar*, here raised to *tār*; *quō-rum* fr. st. *quo-* (rel. interrog.), origl. *ka*, etc.

5. *ū* as=origl. *ā* can only be considered a later parallel form from *ō*, since *o* has frequently become *u*; probably it does not

occur within the root. Hence the suff. *-tūro-*, fem. *-tūra-*, e.g. § 34. *da-tūr-us* (about to give), *rup-tūr-a* (breach), Lat. formns. from stems in *-tōr*, origl. *-tar*, *da-tōr-*, *rup-tōr-*, origl. *da-tār-*, *rup-tār-*; the suff. of gen. pl. *-um*, *-rum* (prob. for *-ūm*, *-rūm*, cf. Bücheler, Grundriss der Lat. Decl., p. 40) stands for earlier *-ōm*, *-rōm* (*bou-om* even in Verg.), Gk. *-ων*, in **-ῶν*, Sk. and origl. *-ām*, *-sām*, e.g. *(is)tarum*=Gk. **ταῶν*, i.e. *τῶν*, Sk. *tāsām*; *vōc-um*=Gk. *Φοπ-ῶν*, Sk. *vāk-ām*.

2. *i*-scale.

§ 35.

In this, as in the *u*-scale, there is a lack of roots which present all three steps at once. In the *i*-scale, I know only the $\sqrt{fid}$ in *fides* (faith), *per-fid-us* (faithless) beside *con-fid-o* (trust), i.e. *feid-o* (*dī-feid-ens* is vouched for) and *foid-os* (*foedus*, treaty): even in roots which appear in two steps, e.g. $\sqrt{dic}$ (Gk. *δικ*, Sk. *diç*, etc.), in *in-dīc-o* (point at), *causi-dīc-us* (advocate) beside *deic-o*, *dīc-o* (say); and $\sqrt{i}$ (go) in *ī-tum* beside *ei-s*, *ei-t*, *ei-tur*=*is*, *īt*, *itur* (cf. *εἶμι*, go, Sk. *é-mi*), there is a step wanting.

The fundamental vowel *i* occurs, e.g. in *dic-are* (dedicate), $\sqrt{dic}$, cf. Sk. *diç*, Gk. *δικ* (in *δεῖκ-ννμι*); *ī-tum* (cf. *ἵ-μεν*, Sk. *i-más*), $\sqrt{i}$ (go); *uid-eo* (see), cf. Sk. *vid-más*, Gk. *ἴδ-μεν*, Goth. *vit-um*, $\sqrt{vid}$; *sci-n-d-o* (slit), *scissus*=**scid-tus* (slitten), cf. Sansk. *khi-n-á-d-mi*, *σχίζω*=**σχιδ-γω*, Goth. $\sqrt{skid}$ in *skaid-an*, $\sqrt{scid}$; $\sqrt{mig}$, origl. *migh*, Gk. *μιχ*, in *mi-n-g-o*, *mic-tus* for **mig-tus* (past part. pass.); $\sqrt{lig}$ in *li-n-g-o* (lick), origl. *righ*, Gk. *λιχ*; *qui-s* (who?), cf. Goth. *his* (dem.), Lith. *szī-s*, f.f. *ki-s*, $\sqrt{qui}$ =*ki*. In stem-formative elements, e.g. *ou-i-s* (sheep), Gk. *ὄψ-ι-ς*, Sk. *áv-i-s*, Lith. *av-ì-s*, $\sqrt{u}$, *av*, with suff. *i*, *i* is often lost in consequence of its position at the end of a word, e.g. *men-s* for *men-tis*, *men-ts*, f.f. *man-tis*, or dulled to *e*, as *men-tem*, cf. sqq.

This genuine *i* is dulled to *e* according to definite laws, e.g. *in-dex*, *in-dic-is* (pointer), $\sqrt{dic}$; *ig-ne-m* (fire, acc.) for older *ig-ni-m*, Sk. *agni-m*, Lith. *ùgni*. The earlier forms of this acc. occur not uncommonly, as *navi-m* (ship, acc.) beside *naue-m* and

§ 35. others. Also *mare* for **mari*, cf. *mar-i-a* (in similar cases final *i* is lost); so also in *naue-bos*, *tempestate-bus* (inscrr.), origl. *i* has passed into *e*, stems *nāui-*, *tempestāti-*.

Note.—Thus here *e* is the newer, *i* the origl. and hence older sound; whilst in the case of the more usual *i* weakened from *a*, when it is interchanged in the earlier lang. with *e*, the latter is the earlier sound. The language, however, no longer felt the difference of derivation, and both *i*-sounds were treated alike. Perh. unorigl. lengthening of *i* to *ī* should not be separated from step-formn. of *i* (to *ei*).

First step: *ei* (*ī*, *ē*); **deiu-os*, *dīu-os* (godlike, *deiuae*, *deiuinus*, occur), Sk. *dēvá-s*, f.f. *daiva-s*, $\sqrt{\text{div}}$ (shine); *deic-o*, *dīco* (say), f.f. *daik-āmi*, $\sqrt{\text{dic}}$; *ei-tur*, *ī-tur* ('it is gone,' impers.), $\sqrt{\text{i}}$; *feid-o*, *fīd-o* (trust), $\sqrt{\text{fid}}$; *ueiuo-s*, *uīuo-s* (alive), cf. Sk. *gīvá-s*, Lith. *gývas*, $\sqrt{\text{gi}}$, redupl. *gig*, *uig*, *giu*, *uiu* (*u* for *g*, through intermed. *gu* (vid. sub. "Consonn.")), *ueic-us*, *uīc-us* (hamlet), Sk. *vēças*, Sk. *Foikos*; *uīnum* (wine), i.e. *ueinom*, Goth. *vein*, Gk. *Foivos*; clearly *īd-us*, *eid-us* (a fixed day in the month, origly. the day on which the moon shines, the bright day; Corss. Krit. Beitr. 261), $\sqrt{\text{id}}$, origl. and Sk. $\sqrt{\text{idh}}$ (vid. sub. *ai*, *ae*).

Deus (god) is weakened fr. **dēus*, **dēuos*, **deiuos*, and is thus a parallel-fm. to *dīuos*, to which *deiuinus* points; so *ēo* (go) is clearly for **ēo*, **ēyo*, f.f. **aiy-āmi* for **aiāmi*, with splitting up of *i* into *iy*; *uen-dēmia* (inscrr.)=*uin-dēmia* (vintage).

In word-formative elements, *ē* beside *ei*, *ī*, is common, later generally the rule, e.g. *omneis*, *omnis*, *omnes*, etc.

ai, *ae*, occur here and there as in Gk., e.g. *aid-e(m)*, *aed-es* (house, hearth), *aid-īlis* (overseer of buildings), *aes-tās* (summer heat) for **aed-tas*, cf. Gk. *αἶθ-ω*, *αἶθ-οῦσα*, *αἶθ-ήρ*, Sk. $\sqrt{\text{idh}}$ (kindle); *ae-uo-m*, old *ai-uo-m* (aye, long time) (except in gend.)=*Sk. ēv-a-s* (course), cf. *αἶ-Fών*, $\sqrt{\text{i}}$ (go), origl. suff. *va*; *maes-tus* (sorrowful), *maer-eo* (grieve, intr.) beside *mis-er* (wretched); *aem-ulus* (vying) beside *im-itari* (imitate); *laeuos* (left-), cf. *λαίFός*; *scaeuos* (left-), cf. *σκαίFός*; *caecus* (blind), cf. Goth. *haihs* (one-eyed, blind).

Second step is *oi*, *oe*, *ū*; e.g. *foid-ere*, n. **foid-os* (*foed-us*, § 35. treaty), $\sqrt{fid}$; *ūber* (fruitful), early Lat. **oib-ri-s*, f.f. *āidh-ri-s*, cf. Sk. *ēdh-atē* (he grows), hence $\sqrt{idh}$, *ūber* (neut. subst. fruitfulness), early Lat. perh. **oib-es*, f.f. *āidh-as*, fr. same root; **oinos*, *oino(m)*, occurs, *oenus*, *ūnus* (one), cf. Goth. *ains*; *comoinem*, *comūnem* (common, acc.), cf. Goth. *gamains*; so we find *loidos*, *loedos*, *lūdus* (game); *oitier*, *oetier*, *ūtier* (use), etc.

Note.—For *oe* we find *ē* written by mistake (cf. Fleckeisen, 5th Art. aus einem Hilfsbüchlein für Lat. Rechtschreibung, Frankf. 1861, p. 22), e.g. *ob-ēdire* for *ob-oedire*, cf. *audire*, *n-ēnum*=*n-oenum* (*non*).

3. *u*-scale.

§ 36.

Very much obliterated in Lat. *Exx.* are very rare: we can bring forward only *lūc-erna* (lamp), Gk. $\sqrt{\lambda\upsilon\kappa}$, Sk. *ruk*, f.f. *ruk*, beside *Leuc-esie* (Carm. Sal.), *Louc-ina* (nom. pr.), *lūcem* (light, acc.), *lū(c)-men* (light), *lou(c)-men*; *dūc-em* (leader) beside *douc-ere*, *dūc-ere* (lead); *rūb-er* (red), f.f. *rudh-ra-s*, beside *rūf-us* (red), f.f. *rāudh-as*; *pro-nūb-us* (marriage-making), *in-nūb-us* (unwedded), beside *nūb-o* (marry— of the woman); *rūp-es* (rock, cliff) fr. $\sqrt{rup}$, in *ru-m-p-o* (break); *trūd-o* (thrust) beside *trūd-i-s* (thrusting-pole).

The fund. vowel *u*, e.g. in *rup-tus* (broken), *ru-m-p-o* (break), cf. Sk. *lu-m-p-āmi*, $\sqrt{lup}$, origl. $\sqrt{rup}$; *us-tu-s* (burnt), $\sqrt{us}$, Sk. $\sqrt{uś}$; *tu-tud-i* fr. pres. *tu-n-d-o* (thump), cf. Sk. *tud-āmi*, $\sqrt{tud}$; *rub-er* (red), for **ruf-er*, **ruf-ro-s*, $\sqrt{ruf}$ = $\rho\nu\theta$, Sk. and origl. $\sqrt{rudh}$; *iug-um* (yoke)= $\zeta\nu\gamma\acute{o}\nu$, Sk. *yug-ām*, $\sqrt{yug}$; *fu-i* (was), *fu-turus* (about to be), cf. $\phi\nu\text{-}\tau\acute{o}\nu$, origl. and Sk. $\sqrt{bhu}$ (in Sk. lengthened *bhū*). In stem-formn. (not in stem-formative particles), e.g. *pec-u* (cattle, pl. *pecu-a*), cf. Goth. *faihu*, O.H.G. *vihu*, Sk. *paçú-s*.

This genuine *u* was also weakened to *i* (*ü*) [like that which arose from *a*, cf. § 32], e.g. *lub-et*, *lib-et* (it pleases), Sk. and origl. $\sqrt{lubh}$ (desire), Goth. *lub* (in *lub-ō*, beloved, *liub-s*, love; *ga-laubs*, dear); *cli-ens* (hearer), $\sqrt{clu}$, $\sqrt{\kappa\lambda\upsilon}$, origl. *kru* (hear);

- § 36. **manu-bus*, and hence *mani-bus* (*manu-s*, hand), *u* is noticeably preserved in many cases; *fructi-fer*, *corni-ger*, fr. **fructu-fer*, **cornu-ger* (fruit-bearing, horn-carrying).

Note 1.—Genuine *u* does not change to *o* except in *fö-re* fr. *fü-se*, √*fu*.

Note 2.—*ū* as lengthening from *ũ* is prob. not to be separated fr. *ū=ou*, 1st and 2nd step-formn. of *u*. In *tū* (thou), we have an unorigl. lengthening, f.f. is *tũ*, for in Sk. *tv-am*, Gk. *τύ, σύ*, Goth. *thu*, Scl. *ty*, there is no step-formn. We cannot decide between lengthening and step-formation in cases like *sū-s* (boar), *ūs*, O.H.G. *sū*; *mūs* (mouse), *μῦς*, O.H.G. *mūs*, etc., where Gk. vouches for the hypothesis of the lengthening.

The first step-formn. (acc. to analogy of all Indo-Eur. langg.)—sounded of course precisely as in Gk.—was *eu*; but it was lost very early, since the only remaining instance of this archaic step-formn. is in *Leuc-esius* (n. prop.), cf. *λευκ-ός* (white), also *Loucetius*, *Lucetius*; f.f. is prob. **Leuc-ent-ios*, a further formn. fr. a particp. st. **leuc-ent-* (as *Prudent-ius* fr. *prudent-*), of a pres. **leuc-o*, √*luc*, as *φεύγ-ω* fr. √*φύγ*. In consequence of the sound-law mentioned § 33, (*e* before *u*, *v*, changed to *o*), there will arise fr. *eu* an *ou*, coinciding with 2nd step, and later becoming *ū*. Hence from *dūc-o* (lead), *douco*, we must infer an older **deuco*, f.f. *dauk-āmi*, √*duk* (because pres. stt. of this kind were formed by the 1st step); *ūro* (burn), **ouso* for **euso*=*εὔ-ω* for **εὔσ-ω*, Sk. *ṛś-āmi*, f.f. *aus-āmi*, √*us*; in roots which end in *u* we find *ov* for **ev*=*eu*, e.g. **plou-ont*, thence *pluu-ont*, *plu-ont* (they rain); **plou-ont*, however, is for **pleu-onti*, cf. Gk. *πλέF-οντι* (*πλέ-ουσι*), f.f. *plav-anti*; so *flu-ont*=*flo-ont*, fr. **fleu-onti*, and other similar pres. fms.; *iou-s*, *iour-is* (*iūs*, *iūr-is*, right), is for **iou-os*, **iou-es-is*, and formed like **gen-os*, **gen-es-is* (gen-us, gen-eris), fr. √*iu* (*iungere*), by the first step, as is usual in this kind of noun st., **iou-os* is thus for **ieu-os*, formed fr. √*iu* like *κλέF-ος* fr. √*κλυ*, and corresponding Sk. *grāv-as* fr. √*gru*; *iūs*, *iūr-is* (broth)=**iou-s*, **iour-is*, **iou-os*, **iou-es-os*, **ieu-os*, **ieu-es-os*, f.f. *yav-as*, *yav-as-as*, fr. another √*yu*, Gk. √*ζυ* (in *ζύ-μη*, yeast), cf. Scl.

iu-cha (broth); *pūs* (*pūr-is*, matter) = **pous*, **pou-os*, **peu-os*, f.f. § 36. *pav-as*, Sk. and origl. √*pu* (be foul), cf. Goth. *fu-ls*, perh. *fū-ls*, O.H.G. *fū-l*, N.H.G. *fau-l*, f.f. *pau-ra-s*, Lith. *pū-ti* (be foul). Also *Iou-em* = *Diouem* (acc. n. pr.) must be referred to **dyeu-em*, and clearly *Iū-piter* stands for **dyū-piter*, **dyou-piter*, and the latter for **dyeu-piter*, st. *dyeu* = ζευ-, which is merely a sound-variation fr. *dyeu*, √*dyu* = *div* (shine, as noun-st. 'heaven' and 'god of heaven'; Sk. nom. *dyā-us* (2nd step) does not correspond with the Lat.): here the 1st step is much commoner than the 2nd, so that Lat. *ū* must generally be referred hither as = Old-Lat. *ou*.

Note.—*neu*, *seu* = *neue*, **seue*, do not belong here strictly, any more than *ne-uter*, *ne-utiquam* (also *nutiquam* like *nullus*).

au, as in Gk., is a first step long since unused, and in Lat. the only diphth. retained, and not yet given up (it occurs still in Ital. and in more isolated cases in other Latin lang.), although even in early times it was weakened, esp. in popular dialects, to the sound *ō*; further *au* is contr. into *ū* (prob. through intermed. *ō*), e.g. *raud-us*, *rōd-us*, *rūd-us* (crumb of earth), √*rud*, elsewh. *rub*, *ruf*, √*rudh* (be red). Exx. of *au*: *aur-ōra* (dawn), f.f. prob. *aus-āsā*, √*us* in *ūr-o*, *us-tus*, cf. Sk. st. *uś-ās-* (aurora), without step-formn. in root and suff. (the latter occurs in certain cases only); *aug-eo* (I increase), cf. αὐξω, αὐξάνω, prob. fr. **avγ-σω*, **avγ-σaw*, Lith. *aug-u* (I wax), √*ug*; the above-mentioned *raud-us* (neut. pl. *raud-era*), √*rud*, Sk. √*rudh*, Gk. √*pvθ*, etc.

Note.—*au* can also arise through a secondary process, e.g. *nauta* (sailor), *auceps* (bird-catcher), *gaudeo* (am glad), fr. *nāu-i-ta*, **au-i-ceps*, **gāu-i-deo*, etc.

The second step of *u*, viz. old Lat. *ou*, later *ū*, is equally wanting with the 1st step, and it is only by the aid of the cognate langg. that we can detect whether *ou*, *ū*, represent origl. *au* or *āu*: the latter is certain only in rare instances, e.g. *rūf-us* (red) = Kelt. *ruad*, Goth. *raud-s*, f.f. *rāudh-as*; clearly

- § 36. here belongs *ūber* (udder), on acct. of Gk. *oûthap*, f.f. of both *āudhar*, though Sk. *ūdhas*, O.H.G. *ūtar* (H.G. *euter*), show other degrees of the scale: perh. also *lūc-em*, *Louc-ina*, *lū(c)men*, *√luk*, origl. *√ruk*.

Note.—*ū*, *ou*, are here and there secondary products through falling-out of sounds, as e.g. **councti*, *cuncti* (all together), fr. *co-iuncti*; *noundinum* (S.C. de Bacc.), *nūndinum*, fr. **nouendinum*, cf. *nundinae* (period of 9 days), *prūdens* fr. *pro-uidens*.

§ 37.

VOWEL SOUND-LAWS.

Accurate statement of the extraordinarily variable vowel sound-laws of the Lat. must be left to the special-grammar of the lang.: a general view only can be given here.

Hiatus. In case of vowels coming into contact with one another, hiatus is often obviated by means of contraction. This occurs regularly, when the first vowel is *a*, thus *amo* (1 sing.) fr. **amao*, *amas* (2 sing.), fr. **amais*, f.f. of termn. *-ayāmi*, *-ayasi*; *amarunt* (3 pl. pf.) fr. *ama(u)erunt*; *equae* and *equā* fr. *equāi* (d. sing.); *diē*, *fidē*, fr. *diēi*, *fidēi*, etc. Other exx. are found in *sīs* fr. *siēs*, *sīt*, earlier *seit*, fr. *siēt*, f.f. *syāt*; *tibī*, *tibei*, fr. *tibie*, f.f. of termn. *-bhya(m)*; so too in *uōbeis*, *uōbīs*, f.f. of termn. *bhya(m)s*; *senatūs* (gen. sing.) fr. *senā-tuis* (*-tuos*), *senatu* (d. sing.) fr. *senatui*, *cōgo* fr. **co-igo*, *equo* (d. sing.) fr. *equōi*, etc. Both vowels, however, remain in many cases, esp. *u* and *i* with its kindred *e* make no hiatus with follg. vowels, e.g. *fui*, *lues*, *fluunt* (*fluont*); the noun-termns. *-io*, *-ia*, *-ies*; *fieri*, *tenuia* (*tenvia*), *eunt*, *eo*, *meae*. In combination even *co-actus*, *de-esse*, *co-optare*, but also medially, *boo* (*boare*), etc. Hiatus in the middle of a word is almost always brought about by loss of consonn., e.g. *fluunt* fr. *flouont*, *boo* fr. *bouo*, etc. The laws of hiatus in Lat. need a further and more accurate settlement.

- § 38. Assimilation exercises a wide-spread influence; vowel assimilates vowel, both forwards and backwards, and also in case of indirect contact of vowels (passing over consonn.), causing both

partial and complete similarity; and the same effects are produced § 38. by consonants upon vowels (relationship between particular consonantal- and vowel-sounds). And, moreover, by this means immediate contact betw. like vowels is avoided, and dissimilation takes place.

Thus *aureolus*, *gladiolus*, even *vinolentus*, etc., stand for **aureulus*, **gladiulus*, **vinulentus*, fr. *aureu-s*, *gladiu-s*, *uinu-m*, cf. *longulus*, *turbulentus*; *duritie-s* beside *duriti-a*, etc.; cf. *siēm*, *siēs*, *siēt*, with Sk. *syām*, *syās*, *syāt*. In these and similar cases we see an assimilating influence of foregoing vowels on those follg.; consequently *o* is nearer to *e* and *i* than *u*, and *e* more akin to *i* than *a*.

A reflexive assimiln. passing over cons. occurs, e.g. in *ex-ul* but *exil-ium*, *facul-tas* but *facil-is*, *sta-bulum* but *sta-bilis*; *mihi*, *tibi*, but Umbr. *mehe*, *tefe*; *bene* but *bonus*.

For relation between *o* and *u*, vide § 33, 2; *u* has a special affinity for labials, and above all *m* and *l*. Hence from weakened *a* we get, not *i*, but *u*, in cases like *oc-cup-o*, *au-cup-ium*, bes. *capere*, *con-tubernium* (chummage) beside *tab-erna* (hut), *op-tum-us* (later only, *optimus*), etc.; bef. *l* older *o* became *u*, e.g. *poculum* fr. *pocolom*, *consul* fr. *cosol*, *epistula* fr. *ἐπιστολή*; through this weakening of *a*, before *l*+cons. we find *u*, not *i* or *e* (the regular representative of *i* before 2 consonn.), e.g. *salsus*, *insulsus*, *sepelio*, *sepultus*, etc.; further, *u* has remained before *n*+cons., e.g. *ferunt*, *homunculus* (cf. supr. § 32). Throughout, it represents here too an earlier *o*, wh. maintained itself intact in the popular diall., as later inscrr. and Ital. (e.g. *sepoltura* as early as 558 A.D., cf. Ital. *sepulcro*, *colonna*, Ital. *colonna*) prove.

Even origl. *i*—not weakened fr. *a*—gives way to *u* in cases like *testu-monium* (witness) beside *testi-s*; *carnu-fex* (flayer) beside *st. carni-* (n. *caro*, flesh), and the like; where, nevertheless, the analogy of the commoner cases may have had some influence.

e is retained by preference in final syll. bef. nasals, e.g. *septem*, cf. *ἐπτά*, *nōmen*, Sk. *nāman-*, *cornicen*, *√can*, *ouem* fr. *oui-m*, and

§ 38. so in most *i*-stems; in acc. sing. of *a*-stem nevertheless we find *o*, *u* (*nouo-m*, *nouu-m*); but above all *e* is found bef. *r*, e.g. *camera* fr. *καμάρα*, *operis* beside *nominis*; *stetērunt* for **steti-sonti*, cf. *stetis-ti*; *ueher-is* fr. *uehis-is*, cf. *uehit-ur*; *peperi* for **pepiri*, fr. *pario*, like *cecini* fr. *cano*; *affero*, not **af-fir-o*, wh. we might look for acc. to analogy, comparing such cases as *colligo* fr. *lego*.

r has also a preference for *o* (= *u*) preceding, e.g. *fo-re*, *fo-rem*, fr. *√fu* (*fu-turus*); Lat. *ancora* fr. Gk. *ἄγκυρα*; but *robur*, *ebur* with *u*, perh. on account of preceding *b*.

Further, *e* occurs bef. two or more consonn. interchangeably with *i* bef. one cons., e.g. *iudex* but *iudicis*; *eques-ter* for **equet-ter*, **equit-ter* but *equit-em*; *asellus* fr. **asin(u)lus*, cf. *asinus*; *consecro*, *abreptus*, etc. (but it remains *i* bef. *ng* in *attingo*, *infringo* and the like).

The sound-combinations *ent*, *end*, and *unt*, *und*, are weakened forms, e.g. *fer-ent-em* beside *e-unt-em* fr. **e-ont-em*, where the earlier sound *o*, *u*, has been kept in consequence of dissimiln., beside *e*, *uolunt-arius*; *faciendus* and *faciundus*, both fr. **faciendus*, remain in '*sacris faciundis*,' '*iure dicundo*,' and the like. After *u*, *e* is invariable: *tu-endus*, *restitu-endus*. *a* is throughout the origl. vowel in these cases.

i has a special affinity to *n* and *dentals*, and is the commonest weakening fr. *a*, e.g. *μηχανή* but *māchina*; *nominis*, *hominis*, *cecini*, fr. stems *gnāman-*, *ghaman-*, *ka-kan-*, etc.

By dissimiln. is prevented the combn. of two like vowels, e.g. *ueri-tas* fr. *ueru-s*, but *pie-tas* (*piu-s*), *ebrie-tas* (*ebriu-s*), etc., not **pii-tas*, etc.; *equit-is* (*eques*) but *abiēt-is*, *ariēt-is*, *pariet-is* (*abies*, *aries*, *paries*); *diuinus*, *diuo-s*, but *aliēnus* (*aliu-s*); *lēui-gare* (*lēuis*) but *uarie-gare* (*uariu-s*), etc. The first vowel is changed in *mēio* fr. **mīg-yo*, **mīo*: *ei*, *dei*, are older and more correct than *ii*, *dii*, etc. Through dissimiln. *o* kept ground longer after *u*, *v*, e.g. *equos*, *equom*, *nouom*, *mortuos*, etc.

§ 39. Through loss of consonants vowel-change takes place, viz.
1. Compensatory lengthening; 2. Contraction.

1. Compensatory lengthening, e.g. *pēs*, *ariēs* = **pēd-s*, § 39. *ariēt-s*; a regular shortening has here taken place later (§ 41), e.g. *pedēs* fr. *pedēs* = **pedēt-s*, *patēr* fr. *patēr* = **patēr-s*; *ferēs* = **ferēt-s* (cf. *φέρων* = *φεροντ-ς*); *sāl* (salt) = *sāl-s* (gen. *sāl-is*), cf. *ἄλς*, etc.; esp. often through loss of nasal bef. *s*, e.g. acc. pl. of *a-st*. *-ōs* (*nou-ōs*) = *-ons* (f.f. *nav-ans*); in compar. *-iōr*, *-iōrem*, fr. *-yans*, *-yansam*, etc.; further, *pōno* (place) = **pos-no* (cf. *pos-ui*), *quini* (by fives) = *quīncni*, *exāmen* (swarm) = *exāg-men* (*āgo*); thus *g* falls out esp. bef. *y*, e.g. *māior* (greater) = **māg-ior*, cf. *mag-nus* (great), *āio* (say) = **āg-io* (cf. *ad-āg-ium*, proverb), *mēio* (urino) = **mīio* = **mīgyo*, etc.

2. Contraction (vid. supr. § 37), e.g. *amārunt*, *amāsti*, *nōrunt*, *amō* (fr. **amao*), *docēs*, *audīs* (fr. **doce-is*, **audi-is*); *nouīs* = **nouo-is*, **noua-is* fr. **nouo-bios*, **noua-bios* (v. Decl.), etc. In redupl. perff. this case is very clear, e.g. *fēcī* fr. **fēfici*, cf. *cecini*, likew. *iēcī*, *frēgi*, etc.

Note.—Cases like *inuītare* (invite) = **uicitare*, √ *uōc*; *conuītium* (wrangle) = **conuīcitium* √ *uōc*; *suspītio* (suspicion) = **suspicitio*, etc. (on the last ex. cf. Fleckeisen, Rhein Museum, viii. 227; on the other side Corssen, Kritik. Beitr. s. 12 sqq., who writes *suspīcio*, *conuīcium*, and derives them accordingly, but assigns *inuītare* to an ambig. Sk. √ *vi*). Cf. § 77, 1. a. sub fin.

Weakening (lightening of vowels by change of quality § 40. with and without shortening) is very common in Lat., and throughout not exclusively confined to unaccentuate sylls., whence probably too the analogy of this weakening arose (cf. supr. § 32, 2; on the question cf. G. Curtius, das dreisilbengesetzt der Gk. u. Lat. betonung, in Kuhn's Zeitschrift, ix. 321 sqq.). Esp. regular is the occurrence of weakg. in sylls. of word-formation; in composition and in reduplication, but also in root sylls. Nevertheless, that the weakening did not invariably occur in the second member of a compound is proved by exx. such as *com-paro*, *per-agro*, *per-actus*, etc. (Corss. Kuhn's Zeitschr. xi. 370). Through weakening

§ 40. *a* becomes *e*; *fall-o fe-fell-i*, *parc-o pe-perc-i*, *fac-tus per-fec-tus*, etc.

a becomes *u*; *cap-io*, *oc-cup-o*; here belongs the *u* of the unaccentuated final sylls., e.g. *da-tu-s* f.f. *da-ta-s*; early Lat. *oper-us*, Sk. and f.f. *apas-as*, etc.: the change fr. *a* to *u* is through intermed. *o*.

a becomes *i*; e.g. *fac-io con-fic-io*, *pa-ter Iupi-ter*, *cad-o*, *ce-cid-i*, *can-o*, *ce-cin-i*, etc.; the change must be through intermed. *e*. *e* occurs for *i* acc. to the above-stated rule, in cases like *tubi-cen*, *pe-per-i*, *oper-is* for **opis-is* (*opos-os* f.f. *apas-as*), etc. Cf. § 38.

ā becomes *ē*; *hāl-o an-hēl-o*.

ae becomes *ī*; *quaer-o in-quīr-o*, *caed-o ce-cīd-i con-cīd-o*, *aequos in-īquos*, etc.

au becomes *ō*, *ū*; *caus-a ac-cūs-o*, *fauc-es suf-fōc-o*, *plaud-o ex-plōd-o*, etc.

Even long vowels and diphths. became *ī* (*ē*) by more marked shortening, e.g. *gnō-tus co-gnī-tus*, *iouro* (*iūro*), *pe-iēro*, *de-iēro* (*-yērō* for **-yiro*, with *e* for *i* bef. *r*, cf. § 38).

Before secondary suffixes, and as 1st member of compds., stems in *o*, *u*, weaken their stem-termns. before consonn. to *i*, e.g. *duri-tas*, *duri-ties*, st. *duro-* (*durus*); *corni-culum*, *corni-cen*, *corni-ger*, st. *cornu-*, etc.

Bef. vowels *u* remains, e.g. *fructu-arius fructu-osus*, st. *fructu-*; it also keeps ground bef. labials, e.g. *locu-ples*, *quadru-pes*, *quadru-plex*.

§ 41. Also shortening of vowels in unacc. final sylls. prevails very widely.

Thus *ā* in fem. is origl. *ā* (Sk. *ā*, *ṛ*), hence kept long sometimes in earlier Latin; *ē*, in abl. sing. of *i*-st. and of conson. stems, following their analogy, is origl. *-ait*, thence *-aid*, *-eid*, *-ēd*, *īd*, later *-ei*, *-ē*, *-ī* (so *patrē*, tit. Scip. Barb.); *ē* of the vb. sometimes appears short, e.g. *cauē*, *iubē*; *ī* in *mihī*, *tibī*, *ubī*, etc., is fr. earlier *ī*, *ei* through shortening, *mihei*, *tibei*, *ubei*, occur not seldom: final *ō* always represents origl. *ō*, e.g. *homō* = **homon-s*;

agō cf. ἄγω, f.f. *ag-āmi*, next step *ag-ā* by loss of *mi*; *egō* cf. § 41. ἐγώ; in these cases the nasal may have caused the dulling of *ā* to *ō*; *duo*, *ambo*, *octo*, cf. δύο, ἄμφω, ὀκτώ.

Shortening occurs regularly bef. final *t*; *amā-t* for *-āt=-ait*, *-aat* fr. *-ayati*; cf. *amā-mus*; so *-et*, *-it*, in the derived vbs. and in opt. fr. *-ēt*, *-it*, earlier *-eit*: also *-it* in pf. was sounded *-eit* in earlier times, and the like.

Similarly bef. other consonn., e.g. *-is* of opt. (*feceris*) for and beside *-īs* (*fecerīs*); *pa-tēr* fr. *pa-tēr* (cf. πατήρ) for **pa-ters*; *-ōr* in nom. sing. fr. *-ōr*, e.g. *censōr* (tit. Scip.) fr. **cens-tor-s*, and many more such.

Evaporation in unacc. sylls. brings us to total loss, final and § 42. medial loss of vowels (§ 32).

Final loss of vowels is partly of late date only, e.g. *animal* for and beside *animale*, *dic* for and bes. *dice*, *hoc* for and bes. *hoce*, *ut* for and bes. *uti*; partly older, e.g. *uehis* for **uehisi*, f.f. *vaghasi*; *est*, *uehit*, for **esti*, **uehiti*, f.f. *asti*, *vaghati* (*tremonti* has remained, Bergk. index lect. Marburg, 1847-8), etc.

Medial loss of weakly-accented vowels is esp. common in Lat., and occurs (1.) bef. vowels, e.g. *minor*, *minus*, for **minior*, **minius*; *nullus* for *ne-ullus*, etc.; cases can be produced where no contraction has taken place, e.g. *un-ōculus* (*uno-oculus*), *sem-ānimus* (*semi-animus*), *nūtiqum* (*ne-utiquam*). (2.) bef. consonn., the commonest case, e.g. *alumnus*, *uertumnus*, for **alumenus*, **uertumenus*, suff.=Gk. *-μενο-*, Sk. *-māna-*; *stella* for **sterla* fr. **sterula*; *puella* for **puerla* fr. **puerula*; *misellus* for **miserlus* fr. **miserulus*; *patrem* for **pater-em*, st. *pater-*; *rettuli* fr. **re-tetuli*; *reppuli* fr. **re-pepuli*; *repperi* fr. **re-peperi*, and so on. Thus the loss of medial vowels is chiefly approved betw. like consonn. (as in Mid.H.G., Zeitschr. x. 160). Unacc. *i* may altogether disappear, e.g. *dixti* fr. *dixisti*, *ualde* fr. *ualide*, *gaudeo* fr. **gauideo* (cf. *gavisus*), etc.

Of special importance in treatment of declension is the medial loss of origl. *a* and *i*, i.e. *o* or *u* and *i* before the *s* of nom. sing.

§ 42. Thus arises *puer*, etc., fr. **puers*, which comes fr. *puero-s*, *puerus* (in existence), *uir* fr. **uirs*, **uiros*, *acer* (§ 43) fr. *acris*, etc. This is noticeably regular after *r* with short syll. precedg.; hence *quatuor* stands for **quatuors*, **quatuores*, cf. τέσσαρες, Sk. *katvāras*; after the vowel had been lost, the *s* also fell off from the *r*. Such forms as *famul* (Enn. Ann.) are obsol.; it stands for **famuls* fr. *famulos*, *damnas* for **damnats* fr. *damnatos*; *alis* for *alios* (vouched for more than once); *Sallustis*, *Clodis* (Inscr.) for *Sallustios*, *Clodios*, etc.; *alid* for **aliud*, *aliud*.

Loss of *i* in *i-st.* is remarkably common, whereby its Lat. nom. has become thoroughly confused with that of conson. stems, thus e.g. *primas* for older *primatis*, *gens* fr. **gents* and this fr. **gen-ti-s*, *mors* for **morts* fr. **mor-ti-s*, fr. √*gen*, origl. *gan* (gignere), and √*mor*, origl. *mar* (mori), f.f. therefore *gan-ti-s*, *mar-ti-s*, and the like. Further *acer* for and bes. *acris*, *uigil* fr. *uigilis*, etc.

Note.—The occasional omission of vowels in the text of Inscr. which could not take place in the spoken lang. (e.g. *decumius*, *fecit*, *uixit* for *Decumius*, *fecit*, *uixit*) has been pointed out by Ritschl. (Rhein. Mus. n. Folge xvi. p. 601 sqq.; xvii. p. 144 sqq.).

§ 43. Insertion of a helping-vowel likewise sometimes occurs in Lat., e.g. *s-u-m* fr. **es-mi*, **es-u-mi*, origl. *as-mi*; *s-u-mus* fr. **es-mus*, **es-u-mus*, origl. *as-masi*; *uol-u-mus* fr. **uol-mus*, f.f. *var-masi*, cf. *uol-t*, f.f. *var-ti*; *teg-u-mentum* (hence *teg-i-mentum*) bes. *teg-mentum*, and the like belong likewise here; *u* is here the helping-vowel on account of *m* following, cf. *drach-u-ma* (Plaut.) fr. δραχμή, since in general a similar vowel-insertion was admitted in foreign words, as e.g. *tech-i-na* (Plaut.) from τέχνη, etc.

Bef. *r*, *e=i* (§ 38), e.g. *um-e-rus* (shoulder) bes. Sk. *āsa-s* for **amsa-s*, *rub-e-r* (red) for **rubr* fr. **rubrs*, **rub-ro-s*=ἐρυθρός, Sk. also with helping-vowel *rudh-i-rá-s*, origl. *rudh-ra-s*; *gener* (son-in-law) for **gen-r(o-s)*, cf. γαμβρός for **γαμ-pó-s*; *ager* (field) for **ag-r(o-s)*, Gk. ἀγρός; *caper* (he-goat) for **cap-r(o-s)*, a form like κάπ-ρ-ος (boar), etc.

The common helping-vowel *i* may generally be regarded as § 43. a weakening of an older *u* or *e*: it occurs rather irregularly (cf. Ritschl. Rh. M. n. F. 1862, 607 sqq.) in e.g. *mor-i-turus* bes. *mor-tuos*, *or-i-turus* bes. *or-tus*, etc. After the analogy of consonl. roots this *i* is found also in the case of roots ending in a vowel, e.g. *ru-i-turus*, *di-ru-i-tus* bes. *diru-tus*, *tu-i-tus* bes. *tu-tus*, etc.

B. CONSONANTS.

§ 44. CONSONANTS OF THE INDO-EUROPEAN ORIGINAL LANGUAGE.

The consonn. in Indo-Eur. are specially distinguished from the vowels, setting aside their physiological conditions, in that they are fixed and invariable in roots (we may pass over the changes which they undergo in consequence of sound-laws that are always secondary), but cannot, like vowels, raise themselves in a definite scale of gradation. Whilst the nine origl. vowel-sounds of the Indo-Eur. can be reduced to three fundamental vowels, the consonn. are collectively independent of one another. Whilst the vowels by means of their step-formation according to meaning thereby serve for the expression of *relation*, consonn. are merely elements of expression of *meaning*; no relationship is expressed in Indo-Eur. by the use of root-consonn.

The Indo-Eur. origl. lang. has fifteen consonn., which in § 1 are classed according to their physiological conditions, viz. three momentary mutes, three mom. sonants, three mom. son. aspirates, three spirants, and three so-called liquids, i.e. two nasals and *r*. The existence of *b* (mom. son. labial) in the origl. lang. cannot be authenticated by any perfectly certain example: but it is highly probable that it did exist, as the origl. element of the frequent aspirate *bh*. The number of origl. consonn. is also much greater than that of the vowels (prob. 3×3 , but certainly 2×3 existed).

The aspirates, as double sounds, seem to be foreign to the most original condition of the lang., and to have developed only in later times: but they certainly existed before the first splitting-up of the origl. lang., for they are found in the three divisions of the Indo-Eur., or at least they can be detected;

that is, they occur in Aryan and in S.-European; in N.-Euro-§ 44. pean likewise they must once have existed: the Teutonic has them, it is true, like the other northern langg., changed to *sonants*, but the origl. *sonants* are distinguished from them by becoming *tenues*.

Consonantal sound-laws had not arisen so early as the origl. lang.; consonn. can be placed anywhere, and in any combination which the organism of the lang. required, because these combinations (e.g. *vāk-bhis* inst. pl. fr. st. *vāk*, voice) were not yet so close that those consonn. which are brought together by word-formation exercised any influence on one another (thus e.g. in *vāk-bhis* the influence of *bh* on *k* produces as early as Sk. the fm. *vāg-bhis*: *k* has here changed bef. sonant *bh* into its corresponding son. *g*: on the improbability of origl. interchange of *i*, *u*, with *y*, *v*, cf. § 3).

EXAMPLES.

§ 45.

Momentary mute unaspirated consonants.

1. *k*. *ka-s* (who), *ka* (-que, and), *katvār-as* (four), *kankan* (five), *kard* (heart), *√kak* (cook), *√ka* and *ak* (be sharp, quick), *√ki* (lie), *√kru* (hear), *kru-ta-s* (heard), *kvan-s* (dog), *√skid* (cut), *√vak* (speak), *√dak* (bite), *√dik* (show), *√ruk* (light), *ak-man-s* (stone, heaven), *dakan* (ten), *varka-s* (wolf); sf. -*ka*, etc.

2. *t*. *ta-t* (that), *tu* (thou), *√ta*, *tan* (stretch), *tri* (three), *√sta* (stand), *stag* (cover), *√pat* (fly, fall), *√prat* (broad), *√vart* (turn); common in stem- and word-formative particles, e.g. sf. -*ta* (pf. pt. pass.), *bhara-ti* (fer-t), *ragh-is-ta-s* (ἐλάχιστος), etc.

3. *p*. *√pa* (drink), *√pa* (protect, rule), thence *pa-ti-s* (lord) and *pa-tar-s* (father), *par* (fill), hence *paru-s* (many) and *par-na-s* (full), *√pad* (go) as noun-st. n. sing. *pad-s* (foot), *pratu-s* (πλάτύς), *√pru* (flow), *prav-ati* (he flows), *√spak* (see, look), *√sarp* (creep, serpere), *√tap* (burn, heat), *√svap* (sleep) thence *svap-na-s* (sleep, n.), etc.

§ 46. Momentary sonant unaspirated consonants.

1. *g*. √*ga* (go), 1 sing. pres. *ga-gā-mi*, √*ga*, *gan* (be born), √*gan* (know), √*ag* (agere), *ag-ni-s* (ig-ni-s), √*grabh* (grasp), √*yu-g* (iungere), thence *yug-am* (yoke, iug-um), etc.

2. *d*. √*da* (dare), 1 sing. pres. *da-dā-mi*, √*dak* (bite), √*dam* (tame, domare), *dama-s* (domus), √*dik* (show), √*div* (shine), st. *dva-* (two), √*ad* (eat), √*sad* (sit), √*vid* (uidere), 1 sing. pres. *vid-mi*, etc.

3. *b*. I know of no certain example of this sound.

Note.—The Teutonic and Gk. forms of those words that show *b* in the Aryan and S.-European langg. point partly to *bh*, e.g. Sk. √*bandh* (bind), but Goth. *band*, f.f. therefore *bhandh*, Gk. √*πενθ* for **φενθ*, *πενθ-ερός* (affinis), *πείσμα* for **πένθ-μα* (cable); Sk. *bāhús* (fore-arm), Gk. *πῆχυς* for **φῆχυς*, N.-Eur. *bōgr*, O.H.G. *puoc*, origl. initial-sound *bh*; Sk. √*budh* (know), Gk. √*πυθ* (*πυνζάνομαι*) for **φυθ*, Goth. *bud*, not **pud*, as might be expected fr origl. *b* (moreover the Goth. root, notwithstanding the difference of function, is identical with *budh*, *πυθ*); if *b* were origl., the Gk. fms. would be **βενθ*, **βηχυς*, **βυθ*. These three roots have a final asp., which was the effect of the disappearance of an origl. asp. at the beginning in Aryan and Gk. (this conjecture has been ably confirmed by Grassmann, Zeitschr. xii. 110). In other instt. we lack decisive representatives in N.-European, e.g. *βραχύς*, *breviis*, Slav. *brŭzŭ*; Sk. √*lab*, *lamb* (labi, delabi; 3 sing. pres. *lāmbatē*), Lat. *lab*. (*lāb-itur*), etc.; *κάνναβις* (hemp), Norse *hanpr*, O.Bulg. *konoplya*, a doubtful and borrowed form. Grassm. Zeitschr. xii. 122 sqq. shows it to be likely that *b* did not exist in Indo.-Eur., at least at the beginning of a word. Nor have I found any certain exx., ap. Bickell Zeitschr. xiv. 425 sqq., of the origl. existence of *lab*, son. in Indo.-Eur.

§ 47. Momentary sonant aspirated consonants.

1. *gh*. √*ghar*, *ghra* (burn, shine; be green, yellow), *ghans-s* (m. f. *goose*), √*stigh* (step), √*agh*, *angh* (be tight), √*vagh* (uehere), √*migh* (mingo), √*righ* (lick), *dargha-s* (long), etc.

2. *dh*. √*dha* (set, make), 1 sing. pres. *dha-dhāmi*, √*dham* (blow), √*idh* (burn), √*rudh* (be, become red) thence *rudhra-s* and *rāudha-s* (red), *madhu* (honey, mead), *madhya-s* (medius), etc.

3. *bh*. $\sqrt{bha}$ (shine, speak), $\sqrt{bhar}$ (bear, ferre), 1 sing. pres. § 47, *bhar-āmi*, $\sqrt{bhu}$ (be, become), 1 sing. pres. *bhav-āmi*, $\sqrt{bhug}$ (bend, flee), *bhrā-tar-s* (brother), $\sqrt{grabh}$ (grasp), *nabha-s* (neut. nubes), *-bhi* common case-sf. *bh* is not very common in st.-formative particles.

CONSONANTAL PROLONGED-SOUNDS.

§ 48.

Spirants.

1. *y*. *ya-s* (which), *yuga-m* (yoke, iugu-m), $\sqrt{yug}$, *yu* (iungere); very common in st.-formative particles, e.g. *madh-ya-s* (medius), *as-yā-t* (sit, siēt), *bhāra-yā-mi* (φορέω), compar. sf. *-yans* (prob. also *-yant*); also in word-formative sff., e.g. *-bhyam*, *-bhyams*, sf. of dat. sing. pl. *-sya*, sf. of gen. sing. masc. of *a-st.*, etc. As a medial sound, *y* is akin to *i*, cf. § 3.

2. *s*. $\sqrt{sad}$ (sit), *saptan* (seven), $\sqrt{su}$ (sow), thence *su-nu-s* (son), $\sqrt{sru}$ (flow), $\sqrt{svid}$ (sweat), $\sqrt{sta}$ (stand), $\sqrt{star}$ (strew), $\sqrt{smar}$ (remember), $\sqrt{as}$, pres. *as-mi* (sum), $\sqrt{us}$ (urere), $\sqrt{vas}$ (dwell, clothe oneself), $\sqrt{tars}$ (torrere, thirst), *sva-star-s* (sister); common in word-formative partt., e.g. *akva-s* (equos), nom. sg. masc., *akvā-sas*, nom. pl. masc., etc.; also in st. forms, e.g. *man-as* (mind), etc.

3. *v*. $\sqrt{va}$ (flow), $\sqrt{vam}$ (uomere), $\sqrt{vak}$ (speak), thence *vāk-s* (voice), $\sqrt{vagh}$ (carry, uehere), 1 sing. pres. *vagh-āmi*, $\sqrt{var}$ (will), $\sqrt{vart}$ (turn, uertere), *auī-s* (ouis), $\sqrt{vid}$ (see, know), *naua-s* (new, nouos); in stem-formative partt., e.g. sf. *-vant*, Sk. *-vant*, *-vans*, Gk. *-Fevτ*, *-Forτ*; rarer in word-formative partt., e.g. loc. pl. *-sva*, etc.; *v* as a medial sound is akin to *u*, vid. § 3.

Nasals.

§ 49.

1. *n*. *na*, *an-* (negation), $\sqrt{nak}$ (die), thence *nak-ti-s* (night), *nava-s* (nouos), *nāu-s*, gen. *nāv-as* (nauis), $\sqrt{gan}$ (be born, know), st. *ana-* (dem. pron.); *n* is common in st.-and word-formative partt., e.g. *par-na-s* (plenus; past part. pass.), *ak-man-s* (stone), *gnā-man* (name), *bhara-nti* (ferunt), etc.

- § 49. 2. *m*. $\sqrt{ma}$, *ma-n* (measure, think), thence *ma-na-s* (mind) and *mā-tar-s* (mother), $\sqrt{mar}$ (mori), $\sqrt{smar}$ (remember), $\sqrt{vam}$ (uomere); common in word-formative partt., e.g. *varka-m* (acc. sg.), *ai-mi*, *i-masi* (eo, imus, 1 sg. pl. pres.), etc.; in st-formative partt., e.g. *ghar-ma-s* (heat), *gnā-man* (name).
- § 50. *r*. $\sqrt{rak}$ (shriek), $\sqrt{ruk}$ (light), $\sqrt{rik}$ (liquere), $\sqrt{righ}$ (lick), $\sqrt{rudh}$ (rubere), *raghu-s* (light, adj.), $\sqrt{kru}$ (hear), $\sqrt{bhar}$ (ferre), $\sqrt{ar}$ (oriri, ire; arare), $\sqrt{par}$ (fill); also in stem-formative partt., e.g. sf. *tar*, *bhrā-tar-*, *mā-tar-*, and the like, but not in word-formative sff.

§ 51.

SANSKRIT CONSONANTS.

The physiologically-arranged table of Sk. consonn. is in § 4, where also their pronunciation is considered. Whilst the vowel system of Sk. is generally original, its conson. system is mixed in many ways with later elements. Hence arises that large number of conson.-sounds which is unparalleled in other Indo-Eur. langg.

The origl. sounds in Sk. are the mom. mutes and sonants, and the sonant aspp. all of gutt., dent., and lab. quality, thus, *k*, *t*, *p*; *g*, *d*, *b* (?); *gh*, *dh*, *bh*; further the spirants *y*, *s*, *v*, and also *n*, *m*, *r*. Thus Sk. still possesses the consonn. of the Indo-Eur. origl. lang. entire. All the rest, nineteen in number, have arisen in pure Aryan words from these fifteen origl. consonn., and are to be treated as parallel fms. of them, which have been called forth according to generally perceptible sound-laws, and through the influence of the non-Indo-Eur. langg. spoken by Dravidian (Dekhanic) peoples who were pressed back by the Aryans, and were the earlier inhabitants of the peninsula of Further India, just as neighbouring langg. very often acquire sounds from one another.

The origin of the so-called Sk. lingual mom. consonn. and ling. nasal (*t̪*, *d̪*, *t̪h*, *d̪h*, *ṇ*) is due to the latter influence, therefore these sounds are peculiar to Indian, and are unknown in this form to other Indo-Eur. langg. Within the Indian these

sounds gain a still wider sway in the course of the development § 51, of the lang. (in the Prākritis). In Aryan words they are variations of their corresponding dentals.

Further the palat. mom. sounds and their nasal are all unorigl. (*ḳ, ġ, ḳh, ġh, ṇ*); they have arisen from the corresponding gutturals; and so is the pal. mute spirant *ç*, which is a variation fr. *k*. The law acc. to which the gutt. partly pass into palatals, partly remain, is hitherto unexplained in particular cases (however, that the change of gutt. into palat. did not occur till late, is implied by the circumstance that the gutt. were reduplicated by means of the corresponding palatals).

Unorigl. also are all the tenues aspp. (*kh, th, ph*; in the case of *ḳh* and *ṭh* the unoriginality is sufficiently clear from the nature of the unasp. sound), whose origin is in known cases mainly caused by foregoing *s* (*kh, ḳh=sk, sth=st*).

Unorigl. also is *h*, which mostly represents *gh*, sometimes also other aspp.; *ś* occurs partly acc. to definite sound-laws, partly without perceptible reason for *s*; *ḥ* (visarga) is an altogether late variation of *s*, and confined almost entirely to the termination.

The gutt. and palat. nasals stand only bef. mom. consonn. of their own quality, by which therefore they are conditioned; the nasalisation of the vowels (˜) is likewise dependent on the follg. conson.; it occurs bef. *s* and *h* (bef. other consonn. it is often merely a way of writing nasal consonn.).

l bes. *r*, is as in other langg., unorigl.; it obviously increases in the course of the development of Sk.

Besides the sound-laws already explained, Sk. has numerous laws for medial sounds, but esp. for termn. (these laws however do not belong here, but rather to Sk. special grammar), through which the conson.-syst. of Sk. became considerably removed from the basis of the origl. lang.

The representation of gutt. by palatals occurs only bef. vowels and sonant mom. prolonged sounds, not bef. mom. consonn., mute conson.-prolonged-sounds, and in termin. Yet here also

§ 51. occur palatals by no means acc. to fixed sound-laws (e.g. *yu-yōg-a* iunxi, bes. *yōg-a-s* iunctio), so that it seems that the lang. has availed itself of the change of gutt. into palatals (originally merely physiological), in order to express differences of relation.

EXAMPLES.

§ 52. Origl. mom. mute unaspirated consonn.

1. Origl. *k*=Sk. *k*, *k̐*, *kh*, *k̐h*, *ç*, *p*.

Sk. *k*=origl. *k*, e.g. in *ka-s* (who), *√kar* (make), *k'mi-s* (worm), *vika-s* (wolf), st.-formative sf. *-ka*, e.g. *dhārmi-ka-s* (right, fr. *dharmā-s*, duty), etc.

Sk. *k̐*=origl. *k*, *k̐a-kāra* (feci), *k̐a-* is the relic of the most origl. reduplicated supposed *√kar*; *k̐a* (-que, and), *katvār-as* (quatuor); *√ruk̐* (shine), *√vak̐* (speak), whence *vāk-mi* (I speak), *vāk-am* (uocem, speech); *k̐* stands for *k* esp. in *√termn.*, etc.

Note.—Bef. mom. sounds and *s* the gutt. remains, e.g. *vāk-ti* (he speaks), *vāk-ši* (thou speakest, *ś* for *s* after *k*, v. § 55, 2), *vag-dhi* (speak), *g* for *k* acc. to sound-laws, v. post., etc.

kh and *k̐h* occur for origl. *k* after *s*; this *s* more often than not is lost in case of *skh*, in case of *k̐h* always. [For aspirating force of *s*, v. Kuhn, Zeitschr. iii. p. 321 sqq., 426 sqq. Cf. also Ascoli, Zeitschr. xvi. p. 442 sqq.]

Sk. *kh*=origl. *sk*, e.g. *khaṅga-s* (limping), cf. O.H.G. *hinch-an*, *hink-an*, *√hank*, likewise without initial *s*, but Gk. *σκάζω* (limp), *√σκαγ*=Sk. *khaṅg*, f.f. *skag*; *khaṅga-s* (stirrer), cf. Ang.-Sax. *scac-an*, Norse *skak-a* (shake); *khaṅ* (spring forth), cf. Slav. *skak-ati* (spring).

Note.—Most words in *kh* cannot, or at least not certainly, be reduced to their f.f.

Sk. *k̐h*=origl. *sk*, e.g. *√k̐hid* (split), Zend *çkid*, Lat. *scid*, f.f. *skid*; *k̐hāyā* (cover), cf. Gk. *σκιά*; *gāk̐khāmi*, f.f. *gaskāmi* (the redupln. of *k̐h* to *k̐kh* is regularly written so after a short vowel), and in similarly fmd. pres. stt.

Note.—Bef. *t*, *th*, *kh* becomes *ś*, e.g. *práś-tum* (*t* for *t* after *ś*), § 52. infin., *√prakh*, f.f. prob. *prask*, with unorigl. *s*; cf. Lat. *prec* (*precor*), *proc* (*procax*), Lith. *prasz*, Sclav. *pros*, Germ. *frah* (*fraihnan*), Sk. *praç-ná-s* (prayer) for **prak-na-s*; but e.g. *prak-śyáti* fut. with *k* acc. to usual rule.

ç=origl. *k*; *√çi* (*çēte*=*κεῖται*); *ça* and *aç* (*acuere*), pres. (*a*)*ç-yáti*, *çā-tá-s*, *ci-tá-s* (*acutus*), whence also *áčman-* (n. *áčmā*, stone); *√çru* (hear); *çvan-*, n. *çvā* (hound); *√diç* (show); *√daç* (bite); *dáçan-* (ten), etc. *ç* is a favourite sound esp. bef. liq. consonn. and *v*; further in *√termns.*, in place of *k*; it is however not uncommon at the beginning of roots.

In verb stt. *k* remains bef. *s*, though *ç* was produced from it in other circumstances, e.g. *á-dik-śat* (*ἐ-δεικ-σε*, after *k*, *ś* stands for *s*, v. post.), so in certain noun stt., e.g. *dik-śú*, loc. pl. fr. st. *diç-* (n. sg. *dik* for **dik-s*, gen. *diç-ás*, quarter of the compass), dat. pl. *dig-bhyás* acc. to sound-laws (v. post.) for **dik-bhyas*. Other noun. stt. let their *ç*, however, interchange with *t*, *d*, unoriginally. Bef. *t*, *th*, *ç* becomes *ś*, which *t*, *th*, then become lingual, e.g. *√darç* (Gk. *δερε*, see), but *drś-tá-s* (past part. pass.) for **drç-ta-s*, f.f. *dark-ta-s*.

Sk. *p*=origl. *k* occurs only sporadically. This change fr. *k* to *p* is seen in all Indo-Eur. langg. except Lat. and Erse; e.g. *√pak* (cook) for origl. *kak*. Whilst Lat. *√coc* preserves both gutt., which evidently arose fr. redupln. of origl. *√ka*, Gk. has in *πεν* permitted labials to arise in both cases, Sk. *pak* and Scl. *pek* have only changed the initial, and Lith. *kep* contrariwise the final. This ex. is specially full of information, and points unmistakably to the originality of the *k*, hence the *√fm.* is in these cases *kak*. Further *pánkan-* (five) for **kankan*; *√sap* (sequi, Vēdic) seems to be a bye-fm. of *sak* (sequi), f.f. *sak*, so that in this root also two variations fr. origl. *k* are to be seen; st. *ap-* (water) must stand bes. Lat. *aq-ua*, Goth. *ah-va* (river), for origl. *ak-*, Lith. *ùpe* shows likewise the change fr. *k* to *p*, f.f. of *ùpe* is thus **ak-yā*, and the root of this word is probably

§ 52. *ak* (be swift). [On the change of origl. *k* to *p*, wh. often does not appear till late in certain words, while in others *k* remains, cf. Beitr. iii. 283 sqq.]

Note.—In the words *hrd-*, *hrd-aya-m* (heart), *h*=origl. *k*, clearly through intermed. *kh*; origl. *k* is attested by *cord-is*, *καρδ-ία* *hairt-ō*, Lith. *szird-is*, Sl. *srūd-ice*. In *√guh* (hide, 3 sg. pres. *gúh-ati*, *gúh-ā*, cairn) *g* is softened fr. *k*, f.f. of root therefore is *kudh*, as Gk. *κεύθ-ω* (hide), Lat. *cus-tos* for **cud-tos*, Ang.-Sax. *hyd-an*, prove.

2. Origl. *t*=Sk. *t*, *th*.

Sk. *t*=origl. *t*, e.g. *ta-t* (that), origl. id.; *tē-am* (thou); *√ta*, *tan*, 1 sg. pres. *ta-nōmi* (stretch); *pát-ati* (3 sg. pres.), *√pat* (fly, fall); *várt-atē* (3 sg. pres. med), *√vart* (uertere); sf. of past part. pass., e.g. in *yuk-tá-s* (*√yug*, *yuḡ*, iungere), cf. *iunc-tu-s*, *ζευκ-τό-ς*; sf. *ti* of 3 pers. vb., e.g. 3 sg. *bhára-ti*, 3 pl. *bhára-nti*, cf. *φέρε-(τ)ι*, *φέρο-ντι*, *fer-t*, *feru-nt*, Goth. *bairi-th*, *baira-nd*, etc.

Sk. *th*=origl. *t*, esp. after *s*, e.g. *√stha* (stand), e.g. *sthi-tás*, origl. *sta-ta-s* (status); *√sthaḡ* (cover), cf. Gk. *στεγ*, Lith. *steg*; superl. sf. *-iṣṭha*, e.g. *lúgh-iṣṭha-s*, cf. *ἐ-λάχιστος* (here *th* has become *th* acc. to sound-laws after *ṣ*). Sometimes *th* stands for *t* without being caused by preceding *s*, thus *tha*, termn. 2 sg. pf., e.g. *babhár-tha* (thou hast borne) could hardly have had an *s* inserted bef. it; as a *√termn.* in *√prath* (be wide, broad), 3 sg. *práth-atē*, *prth-ús* (*πλατύς*); *√math*, *manth* (move), 1 sg. pres. *math-nāmi*, *mánth-āmi*, where origl. *st* must not be assumed.

Note 1.—The unoriginality of *th* is shown by the fact that it does not appear at the beginning of words (except in the few onomatopoeitic or unused and unorigl. words given in Lexx.).

Note 2.—It appears that after *k* (in those cases where *t* though part of a sf. was not felt to be such) this *t* passed into *s*; *s* however in these instances becomes *ś* (v. post. § 55, 2), e.g. *rkṣa-s* (bear)=*ῥκτο-ς*, *ursu-s* for **urctus* (cf. post. sub Lat.); st. *tákṣan-* (carpenter)=*τέκτον-*; *√kṣan* (slay) further fm. fr. *kṣa*, cf. *κτεν* in *κτείνω*; *√kṣi* (dwell), Gk. *κτι* (*ἀμφι-κτί-νες*, dwellers-around, *κτί-ζω*, build), etc. Contrariwise, e.g. *uktá-s*

(said), past part. pass.; *vák-ti*, 3 sg. pres. $\sqrt{vak}$, origl. *vak* (say, § 52. speak); st. *çak-tár-* (fut. part.), *çak-tá-* (past part.), $\sqrt{çak}$ (know, be able), etc.

3. Origl. *p*=Sk. *p*, *ph*.

Sk. *p*=origl. *p*, e.g. $\sqrt{pa}$ (drink, protect), whence *pá-ti-s* (lord), *pi-tár-* n.sg. *pi-tā* (father); $\sqrt{par}$ (fill), 3 sg. pres. *pi-par-ti*, whence *pūr-ṇá-s* for **par-na-s* (plenus); $\sqrt{spaç}$ (see, spy) in *spaç-a-s* (spy), *vi-spaṣṭá-s* (perspicuos) for **vi-spaç-ta-s* (past part. pass.); $\sqrt{tap}$, 3 sg. pres. *táp-ati* (heat, burn); $\sqrt{sarp}$, 3 sg. pres. *sárp-ati* (serpere, ire), etc.

Sk. *ph*=origl. *p*, esp. after *s*, e.g. *sphaṭi* (alum), *sphātika-s* (crystal), cf. German *spat*; $\sqrt{sphur}$, 3 sg. pres. *sphur-āti* (shake, in Vēd. the root means 'strike, push'), clearly fr. **sphar*, cf. *σπαίρω*, *ἀ-σπαίρω*, O.H.G. *sporo* (spur), *spor* (track); *phēna-s* (foam), cf. Scl. *pěna*, Lith. *pěna-s* (milk); Lat. *spūma*, provided it comes fr. **spoi-ma*, would here also point to *sp*, in *phē-na-s* etc. we must therefore assume a root *spi*, etc. For the rest, *ph* is not frequent in initio.

The aspiration of tenues after *s* is not, however, by any means universal, as is shown by the common combinations *sk* (*skánd-ati*, scandit), *st* (*str-ṇāti*, sternit), *sp* (*sprç-āti*, touches).

Origl. mom. sonant unasp. consonn.

§ 53.

1. Origl. *g*=Sk. *g*, *g* (*h*).

Sk. *g*=origl. *g*, e.g. $\sqrt{ga}$ (go) in *gá-gā-ti*, *gī-gā-ti*, 3 sg. pres., *ga-tá-s* (past part. pres.), *á-gā-t* (3 sg. aor.); *yugá-m* (iugum); *grabh*, *grah* (seize), etc.

Sk. *g*=origl. *g*, e.g. *gī-gā-mi* (βίβημι), 1 sg. pres. $\sqrt{ga}$ (go); *yu-ná-g-mi*, 1 sg. pres. $\sqrt{yug}$ (iungere), cf. parallel *yug-á-m* with *g* preserved; $\sqrt{gan}$ (gignere), e.g. *gán-as*=Lat. *gen-us*, 1, 3, sg. ind. pf. *gá-gān-a*=γέγονα, γέγονε; *gñā-tá-s*=(*g*)*nō-tus*, $\sqrt{gñā}$ fr. *gan*, origl. *gan*, etc.

Note.—Bef. *t* in many cases we find not the gutt. but an un-origl. *ś*, e.g. *srś-tá-s*, past part. pass. $\sqrt{sarś}$ (do); *mārś-ti*, 3 sg. pres. $\sqrt{marś}$ (cleanse, wash away). Sometimes also *g* is interchanged with *ḍ* and *ṭ*, acc. to the quality of the following sounds.

§ 53. In more cases in Sk. *h* (= *gh*) stands where Gk. and the other langg. point to origl. *g*, so that in Sk. we must assume an unorigl. aspiration, e.g. st. *mah-ánt-*, i.e. **magh-ant-* (big), but parallel to it *maḡ-mán-* (strong), cf. Gk. *μέγας*, *μέγιστος*, Goth. *mik-ils* (big), Lat. *mag-nus*; indeed beside it stands Sk. $\sqrt{mah}$ = *magh* (to wax), which exactly corresponds to Goth. $\sqrt{mag}$ (can, be able); *hānu-s* (jaw) = Gk. *γένυς*, Goth. *kinnu-s* (chin), cf. Lat. *gena*, and (dens) *genu-inus*; *ahám*, i.e. **agham* = *ἐγώ*, Goth. *ik*, Lat. *ego*; *gha*, *ha* = Gk. *-γε*, Dôr. *-γα*, Goth. *-k* (in *mi-k* = **με-γε*). In all these cases Gk. *γ* = Goth. *k* are in favour of origl. *g*.

2. Origl. *d* = Sk. *d*, e.g. $\sqrt{da}$ (dare), 3 sg. pres. med. *dá-da-tē*, 2 sg. imper. med. epic *dá-da-sva*, 1 sg. pres. act. *dá-dā-mi*; $\sqrt{dam}$ (domare), e.g. *dam-á-s*, *dām-ana-s* (domans, coercens), 3 sg. pres. *dām-yá-ti*; $\sqrt{vid}$ (uidere), e.g. 1 sg. pres. *véd-mi*, 1, 3, sg. pf. *véd-a* = *Foîda*, *Foîde*; $\sqrt{sad}$ (sidere, considerare), e.g. 3 aor. sg. *á-sad-at*, etc.

Note.—*d* in *pīd* (press) and *nīdā-* seems to have arisen from *sd*, namely in case of *pīd*, which is proved unoriginal through *i* and *d*, comes fr. **pisd*, **pi-sad* = *api-sad*, cf. *πιέζω* = **πι-σεδ-yō* = **ἐπι-σεδ-yō*; bes. *nīdā-s*, *nīdā-m*, stands Lat. *nīdu-s*, which may very likely be for **nisdus* (cf. *iu(s)-dex*, *i(s)dem*; v. sub Lat. 'consonn.'), to which Teutonic *nest* points; **nīda-s* would then have arisen from **nī-sada-s*, and mean "down-sitting," unless it belong to $\sqrt{nas}$, on which point v. Curt. Gr. Et.² no. 432, p. 282.

3. Sk. *b* (cf. § 46, 3), which may be held unorigl., occurs, e.g. in *bala-m* (force), with which is usually classed O. Bulg. *bolij* (greater); $\sqrt{lab}$, *lamb* (labi), 3 sg. pres. *lāmb-atē*, Lat. *lab*.

§ 54. Origl. mom. sonant asp. consonn.

1. Origl. *gh* = Sk. *gh*, *h*.

Sk. *gh* = origl. *gh*, e.g. $\sqrt{agh}$ in *agh-ám* (ill, sin, origl. prob. anguish); $\sqrt{stigh}$ = *στῆχ* (step), 3 sg. pres. *stigh-nutē*; *mēgh-á-s* (clouds), cf. $\sqrt{mih}$, sub '*h*' = *gh*; *dirghá-s* (long) = *δολεχός*, etc.

Sk. *h* = origl. *gh*; e.g. *hāsá-s* (goose), cf. *χρήν*, Germ. *gans*, Lith. *žąsis*, Pol. *geś*; $\sqrt{āh}$ = *angh* in *āh-ú-s* (snake), *āh-as*, *āh-atīs* (pain); $\sqrt{vah}$ (uehere), 3 sg. pres. *váh-ati*, for *vagh*, cf. Goth.

√*vag*; √*mih* (pour out, mingere), 3 sg. pres. *mēh-ati* for *migh*, § 54. cf. supr. *mēghās*, Gk. √*μυχ*; √*lih* (lick), 3 sg. pf. *li-lē-ha*, cf. *λιχ*, etc.

Note 1.—In *nakha-s*, *nakha-m* (nail, claw), cf. *δνυχ-ος*, Scl. *nog-ūtī*, Goth. **nag-l-s*, *kh* stands most strangely where we should have expected *gh*.

Note 2.—*gh* occurs rarely, e.g. *ghasā-s* (fish); in other Indo-Europ. langg. no similar example is yet known; *gh* occurs most often in initio in onomatopœtic words.

2. Origl. *dh*=Sk. *dh*, *h*.

Sk. *dh*=origl. *dh*, e.g. √*dha* (set), 1 pres. *dā-dhā-mi*, cf. *τλ-θη-μι*, Goth. √*da*: √*idh* (kindle), 3 sg. pass. *idh-yátē*, cf. Gk. *αἰθ-ω*; √*rudh* (rubere) in *rudh-irás* (ruber), cf. Gk. *ῥυθ*, Goth. *rud*; *mádhu* (honey, mead, intoxicating drink), cf. *μέθυ*, etc.

Sk. *h*=origl. *dh*, e.g. in *hi-tá-s* for **dhi-ta-s* fr. **dha-ta-s*, past part. pass. √*dha* (set), cf. *θε-τό-ς*; √*rah* (*rah-itá-*, forsaken, bereaved; *ráh-as*, ntr. secret, hidden) for **radh*, cf. √*laθ* (*λαθ-εῖν*, escape notice; *λάθ-ρα*, secretly); √*guh* (hide) for **gudh*, cf. √*κνθ* (*κεύθ-ω*, hide); *-hi* for *-dhi*, sf. of 2 sg. imper. act., e.g. *pā-hi* (tuere), but Vēd. *gru-dhi*=*κλῦ-θι*; in Sk. this *-dhi* occurs after consonn. only, e.g. *ad-dhi*, √*ad* (edere), but *-hi* after vowels.

3. Origl. *bh*=Sk. *bh*, rarely *h*.

Sk. *bh*=origl. *bh*, e.g. √*bhar* (ferre), 1 sg. pres. *bhár-āmi*, cf. Gk. *φέρ*; √*bhu* (become, be), 3 sg. pres. *bháv-ati*, cf. *φν*; *bhid* (findere), 3 sg. pf. *bi-bhéd-a*, cf. Lat. √*fid*; *nábhas* (air, heaven), cf. *νέφος*; √*bha*, 3 sg. pres. *bhā-ti* (gleam), cf. *φα*, *φα-ν*, etc.

Sk. *h*=origl. *bh*, e.g. √*grah*, Vēd. still *grabh* (seize); *má-hyam* bes. *tú-bhyam* (dat. sg. pers. pron. 1 and 2), cf. *mi-hi* bes. *tí-bi*; *bh* has disappeared entirely in instr. pl. of *a-st.*, e.g. *áçvāis* for **açva-bhis* (v. 'declens.').

In roots which end in aspp. an origl. initial asp. loses the aspiration; e.g. √*bandh* (bind), 3 s.g. pres. *badh-nā-ti*, pf. *ba-bāndh-a* for **bhandh*, Goth. *band*, Gk. *πενθ* for **φενθ*; *bāhú-s*

- § 54. (masc. elbow) for **bhāhu-s*, cf. Norse *bōgr*, Gr. *πῆχυς* for **φῆχυς*; √*budh* (learn, know), 3 sg. pres. *budh-yātē*, *bōdh-ati*, cf. Goth. √*bud*, Gk. *πυθ* for **φυθ*; √*druh* (hurt), 3 sg. pres. *druh-yāti* for **dhrugh*, Zend *drug*, *drug*, *druž*, but O.H.G. *trug*, i.e. earlier *drug*, are in favour of initial *dh*. Cf. the reduplication-law (§ 59, 3).

CONSONANTAL PROLONGED SOUNDS.

- § 55. Spirants *y*, *s*, *v*.

1. Origl. *y*=Sk. *y*, e.g. pron. √*ya* (rel.), n. sg. masc. *ya-s*; *ya* is further a frequent st.-formative element, e.g. *mādh-ya-s*=*med-iu-s*; the same part. fms. the opt., e.g. *s-yā-t*=*s-iē-t*; further, as one part of the pres. stem which comes fr. *as* (esse), and serves to form the fut., e.g. *dā-s-yā-ti*=*δώσει* fr. **δω-σ-ye-τι*; *ya* forms derivative vbs., e.g. *bhārā-ya-ti*, 3 sg. pres. vb. causat. √*bhar* (ferre)=*φορεῖ* fr. **φορε-ye-τι*; √*yu*, *yuḡ* (iungere), cf. Lat. √*iug*, whence *yugā-m*=Lat. *iugu-m*; *yūvan-*, acc. sg. *yūvān-am*, cf. Goth. *juggs* (same meaning), Lat. *iūuenis*: *yákrt* (liver), cf. Lat. *iecur* (id.).

The connexion between *y* and *i* is treated in § 14, 1, d; the splitting up of *y* to *iy*, *īy*, in § 14, 1, c; change fr. *y* to *iy*, *īy*, v. § 15, 2, b.

2. Origl. *s*=Sk. *s*, *ś*.

Sk. *s*=origl. *s*, e.g. √*sad* (sedere), e.g. *sād-as* ntr., *sād-ana-m* (sedes); *sáp-tan-*, Vēd. *saptán-*=*septem*; √*su* (beget, sow), e.g. *su-tás*, past part. pass.; √*sru* (flow), 3 sg. pres. *srāv-ati*: *svásar-*, acc. sg. *svásār-am* (sister); √*svid* (sweat), 3 sg. pres. *svid-yāti*; √*star* (sternere), 3 sg. pres. *str-ṇāti*; √*smar* (remember), 3 sg. pres. *smār-ati*; √*as* (esse), 3 sg. pres. *ás-ti*; √*vas* (dwell), 3 sg. pres. *vás-ati*; √*vas* (clothe oneself), 3 sg. pres. *vas-té*; in st.- and word-formative particles, as *mán-as* (ntr. mens)=*μέν-ος*; -*s* is an element of nom. masc. and fem., e.g. *vrka-s*, pl. *vrkā-sas* (wolf, wolves), etc.

Sk. *ś*=origl. *s*, e.g. √*uś* (ur-ere), cf. *us-tus*, 3 sg. pres. *óś-ati*;

√*tarś* (thirst), 3 sg. pres. *trś-yāti*, cf. Lat. *torr-eo*=**tors-eo*, § 55. Germ. *durs-t*; ś also sporadically after *a*, e.g. √*bhāś* (speak), 3 sg. pres. *bhāśatē*, further fmn. of √*bha*=Gk. *φα* in *φά-τι-ς*, *φά-σι-ς* (speech), *φη-μί* (say); bes. *bhās*, 3 sg. pres. *bhāśatē* (shine, gleam), further fmn. of a similarly sounding √*bha*=Gk. *φα* in *φαίνω* (show, make clear)=**φα-ν-γω*, *φά-σι-ς* (showing); ś thus stands to *s* as palatal to gutt.; it is initial in *śaś* (sex) only, but cf. Zend *khaśvs*, a fm. which renders doubtful the originality of the initial sound of this numeral in the other langg. of our stock.

Origl. *s* has moreover undergone many more changes in Sk.; these changes, however, did not occur generally till a relatively late period; *s* before *t* (*th*) and *p* (*ph*) and after *a* (except in fine) remains fixed; after *k* and *r*, ś stands for *s*; likewise after *i*, *u* (and their diphthongs, generally after other vowels, as after *a*, *ā*); medially bef. most sounds (bef. all vowels and *y*, *v*, *m*, *t*, *th*; ° and ~ bef. *s* do not break this sound-law); fr. st. *bhūti*- (=φυσι-) thus comes loc. pl. *bhūti-śu* for **bhūti-su*; *nē-śyāti* (3 sg. fut. √*ni*, lead) for **nai-syati*; *ē-śi*, f.f. *ai-si* (2 sg. pres. √*i*, go); *vāk-śi* (2 sg. pres. √*vak*, speak) but *āt-si* for **ad-si* (2 sg. pres. √*ad*, eat) and *tā-su* (loc. fem. pl. *ta*, pron. dem.); st. *dhānus*- (bow), loc. pl. *dhānuś-śu* or *dhānuś-śu* for **dhanus-su*; with sf. *mant*, *dhānuś-mant*-, n. sg. *dhānuś-mān* (provided with a bow). Betw. *s* and ś there is nevertheless great vacillation (particulars must be relegated to Sk. special. gr.; it is enough to note here that ś =origl. *s*).

°, *r*, *ç*, occur, like ś, acc. to definite sound-laws, in place of *s*; yet mainly in termn. alone, in which case -*as* also may pass into *ō*, and *s* be lost, e.g. *vrka°* for *vrka-s* at end of a sentence, or bef. *k*, *p*; *avir ēti* for *avis ēti* (ouis it); *r* occurs for *s* bef. all sonant sounds unless *a* or *ā* precede; -*as*, however, bef. sonants becomes *ō*, and -*ās* becomes *ā*; this latter also medially, e.g. *çā-dhi* for **çās-dhi*, 2 sg. imper. fr. √*çās* (rule), but 3 sg. imper. *çās-tu*; *aviç karati* (the sheep goes); *vrkō bhavat* for *vrkas abhavat* (the wolf was); *vrka āstē* for *vrkas āstē* (the wolf sits), etc.

§ 55. In stems ending in *-s* these changes take place before case-sff. also which begin with a conson., e.g. st. *mānas-*, g. *mānas-as*, without change; but instr. pl. *mānōbhis* for **manas-bhis*, loc. pl. *mānaḥ-su* for *mānas-su*, which also occurs, *dhānur-bhis* for **dhanus-bhis*, st. *dhānus-* (bow).

ś bef. *s* passes into *k*, e.g. √*dvis* (hate), 2 sg. pres. *dvēk-ši* for **dvēś-si*; also the change to *t*, *ḍ* occurs, as in the case of *ç*, e.g. *dvid-dhi*, 2 sg. imper. act. √*dviś* for **dviś-dhi*. Cf. Sk. grammars.

Note.—In *çvāçura-s* (father-in-law), *çvaçrū-s* (mother-in-law), *ç* stands in initio (by assimiln. to follg. *ç*), instead of *s*, cf. Zend *ghaçura-* i.e. **svaçura-*, *ékupó-s*, Lat. *socer*, *socrus*; similarly in st. *çúška-* (dry) for **suska-*, cf. Z. *huska-*, O.Bulg. *suchū*, f.f. *sausa-s*, Lith. *saúsa-s*; *ç* for *s* occurs besides in other single cases bef. *v* and *u*.

3. Origl. *v*=Sk. *v*, e.g. √*vid* (perceive), 3 sg. pres. *vēt-ti* for **vēd-ti*; √*va* (blow), 3 sg. pres. *vā-ti*, cf. Goth. √*va*; √*vah* (uehere), 3 s.g. pres. *vāh-ati*, cf. Lat. *ueh*, Goth. *vag*, Slav. *vez*, etc.; √*var* (cover), 3 sg. pres. *vr-ṇōti*, whence *úr-nā* (wool) for **var-nā*, cf. Gk. *Fép-iov*, Slav. *vlū-na*, O.H.G. *wol-la*, etc.; √*var* (will), cf. Lat. *uol* (uelle), Goth. *val* (will), etc.; *ávi-s*=Lat. *oui-s*, *ōFi-s*; *náva-s*=Lat. *nouo-s*, *véFo-s*, etc.

On the connexion betw. *v* and *u*, v. § 14, 1, c, d.

§ 56. Nasals.

1. Origl. *n*=Sk. *n*, e.g. *na*, *an-* (negation); √*naç* (perish), 3 sg. pres. *náçyati*, cf. *vek*; st. *nar-*, *nara-*, n. sg. *nā* for **nars*, *nara-s* (*ἄ-νῆρ*); *nāu-s*=*vaûs*; *nā-man-*=Lat. *nō-men-*; *dānta-s* (dens); often *n* is changed into another nasal, e.g. *pūr-ṇá-s* (plenus, cf. supr. *ū=a*, § 8), f.f. *par-na-s*, *ṇ* for *n*, since *r* precedes, v. post.; *gnā-tás*=*gnō-tus*, origl. fm. of √*gña* is *gan*, on *ñ* for *n*, v. post.; *yuñgānti* (iungunt), √*yug*, with inserted nasal, but *yuñktē*, 3 sg. med. with *ñ*, since *k* follows, v. post.; *lump-āti*=*rumpit*, has nasal *m* because *p* follows; *hāsá-s*, cf. *hanser*, Germ. *gans*; *mā-si*, 2 sg. pres. act., *mā-syātē*, 3 sg. fut. med. √*man* (mean), with *~* for *n* acc. to Sk. sound-laws, etc. All these changes must have been wanting in Indo-Eur. origl. lang.,

because clearly either the nasal was not yet within the root, but § 56. stood after it, acc. to the formative principles of Indo-Eur. (v. Introduction, 2), and so the fms. in question were still perh. *yug-nanti*, *yug-natai*, or else *n* and *m* remained unchanged, e.g. *man-si*, etc.

Bef. case-termns. which begin with consonn., *n* as a noun-st.-termn. disappears, e.g. st. *nāman-* (nomen), loc. pl. *nāma-su* for **nāman-su* (**nāmā-su*). This sort of loss of *n* takes place in other like cases also.

2. Origl. *m*=Sk. *m*, e.g. $\sqrt{\text{man}}$ (mean, think), whence *mān-as* (mens)= $\mu\acute{\epsilon}\nu\text{-}\sigma$; *mā-tār*=*mā-ter*-; $\sqrt{\text{smar}}$ (remember), cf. Lat. *me-mor* with lost *s*; $\sqrt{\text{vam}}$, Lat. *uom-ere*, 3 sg. pres. *vām-ati*; in st.- and word-formative particles thus sf. *man*, e.g. *nā-man*-; *m* as sign of acc. case, e.g. *āçva-m*=*equo-m*; *-mi*, *-masi*, *-mas*, 1 sg. pl. e.g. *ē-mi*, pl. *i-mās*, earlier *i-māsi*= $\epsilon\acute{\iota}\text{-}\mu\iota$, $\acute{\iota}\text{-}\mu\epsilon\nu$, etc.

The nasals *n*, *m* have, as the above exx. show, undergone many variations in Sk. because they always adapt themselves to the quality of the succeeding consonn. Accordingly bef. gutt. mom. *n̄* only is found; bef. palatals is found *n̄*, this sound occurs also immediately after *k*, *g*; bef. lingg. and (acc. to distinct sound-laws) where ling. sounds *ṣ*, *r*, precede in a word, *n̄* is found; *n* has its place bef. dentt. and vowels; *m* bef. labb. and vowels (these two origl. nasals only are found in the beginning of a word); bef. *s* and *h*, *n̄* is found. Particulars belong to Sk. special-gr.

r- and *l*-sounds.

§ 57.

r was softened to *l* in many cases at an early date; sometimes the earlier lang. retains *r* where the later already has *l*.

Sk. *r*=origl. *r*, e.g. $\sqrt{\text{ram}}$, 3 sg. pres. *rāmatē* (he is pleased); $\sqrt{\text{rik}}$ (separate), 3 sg. pres. *ri-ṇā-k-ti* (with inserted *na*); $\sqrt{\text{ruk}}$ (shine), 3 sg. pres. *rōk-atē*; $\sqrt{\text{mar}}$ (mori), e.g. *mr-tā-s*, past part. pass. (mortuos); $\sqrt{\text{par}}$ (fill), 3 sg. pres. *pī-par-ti*; st. $\sqrt{\text{krp}}$ (fem. appearance, beauty), $\sqrt{\text{karp}}$, cf. *corp-us*, Z. *keref-s*; in sff., e.g. *rudh-i-rā-s*= $\epsilon\text{-}\rho\upsilon\theta\text{-}\rho\acute{o}\text{-}\varsigma$; sf. *tar*, Lat. *tor*; *tra-m*, Lat. *tru-m*, etc.

§ 57. *Note.*—In termn. *r* was treated like *s*; at the end of a sentence it becomes *ṣ*, etc., cf. § 55, 2.

Sk. *l*=original *r*, e.g. *lōk*, 3 sg. pres. *lōk-atē* (see), doubtless akin to *ruk* (shine), cf. *λευκ-ός* and *λεύσσω* = **λευκ-γω*; *√lup* (break), 3 sg. pres. *lumpāti*, cf. Lat. *√rup*; *√kalp* (be in order), 3 sg. pres. *kālpatē*, cf. *krp*; *√lih*, *λιχ*, Lat. *lig*, Erse *lig*, Goth. *lig*, Lith. *liz*, Scl. *liz* (lick), but in earliest Indian still *rih*. Also where the kindred langg. show no *r*, we must yet assume an origl. *r*, because we notice that *l* is continually spreading, whilst *r* becomes rarer; if we suppose this process to have been going on continuously in pre-historic times, *r* will remain as the older by elimination; cf. Zend. Such instances are found in e.g. *plu* (float), Lat. *plu*, Gk. *πλυ*, Scl., Lith. *plu*, Germ. *flu* (in *flu-ž*, in diall. *flu-e* (wash); here precisely it happens that *l*—so frequently interchanged with *r*—occurs throughout; whilst in Sk. there is still a root *pru* (go) in existence, which origly. was prob. identical with *plu*, and must be considered as its earlier fm.

§ 58. Sketch of some sound-laws important for comparative grammar (so far as they are not contained in foregoing sections).

Between the various ways in which the Indo-Eur. sounds make their appearance in particular Indo-Eur. langg. (i.e. those changes of origl. sounds through which this or that distinct lang. arose from their common fundamental lang., e.g. Sk. *vāk-am*, Gk. *Φόπ-α*, Lat. *uōc-em*, fr. f.f. *vāk-am*), and the variations which the sounds undergo during the separate existence of the lang. thus produced, namely sound-laws, we can draw no sharp line of demarcation. The distinction between sound-representation and sound-law is chronological, and therefore indeterminate, and the exact definition of the date at which a sound-change occurred is generally difficult. For this reason, and also in order not to break up the subject too much, I have often above left the boundary between sound-correspondence

and sound-law ill-defined ; moreover, sound-laws—as peculiar to § 58. the separate-life of a lang.—belong here only in so far as they bear upon our knowledge of older word-forms. The numerous laws, e.g. in Sk., which come into play only when words are composed into sentences, may here be mostly omitted, since we are treating of words taken separately.

We find, esp. in written lang., forms of different periods beside each other, e.g. Sk. *yuk-tá-s* for **yug-ta-s*, √*yuḡ* (iungere), after an earlier mode of formn. than *īś-tá-s* for **ig-ta-s*, **ik-ta-s*, f.f. *yag-ta-s*, √*yaḡ* (open, v. § 53, 1, n.) ; here the sound-law by which *ḡt* becomes *śt* is clearly later than the preservation of the origl. combination *gt*, i.e. *kt* (bef. *t*, *k* must naturally occur for *g*).

Generally speaking we may call the Sk. very rich in conson. sound-laws ; its conson. system is thus manifoldly unorigl. from this point of view also. Consonn. often exercise influence on one another, not only in the middle of words, but also between the end of one word and the beginning of another when they are combined in a sentence, a process which we can scarcely attribute to the lang. at this early condition ; the laying-down of these laws belongs, as we have said, in a great measure elsewhere.

MEDIAL SOUND-LAWS.

1. Assimilation.

§ 59.

a. Medially also sometimes occurs complete assimilation of a preceding to a follg. sound, e.g. *bhinna-* for **bhid-na-*, past part. pass. √*bhid* (split) ; *panna-* for **pad-na-*, likewise fr. √*pad* (go, fall), and so often in similar cases.

b. Lightening of conson.-groups by loss of one sound is likewise not rare, e.g. *kaśtē* for **kakṣ-tē* (*t* for *t* on acct. of *ś*, v. sqq.), 3 sg. pres. med. √*kakṣ* (see), etc. ; *á-tut-ta*, 3 sg. med. aor. compos. √*tud* (push) for **a-tut-s-ta*, and so frequently in case of *s* betw. two mom. consonn. in like cases.

c. Bef. sonant mom. sounds sonants only, bef. mutes mutes

§ 59. only, are found, e.g. st. *vāk* (voice), instr. pl. *vāg-bhis*; *yu-ná-g-mi*, 1 sg. pres. $\sqrt{yug}$ (iungere), but 2 sg. *yu-ná-k-śi*, 3 sg. *yu-ná-k-ti* for **yunag-si*, **yunag-ti* (cf. § 53, 1); *ád-mi*, 1 sg. pres. $\sqrt{ad}$ (edere), but *át-si*, 2 sg. pres. *át-ti*, 3 sg. pres. for **ad-si*, **ad-ti*; *bhárad-bhis*, instr. pl. fr. st. *bhárant-* (ferens) for **bharat-bhis* fr. **bharant-bhis*, etc.

The influence of spirant *s* on follg. mom. sounds has been already handled under 's.' In the case of the combination of *ś* with a follg. *t*, *th*, the latter becomes assimild. to *s* because it is a lingual, e.g. superl. sf. origl. *is-ta*; fr. *yans*, compar. sf. shortened *is+ta*, arises next **is-tha* (§ 51, sqq.), and since after vowels other than *a*, *ā*, *ś* must occur for *s*, **iś-tha*, whereby also *th* becomes *śh*, so that in Sk. *iśtha* stands for *ista*, e.g. st. *āṣ-iśtha*=Z. *āṣ-ista*, Gk. *ᾠκ-ιστο-*, origl. *āk-ista*- (fr. *āṣú-*, origl. *āku-*, swift). For the group *śt* occurs *śt*, e.g. st. *drśtá-* for **drś-ta*-, past part. pass. $\sqrt{darś}$, origl. *dark* (see); st. *aśta-*, *aśtan-* (eight), for **aṣta-*, **aṣtan-*, f.f. *akta-* (cf. *ὀκτώ*, octo); *váśti* for **vaṣ-ti*, 3 sg. pres. $\sqrt{vaṣ}$ (will, wish).

For the changes of *s* produced by assimiln. v. § 55, 2; by nasals, § 56, 2.

An example of dissimilation worth notice is found in the change of *s* to *t* at the end of a root bef. the termn. in *s* of fut. and aor., e.g. $\sqrt{vas}$ (dwell), 3 sg. fut. *vat-syáti*, 3 sg. aor. *á-vāt-sīt* for **vas-syati*, **á-vās-sīt*. Doubled *s* was generally avoided, e.g. *ási*, 2 sg. pres. $\sqrt{as}$ (esse), for *as-si*=*ἐσ-σί*, cf. § 55, 2.

Note.—The *s* of $\sqrt{vas}$ (dwell) is origl. and perh. not due to *t*, cf. Goth. $\sqrt{vas}$ (remain, be), pres. *vis-a*=*vas-āmi*.

2. The aspirates stand bef. vowels and son. prolonged consonn. only, and therefore never in termn. The collision of a sonant gutt., dent., or lab. aspirate with follg. *t* (*th*) is common. In this case the aspp. throw their aspiration on follg. *t*, which in its turn becomes like the preceding sound in that it assumes vocal-sound; fr. sonant aspp. + *t* arise therefore son. unasp. consonn. + *dh*;

accordingly $gh+t=gdh$; $dh+t=ddh$; $bh+t=bdh$, e.g. $\sqrt{budh}$ § 59. (learn, know), step-formed $bōdh+tum$ (infin. termn.)= $bōddhum$; $\sqrt{labh}$ (hold)+ $tum=lābdhum$, etc.: h here also often is clearly equivalent in force to gh (cf. § 54, 1), e.g. $\sqrt{duh}$ (milk)+ ta , sf. past part. pass., composes the fm. $dughdā-s$, further $dug-dhī$ (2 sg. imper.) for $*dugh-dhi$, $dōg-dhi$ for $*dōgh-ti$, 3 sg. pres., collectively formed as sounds from still existing $\sqrt{dugh}$. Other roots (whose initial is not d) also treat their h otherwise, e.g. ruh (increase)+ ta (pf. part. pass.) fms. $rūdḥā-$; $*lēh-ti$, $*lēgh-ti$, 3 sg. pres. $\sqrt{lih}$, i.e. $ligh$ (lick), become $lēḍhi$, etc.; $h+t$, th , dh , here becomes $ḍh$, accompanied by lengthening of preceding short vowel: this sound-interchange is accordingly clearly more secondary and later than the change of ht , i.e. gh , into gdh . The aspiration is thus throughout postponed to the follg. consonant.

When the aspiration of a root-termn. cannot remain, e.g. in termn. or bef. s , and the root begins with an origl. sonant un-aspl. conson., the aspn. passes over to the latter, e.g. st. $sarva-būdh-$ (all-knowing), n. sg. should be $*sarva-budh-s$, s is necessarily lost, acc. to termination-laws, dh became t , the aspn. passes over to the b , and the word is $sarva-bhūt$; precisely so the loc. pl. $sarva-bhūt-su$ fr. $*-budh-su$; h here too was treated like gh , e.g. 3 sg. aor. $\sqrt{duh}$ (milk) is $á-dhuk-śat$, with $ś$ for s acc. to rule (§ 55, 2), for $*a-dugh-sat$; likewise where the final aspn. disappears through loss (assimiln.), e.g. $dhēhi$ (2 sg. imper. act.) for $*dhāhi$ (§ 15, e), and this for $*dā-hi$ fr. $*dadh-hi$, $*dadh-dhi$; $dadh-$ for $da-dha-$ is pres. st. of $\sqrt{dha}$ (set), hi , dhi , termn. of 2 sg. imper. act.

3. Law of reduplication. In redupln. the gutt. are changed into palatals: $kā-kāra$, pf. $\sqrt{kar}$ (make); of more than one conson. or consonantal double-sounds (aspp.; $h=gh$) only the first was maintained; $dā-dhā-mi$, pres. $\sqrt{dha}$ (set, lay); $gu-hō-mi$, $\sqrt{hu}$ (open; cf. also § 54, 3, sub. fin.); $ṣu-ṣrāv-a$, pf. $\sqrt{ṣru}$ (hear); only in case of s +mom. sounds does the second

§ 59. of these sounds remain; *ti-ṣṭha-ti*, pres. $\sqrt{stha}$ (stand), origl. fm. of pres. is *sta-sta-ti*.

In other cases the Sk. still shows a more archaic kind of redupln. by which gutt. and aspp. remain unchanged; so esp. in ancient intensive-sts., e.g. *kō-ku* (3 sg. med. *kō-kū-ya-tē*), $\sqrt{ku}$ (raise a cry); *kari-kar-*, $\sqrt{kar}$ (make); *bhari-bhar-*, $\sqrt{bhar}$ (bear); *ghani-ghan-*, $\sqrt{ghan}$, *han* (slay, kill); in noun-sts., e.g. *ghar-ghara-s* (clatter, crackling), etc. (cf. Benf. G. g. 1864, st. 39, p. 1539 sqq.).

TERMINATION.

§ 60. 1. In termn. only one conson. is tolerated, of more than one only the first remains, e.g. st. *vāk* (voice, acc. *vāk-am*) should be in n. sg. **vāk-s*, or rather (acc. to § 52, 1) **vāk-s*, or (acc. to § 55, 2) *vāk-ś*, wherefore *vāk* is now seen. Since aspp. are double-sounds, they must lose their aspn.; thus we find, not **sarva-budh*, but **sarva-bhud*, with aspn. transferred (acc. to § 59, 2), for which, acc. to the follg. law (no. 2), *sarva-bhūt* with *t* for *d* occurs.

Only *r* + mom. conson can stand *in fine*, a case which nevertheless occurs but seldom; moreover bef. follg. *k*, *t*, *t*, and *kh*, *th*, *ṭh*, the combn. *ṣ* stands with their representatives, e.g. *ácvañ*, acc. pl. of n. sg. *ácva-s* (equos), f.f. is **ačvāns* or **ačvāms*, hence e.g. *ačvās tatra* (equos ibi); *çrī-mān* (pleasant), n. sg. masc. f.f. **çrī-mant-s*, hence e.g. yet *çrīmāñ karati* (felix it; *ç* for *s* acc. to § 55, 2); *āsan*, 3 pl. impl. $\sqrt{as}$ (esse) fr. **āsant*, **āsans*, *t* is esp. often subject to a change into *s*, as in stems in *-ant*, which are interchanged with fms. in *-ans*, further in termn. of 3 pl. *-us* for *-ant*, hence e.g. *āsās tatra* (erant ibi) for origl. **āsant tatra*. In all other cases, however, *n* only remains acc. to the general rule.

2. As only mute mom. consonn. (when no distinctly influencing clearer sound follows upon it; in pausa) could stand *in fine*, the son. consonn. pass over into the mutes of their quality; hence

for **sarva-búdh*, not **sarva-bhud*, but *sarva-bhút* is found. *h*, § 60. i.e. *gh*, becomes *t* in termn., earlier *k* (for *g*, *gh*) has been retained in such roots only as begin with *d*, e.g. fr. *lih* (licking) comes in nom. (f.f. *ligh-s*) *lit* (*lid* bef. sonants), but fr. *duh* (milking), *dhuk* (*dhug*).

Note.—That palatals are not retained in termn. was remarked above in § 51, sub. fin.

CONSONANTS OF GREEK.

§ 61.

v. Table in § 16.

The consonl. system of the Gk. has retained 1. the origl. aspirates, not, however, as sonants, but as mutes: $\chi = kh$, $\theta = th$, $\phi = ph$, these can be proved to be the oldest equivalents of the Gk. sounds; the pronunciation of χ , ϕ , as spirants, i.e. $\chi =$ Germ. *ch*, $\phi = f$, and that of θ as a sibilant (nearly like *ts*), is of later origin, and arose first partially and afterwards in all cases. The passing of origl. sonant aspp. into Gk. mute aspirates is not inexplicable according to the physiology of sounds. Arendt (Kuhn und Schleicher, Beitr. ii. 283) conjectures, prob. rightly, that the un-sonant *h* of the origl. aspp. *gh*, *dh*, *bh*, changed the preceding sonants *g*, *d*, *b*, into the mutes κ , τ , π , and indeed no one will deny that *kh*, *th*, *ph*, are much easier to pronounce than *gh*, *dh*, *bh*. Thus the Gk. already permits of an assimilation. Change of sonn. to un-sonn. is seen also in Teutonic (origl. *g*, *d* = Germ. *k*, *t*). The agreement of the Indo-Eur. langg. collectively, and also of those langg. which are nearest of kin to the Gk., prevents us from accepting the supposition that the Gk. alone has preserved the oldest equivalents for the Indo-Eur. aspirates (that the sounds *kh*, *th*, *ph*, existed in the origl. lang. instead of *gh*, *dh*, *bh*; cf. esp. G. Curtius, Gr. Etym.² p. 369 sqq.). 2. Gk. shows a dislike of the origl. spirants; *y* even, in the earliest accessible state of the lang., is found merely remaining in its effects, but lost as a separately existing sound; *v* is retained

§ 61. as *F* in the archaic lang.; *s* stands its ground only in terminations and bef. and after mutes (ξ, ψ); moreover, when another sound has assimilated itself to it (*s*); before vowels it becomes *h*, and generally falls out between vowels. In Gk. as in all other Indo-Eur. langg., except Zend, *l* already occurs often beside *r*.

Generally, therefore, the consonantal-system of the Gk. is nearer to that of the origl. lang. than that of the Sk. or of most other Indo-Eur. langg.

As for consonl. sound-laws, the loss of origl. spirants and the variations which arise through this loss, and through the effects of origl. spirants on neighbouring sounds, bring about a considerable deviation from the older system of sounds. Assimilation has already acquired a widely extended sway: dentals generally have fallen away before *s, n*, mostly with a lengthening of preceding vowel. The palatal sounds (*y, i*) already show their influence in many cases (*zêtakismos*). Further, but few consonn. are tolerated in termn.; in short, in its consonantal sound-laws Gk. much resembles a lang. which is already in a comparatively late stage of existence.

§ 62.

EXAMPLES.

Origl. momentary mute unaspirated consonants.

1. Origl. *k*=Gk. $\kappa, \gamma, \pi, \tau$ ($\kappa\gamma=\sigma\sigma$, cf. sound-laws).

Gk. κ =origl. *k*, e.g. *καρδ-ία* (heart), cf. Lat. *cord-*, Lith. *szird-īs*, Scl. *srŭd-ŭce*, Goth. *hairt-ō*, Indo-Eur. lang. collectively presuppose an initial κ , Sk. *hrd-* thus stands for **khard-*, origl. *kard-*; *κεῖ-μαι* (I lie), *κοί-τη* (bed), $\sqrt{\kappa\iota}$, Sk. *ṛi*, Scl. and origl. *ki*; *κύων, κυν-ός* (hound), Sk. st. *ṣvan-*, origl. *kvan-*; *κλυ-τός* (famed), $\sqrt{\kappa\lambda\upsilon}$ (hear), Sk. *ṣru*, Goth. *hlu*, origl. *kru*; *δάκ-νω* (bite), $\sqrt{\delta\alpha\kappa}$, Sk. *daṣ*, origl. *dak*; *δείκ-νυμι* (show), $\sqrt{\delta\iota\kappa}$, Sk. *dīṣ*, Goth. *tih*, origl. *dik*; *δέκα* (ten), Lat. *decem*, Sk. *daśan-*, Goth. *taihun*, origl. *dakan-*; *λευκ-ός* (white), *ἀμφι-λύκ-η* (morning-twilight), $\sqrt{\lambda\upsilon\kappa}$, Sk. *ruk*, origl. *ruk*, etc.

Note.—ξ is merely a character for *ks*, e.g. δείξω (I will show) § 62. = *δείκ-σω; δεξιός (right) = *δεκ-σιος, *δεκ-τιος, cf. *dexter*, Sk. *dākṣ-īnas*, etc.

Gk. γ is sometimes a later softening fr. κ, which often remains beside it (cf. G. Curtius, Gr. Et.² 467 sqq., 600 sqq.), e.g. √φραγ in ἐ-φράγ-ην bes. pres. φράσσω (fence in) = *φρακ-γω (v. sound-laws), Lat. *farc-io* (on the difference of meaning v. G. Curt. Zeitschr. xiii. 399); √μαγ in ἐ-μάγ-ην, μάγ-ειρος (cook), μαγ-εύς (pastry-cook), but μάσσω (knead) = *μακ-γω, cf. *mac-erare*, Lith. *mīnk-yti* (knead) bes. *mank-sztýti* (soften), root therefore *mank* fr. *mak*; μίσγω, μίγνυμι (mingle), bes. Lat. *misceo*, Sk. *miṣṛáyāmi*; √πλαγ in πλαγ-ή (blow), ἐξ-ε-πλάγ-ην bes. πλήσσω (strike), i.e. *πληκ-γω, cf. Lith. *plāk-ti* (strike), pres. *plak-ù*, f.f. *plak-āmi*, etc. (cf. Lat. post).

Gk. π = origl. *k* (cf. G. Curt. in Kuhn's Zeitschr. iii. 401 sqq.), e.g. √πεπ (cook) in πέ-πεπ-ται, πέψω, i.e. πέπ-σω, πέπ-ων (ripe), bes. πεκ in πέσσω (cook) = *πεκ-γω, origl. *kak*, Lat. *coc*; πέντε (five), Aiol. πέμπε, πέμπ-το-ς (fifth), πεμπ-άξειν (count by fives), Lat. *quinque*, origl. *kankan*; √πο in ποῦ (where), πῶς (how), πότερος (whether, uter), Iōn. still κοῦ, κῶς, κότερος, Lat. *quo-*, Goth. *hva-*, Sk. Lith. Slav. and origl. *ka-*; √έπ in ἔπ-ομαι (follow), origl. *sak*, Lat. *seq*; √φεπ in φέπος (word), εἶπον (I said) = *φεφεπον, *φοπ-ς (voice) = *uōc-s*, origl. *vak* (speak), in ὄσσα (voice) = *φοκγα (v. sound-laws), *k* has remained; √λιπ in λείπ-ω (leave), λοιπ-ός (left over) = Lat. *lic* (linquo), Sk. *rik*, origl. *rik*; √ὀπ in ὀψομαι (I shall see), ὄμμα (eye), Aiol. ὀπ-πα = *οπ-μα, Lat. *oc* in *oc-ulus*, Lith. *ak-īs* (eye), etc., but dual ὄσσε = *οκγε, fr. a st. *ὀκι- (eye), Lith. and origl. *aki-* with *k* retained. Acc. to G. Curt. Gk. π. is in 17 cases = origl. *k*, whilst in 104 cases it remains *k*, thus about one-sixth of origl. *k* has been changed to π.

Gk. τ = origl. *k* occurs mostly in pronl. and num. stems, thus τίς (who), Lat. *qui-s*, Sk. **ki-s* (in *na-kis*, no one, *mā-kis*, O Bulg. *mā-kis*, ne quis), origl. *ki-s*; τε (and), origl. *ka*, Sk. *-ka*, Lat.

§ 62. *-que*, Goth. *-u-h* for **-ha*, cf. *πό-τε* (when), Dôr. *πό-κα*, *ἄλλο-τε* (another time), Dôr. *ἄλλο-κα*; *πέντε* (five) bes. Aiol. *πέμπε* (see ab. $\pi=k$), origl. *kankan*, cf. *quinque*; *τέσσαρες* (four), origl. *katvāras*, cf. Lat. *quatuor(es)*, Sk. *katvār-as*, Lith. *keturi*. This correspondence of sounds occurs but rarely in other roots, e.g. $\sqrt{\tau}$ in *τί-ω* (honour, value), *τί-μή* (honour), *τί-νω*, *τί-νυμι* (punish, fine), Sk. *ki* in *káy-ē* (I punish), *apa-ki-ta-s* (honoured), origl. therefore *ki*.

2. Origl. $t=Gk. \tau$ ($\tau\gamma=\sigma$, v. sound-laws), e.g. *τό(τ)* origl. and Sk. *ta-t* (nom. acc. sing. dem. pron. st. origl. *ta-*); $\sqrt{\tau}$, *τεν* in *τέ-τα-κα*, *τά-νυ-μαι* (stretch myself), *τείνω* (stretch, lengthen) = **τεν-γω*, origl. and Sk. *ta*, *tan*; st. *τρι-* (three) in *τρεῖς*, origl. and Sk. *tri-*; $\sqrt{\sigma}$ in *στα* (stand), in *στα-τός* (placed), *στά-σις* (setting, revolt), *ἵ-στη-μι* (set up), origl. and Lat. *sta*, etc.; $\sqrt{\sigma\tau\epsilon\gamma}$ in *στέγ-ος* (roof), *στέγ-ω* (cover), cf. Lith. $\sqrt{steg}$, origl. *stag*; $\sqrt{\pi\epsilon\tau}$ in *πέτ-ομαι* (fly), *πί-π(ε)τ-ω* (fall), origl. and Sk. $\sqrt{pat}$ (fly, fall); *πλατύς* (broad), origl. *pratus*, Sk. *prthús*; suff. *το* of pf. pass. part., origl. and Sk. *ta*, etc.

The combination *κτ* is in most cases preserved only in Gk., while in other langg. it is softened to *ks*, e.g. st. *τέκτον-* (carpenter), Sk. *tákṣan-*, cf. O.H.G *dēhsa*, *dēhsala* (axe); *ἄρκτος* (bear) = Lat. *ursus*, by Lat. sound-laws for **urcsus* fr. **urctus*, Sk. *ṛkṣas*, f.f. **ark-ta-s*.

Note.—Upon the very uncommon softening of τ to δ in Gk. cf. G. Curt. Gr. Et.² p. 469 sqq. It occurs almost without exception in obscure etymologies, not in words accurately corresponding with their kindred langg.

3. Origl. $p=Gk. \pi$ (cf. $\pi=$ origl. *k*), e.g. $\sqrt{\pi\omicron}$, *πι* (drink), in *πό-σις* (draught), *πέ-πο-μαι*, *πέ-πω-κα*, *πί-νω* (drink); *πό-σις* (husband), f.f. and Sk. *pá-tis* (lord); st. *πα-τέρ-* (father), origl. *pa-tar-*, fr. $\sqrt{pa}$ (protect); $\sqrt{\pi\lambda}$, e.g. in *πίμ-πλη-μι*, *πιμ-πλά-ναι* (fill), origl. *pra* fr. *par*, e.g. Sk. *pí-par-mi* (1 sing. pres. act.); *πλατύς* (broad), origl. *pratus*, Sk. *prthús*; $\sqrt{\pi\lambda\upsilon}$ in *πλέF-ω* (sail), *πλόF-ος* (voyage), *πλυ-τός* (washed), Sk. *plu*, origl. *pru*;

✓έρπ in έρπ-ετόν (creeping thing), έρπ-ω (creep)=Sk. and § 62. origl. *sárp-āmi*, Lat. *serp-o*, origl. *sarp*; ύπ-νος (sleep), origl. and Sk. *sváp-nas*, cf. *som-nus*=**sop-nus*, etc.

Note 1.—The softening of π to β, likewise uncommon, and only found in words of obscure etymology, has been treated of by G. Curt. elsewh. p. 471 sqq.

Note 2.—On unoriginal aspiration of tenues caused by operation of sound-laws, v. 'sound-laws.' Sometimes in Gk. as in Sk. aspirates make their appearance without visible reason. This occurs comparatively frequently in the case of π, cf. ἀ-λείφ-ω (anoint), ἀ-λοιφ-ή (ointment), bes. λίπ-α, λίπ-ος (grease), λιπ-αρός (greasy, shiny), cf. Sk. ✓*lip* (anoint), O.Bulg. *lěp-ŭ* (plaster), Lith. *líp-ti* (cleave to); βλέφ-αρον (eyelid) bes. βλέπ-ω (glance); κεφ-αλή (head) bes. Lat. *cap-ut*, Sk. *kap-ālas*, *kap-ālam* (shell, skull); σαφ-ής (clear), σοφ-ός (sap-iens), cf. Lat. *sap-io* (smack, am wise), O.H.G. ✓*sab* (understand; in pf. *int-suab*, **ant-suob*, he understands, notices), etc. Moreover, μόθ-ος (bustle) must not be coupled with Sk. ✓*math*, *manth* (i.e. *mat*, *mant*, stir, move), and O.Bulg. *met-a* (trouble), *met-ežŭ* (uproar, tumult). In έ-τυχ-ον (I chanced), τυχ-ή (chance), τεύχ-ειν (prepare), and Iôn. τε-τύκ-οντο (they prepared), τύκ-ος (mason's tool), we cannot suppose different roots; so too δέχ-ομαι (receive) bes. Iôn. δέκ-ομαι, δοκ-ός (beam), δοκ-άνη (fork) has the look of an unorigl. asp. In the perf. this unorigl. asp. has developed into a kind of medium for stem-formation, v. sub. Perf. G. Curt. Gr. Et.² p. 439 sqq. has treated at length of Unorigl. Aspiration in Gk.

Momentary sonant unaspirated consonants.

§ 63.

1. Origl. *g*=Gk. γ, β.

Gk. γ=origl. *g* (on ζ=γγ, v. sound-laws), e.g. ✓γεν in γέν-ος (race), γέ-γ(ε)ν-ομαι (I am born, become), Sk. *gan*, origl. *gan*; ✓γνο=*gna* fr. *gan* in γι-γνώ-σκω (I learn), γνώ-μη (thought, opinion); γόνυ (knee)=Sk. *gānu*, cf. Lat. *genu*, Goth. *kniu*; ✓ζυγ, origl. *yug* (iungere) in ζεύγ-νυμι (I yoke), ζυγ-όν (yoke); ✓ἀγ in ἄγ-ω (lead)=Sk. *ág-āmi*, Lat. *ag-o*, O.Norse inf. *ak-a*, 1 sing. pres. *ek*, pf. *ök*, etc.

Note 1.—It is only in quite detached cases that Gk. δ seems=origl. *g* (like τ=origl. *k*); thus prob. δελφ-ύς (uterus) must be

§ 63. placed beside Sk. *gárbh-a-s* (id.), esp. since a form *ἀδελφειός* corresponds perfectly to Sk. *sa-garbhyaś* (co-uterinus) in its formn. It is worthy of note that *βρέφος*, too (v. sq.), stands close to Sk. *gárbhas*.

Note 2.—On Gk. *γ* and Sk. *h*, cf. § 53, 1.

Gk. *β*=origl. *g* (cf. § 68, 1, e); *√βα* in *βί-βη-μι*, *βά-σκω* (go)=Sk. and origl. *ga* (go), in Sk. *gí-gā-mi*, origl. *ga-gā-mi*, Sk. *gá-kkḥāmi*, origl. *ga-skāmi*; *βαρύς* (heavy)=Sk. *gurús* for origl. *garus*, *βάριςτος*=Sk. *gariṣṭhas*, origl. *garistas* (heaviest), cf. Lat. *gravis*=**garu-i-s*, Goth. *kaúrs* (heavy, earnest) for **kaúri-s*, and this prob. for **kurv-i-s* fr. **karv-i-s*; *βρέφος* (neut. offspring, child), Sk. *gárbha-s* (masc. matrix, offspring), O.Bulg. *žrěbe*, *žrěbica* (to foal), Goth. *kalbō* (fem. cow-calf); Boiōt. *βανά*=*γυνή* (wife) with root vowel *a* retained, f.f. of both *ganā*, *√gan* (gignere); *βάλανος* (acorn), cf. Lat. *glans*, *gland-is* (acorn); *βίφος* (life)=Sk. *gīváś*, Lith. *gývas*, Goth. *kvius*, f.f. prob. *gigvas* (lively); *βούς* (bull)=Sk. and origl. *gāus*; *βι-βρώ-σκω* (eat), *βop-ά* (food), *√βop*, *βpo*, origl. *gar*, *gra*, Sk. *√gar* (swallow); Lat. *(g)uor-are*, Lith. *gér-ti* (drink), Scl. *žrě-ti* (swallow); *ἐρεβος* (gloom of lower world), cf. Sk. *rág-as* (gloom, dust), Goth. *rikv-is* (neut. darkness); *√νβ* in *χέρ-νιψ* (water for washing hands) for **χep-νιβ-s*, **χep-νιβ-os*, Sk. *√niḡ*, origl. *niḡ*, in Gk. retained in *νίζω* (wash)=**νιγ-γω*.

2. Origl. *d*=Gk. *δ* (on *ζ=δγ*, cf. § 68); *√δο*, origl. *da* (give), pres. *δί-δω-μι*, origl. *da-dā-mi*; *√δακ* (bite), pres. *δάκ-νω*, Sk. *√daç*, origl. *dak*; *√δαμ* in *δαμ-άω*, *δάμ-νημι* (tame, bind), Sk. and origl. *dam* (domare); *δόμος* (house), Lat. *domus*, Sk. *damás* or *damám*, Scl. *domu*; *√Fιδ* (see), origl. *√vid* (uidere), pf. *Φοῖδα* (knew), Goth. *vait*, f.f. *vi-vāida*; *√έδ*, origl. and Sk. *√sad* (sedere) in *ἔζομαι*=**sed-yo-mai*; *√έδ*, origl. and Sk. *√ad* in *ἔδ-ω*, *ἔδ-ομαι* (eat, shall eat), Lat. *ed-o*, Goth. *it-a*, etc.

3. Gk. *β*, whose origl. existence can be proved, is found very rarely (cf. § 46), e.g. *βλη-χή* (bleating), *βλη-χάομαι* (bleat), Lat. *bāl-are*, Scl. *ble-γᾶ*, O.H.G. *blā-zan*; *βραχύς* (short), Lat.

brev-is, fr. **bregu-is*, Scl. *brüz-ü*; βδέ-ω (*pedo*), Bohem. *bzdí-ti*, § 63. Lith. *bezd-ėti*, Germ. *fist* (*flatus uentris sine crepitu*), thence *fist-en* (*flatum uentris emittere*), Scl.-Germ. thus with spirant bef. *d* (whether this spirant was inserted in Germ. or lost in Gk., H.G. *f* does not correctly correspond to *b* of other langg.), the f.f. of the root is thus *bda* or *bsda*=*bad* or *basd*.

Note.—χ, θ, φ, instead of γ, δ, β, in Gk., is barely seen in one single certain ex.; even the cases which G. Curt. (Gr. Et.² p. 449 sqq.) allows are more or less doubtful. Θεός (*god*) is in no way related to Δι-ός (*gen. fr. Ζεύς*), δῖος (*godlike*), Lat. *deus*, *diuos*, but, as G. Curt. makes probable, to √θεσ (*Gr. Et.² p. 450*) (*pray*), in θέσ-σεσθαι, πολύ-θεσ-τος (*much-implored*), Πασι-θέη (*implored by all*), θέσ-φατος (*said by god*), θέσ-κελος (*godly*), θεῖος for *θεσιος fr. st. θεο-, *θεσο-, with regular loss of *o* bef. origl. suff. *ya*, and loss of *s* (cf. ἀλήθεια, i.e. *ἀληθεσια fr. st. ἀληθέσ-), Lat. *fes* in *fes-tus*; μέθη (*drunkenness*) does not belong to Sk. √mad (*be drunk*), but to μέθυ (*n. intoxicating drink, wine*), Sk. and origl. *mádhu* (*honey-mead, intoxicating drink*), etc. Only in pf. act. we see in later formations χ and φ bes. γ and β (εἰ-λοχ-α fr. λέγ-ω, τέ-θλιφ-α fr. θλίβ-ω, etc., v. post).

Original momentary sonant aspirated consonants. § 64.

1. Origl. *gh*=Gk. χ (on *xy*=σσ, cf. § 68), e.g. χήν (*goose*), cf. Germ. *gans*, f.f. *gansis*, Sk. *hāsá-s*, i.e. **ghansas*, Lith. *žąsis*, Scl. *gasī*; √χv in χέF-ω (*pour*), χύ-σις (*pouring*), Goth. √gu-t, H.G. *gu-fs* (*giefs-en*); √άχ, άγχ in ἄγχ-ω (*throttle*), ἄχ-νυμαι (*am grieved*), ἄχ-ομαι (id.) ἄχ-ος (*pain, grief*), ἄχ-θος (*burthen*), ἄχ-θομαι (*am burthened*), origl. *agh*, Sk. *āh*, Lat. *ang*, Goth. *aggv*; √στιχ in στείχ-ω (*go*), στίχ-ος (*rank*), στοῖχ-ος (*rank, file*), Sk. and origl. √stigh, Goth. *stig* in *steigan* (*step vb.*), *staiga* (*path*, the Sclavo-Lith. do not regard aspirates); √λιχ in λείχ-ω (*lick*), Sk. *lih*, earlier *rih*, i.e. *righ* (*lick*), Goth. *lig* in *bi-laig-ōn* (*ἐπι-λείχ-ειν*); √μιχ in ὀ-μιχ-έω (*urino*), ὀ-μίχ-λη (*mist*), Sk. *mih*, i.e. *migh* in *mēh-āmi* (*urino*), *mēgh-ās* (*cloud*), Germ. *mig*, e.g. Dutch *mīge* (*urina*); δολιχός (*long*), Sk. *dīrghás*, f.f. *darghas*, etc.

§ 64. In ἐγγύς (near)=Sk. *āhús*, i.e. **anghus* (narrow),—the Goth. *aggrus* (narrow) corresponds to the aspirated fms., which we hold to be origl. in this case, since we assign ἐγγύς to √*āχ*, origl. *agh*, in ἄγχω, ἄχ-ομαι, etc. (so G. Curtius).

Other isolated cases in which Gk. sonants, mostly after nasals, stand for origl. aspp., are treated by G. Curtius (Gr. Et.² p. 460 sqq.).

Note.—In νίφ-α (acc. snow), νίφ-ετό-ς (snow-storm), νίφ-ει (it snows), φ stands for χ, cf. Lat. *nix*, *niu-is*, for **nig-s*, **nigu-is*, (v. post), *ning-it*; the root had an initial *s* lost in Graeco-Italic, cf. Lith. *snig-ti* (to snow), *snėg-as* (snow), O.Bulg. *sněg-ŭ* (snow), Goth. *snaiw-s* (snow), Zend √*çniž* (*çnaēž-enti*, 3 pl. pres. 'it snows,' lit. 'they snow'), Sk. √*snih* (be damp), f.f. of root is therefore *snigh*.

2. Origl. *dh*=Gk. *θ* (on *θy*=σσ, cf. § 68), e.g. √*θε*, origl. *dha* (set), pres. τί-θη-μι, Sk. and origl. *dá-dhā-mi*, Goth. √*da*, (do), H.G. *ta*, e.g. in 1 pres. *tuo-m* fr. **ti-tō-mi*=*dhadhāmi*; μέθυ (intoxicating drink), Sk. and origl. *mádhu*, O.H.G. *mētu* (mead); √*ιθ* in αἶθ-ω (kindle), Sk. and origl. √*idh*; ἐρυθ-ρός (red), √*ῥυθ*, Sk. *rudhirás*, origl. *rudhras*, √*rudh*, Goth. √*rud* in *raud-s*, H.G. *rut* in *rōt*, Lat. *rūf-us*, etc.

Note.—In θερμός, Sk. *gharmás* (heat), Lat. *formus*, cf. Scl. *grě-ti* (to warm), Germ. *warm* fr. **gwarm*, √*θερ*, θερ-ομαι (am warm), θέρ-ος (neut. summer), origl. and Sk. *ghar*, *θ* stands where we should expect *χ*.

3. Origl. *bh*=Gk. *φ*; √*φα* (shine) in φα-ίνω (show), φάσ-ις (a showing), √*φά* (speak) in φη-μί, φά-σκω (say), φά-τις (speech, rumour), φωνή (voice), Sk. and origl. *bha*, Sk. *bhā-mi* (shine), *bhā-s* (give light, shine), *bhā-ś* (speak), Lat. *fā-ri*; √*φερ*, 1 sing. pr. φέρ-ω (bear), Lat. *fer*, *fero*, Sk. and origl. *bhar*, *bhār-āmi*, Goth. *bar*, *baira*; √*φν* in φύ-ω (bring forth), φυ-τόν (plant), Lat. *fu* in *fu-turus*, *fu-i*, Sk. and origl. *bhu*, O.H.G. *pi* in *pi-m*, weakened fr. **pu*, **pi-um*; νέφ-ος (cloud), νεφέλη (a cloud), Sk. *nábhas* (a cloud), O.H.G. *nēpal* (cloud); ὀφρύς (eyebrow), Sk. *bhrūs*, O.H.G. *prāwa*, etc.

Note 1.—In $\sqrt{\lambda\alpha\beta}$ ($\lambda\alpha\mu\beta\acute{\alpha}\nu\omega$, $\acute{\epsilon}\text{-}\lambda\alpha\beta\text{-}\omega\nu$, take, seize) bes. § 64. $\lambda\acute{\alpha}\phi\text{-}\upsilon\rho\omega\nu$ (booty), $\acute{\alpha}\mu\phi\iota\text{-}\lambda\alpha\phi\text{-}\acute{\eta}\varsigma$ (clasping), Sk. $\sqrt{labh}$ (keep, get), β is very prob. a representative of origl. bh , caused perh. by the nasalized pres. $\lambda\alpha\mu\beta\acute{\alpha}\nu\omega$, cf. supr. $\acute{\epsilon}\gamma\gamma\acute{\upsilon}\varsigma$ fr. $\sqrt{agh}$; also $\beta\rho\acute{\epsilon}\mu\text{-}\omega$ (roar) has β for origl. bh , cf. Lat. *frem-o*, Sk. *bhrám-āmi* (swarm, rove). On other isolated exx. cf. G. Curt. Gr. Et.² p. 460 sqq., Grassmann, Kuhn's Zeitschr. xii. 91 sqq.).

Note 2.— $\sqrt{F\alpha\gamma}$ in $\rho\acute{\eta}\gamma\text{-}\nu\upsilon\mu\iota$ (break, tear), $\rho\acute{\eta}\gamma\text{-}\mu\alpha$ (rent), $\delta\iota\alpha\rho\acute{\rho}\acute{\omega}\xi$ (broken through) for $*\delta\iota\alpha\text{-}F\rho\omega\gamma\text{-}\varsigma$ has F for origl. bh (as in case-sf. origl. bhi the bh may even be entirely lost, v. sub. declens.), cf. Lat. $\sqrt{frag}$ in *frang-o*, *frag-men*, *frag-ilis*, Goth. $\sqrt{brak}$ in *brik-an* (break), pf. *brak*. The same change occurs in $\sqrt{F\alpha\gamma}$, $\acute{\alpha}\gamma\text{-}\nu\upsilon\mu\iota$ (break), $\acute{\alpha}\text{-}\alpha\gamma\text{-}\acute{\eta}\varsigma$ (unbroken), cf. Sk. $\sqrt{bhag}$ in *bha-ná-g-mi* (I break), *bhañgi-s* (breakage). It is uncertain whether the roots *bhag* and *bhrag* are akin.

Roots which origly. began and ended with an asp. also lose in Gk. their initial asp., whereby there thus arises a tenuis (cf. sup. § 64). Thus e.g. $\pi\acute{\eta}\chi\upsilon\text{-}\varsigma$ (fore-arm) stands for $*\phi\eta\chi\upsilon\text{-}\varsigma$, cf. Norse *bōg-r*, O.H.G. *buoc*, like Sk. *bāhú-s* (arm) for $*bhāghu\text{-}s$; $\pi\upsilon\theta\text{-}\mu\acute{\eta}\nu$ (base) for $*\phi\upsilon\theta\text{-}\mu\eta\nu$, like Sk. *budh-nás* (floor) for $*bhudh\text{-}na\text{-}s$, cf. O.H.G. *bod-am*, Lat. *fu-n-d-us*; $\pi\epsilon\nu\theta\text{-}\epsilon\rho\acute{\omicron}\varsigma$ (father-in-law), $\pi\epsilon\nu\theta\text{-}\epsilon\rho\acute{\alpha}$ (mother-in-law), $\pi\epsilon\iota\sigma\text{-}\mu\alpha$ (bond, halser) for $*\pi\epsilon\nu\theta\text{-}\mu\alpha$ fr. $\sqrt{\pi\epsilon\nu\theta}$ for $*\phi\epsilon\nu\theta$ (bind), like Sk. *bandh* for $*bhandh$ (in Sk. also 'relationship' derived fr. 'bonds,' e.g. *bandh-u-s*, a relation); so too the Goth. fm. *band* points to this (pres. *bind-a*, pf. *band*); $\sqrt{\pi\upsilon\theta}$ for $*\phi\upsilon\theta$ in $\pi\upsilon\nu\theta\text{-}\acute{\alpha}\nu\omicron\mu\alpha\iota$, $\pi\acute{\epsilon}\upsilon\theta\text{-}\omicron\mu\alpha\iota$ (learn, ask), Sk. *budh* for $*bhudh$ (be awake, know, be wise), Lith. $\sqrt{bud}$ (*bud-ėti* be awake, *bud-rú-s* wakeful), O.Bulg. *bŭd* (*bŭd-ėti* be awake, *bud-iti* wake), Goth. *bud* (*biud-an* bid, though with a considerable change of meaning). A perfectly analogous phenomenon is seen in redupln.-laws (§ 68); cf. Grassm. Kuhn's Zeitschr. xii. 110 sqq.

CONSONANTAL PROLONGED-SOUNDS.

§ 65.

Origl. spirants; y , s , v (the changes of origl. y , v have been treated at length by G. Curt. Gr. Et.² pp. 491-611).

§ 65. 1. Origl. y =Gk. ι , ϵ , ζ , ϵ' , is lost (on y in ζ , $\sigma\sigma$, cf. § 68, 1 b, d, e). From assimiln. of y to other consonn. ($\kappa\epsilon\rho\rho\omega$ for $*\kappa\epsilon\rho-y\omega$, $\epsilon\lambda\acute{\alpha}\sigma\sigma\omega\nu$ for $*\epsilon\lambda\alpha\chi\gamma\omega\nu$, etc.), it follows that it was not lost till late in Gk. To the existence of y in Gk. evidence is given by the operation of the consonantal beginning of Hom. $\omega\varsigma$ (as)=origl. $y\acute{a}t$ (abl. of st. ya -), and that of $\acute{\iota}\epsilon\tau\omicron$, $\acute{\iota}\epsilon\mu\epsilon\nu\omicron\varsigma$, etc., origl. $\sqrt{y}a$ (go); even the writing of F for y in $F\acute{o}\tau\iota$ and $T\lambda\alpha\sigma\iota\alpha F\omicron$ proves it, on which point we may follow G. Curt. Gr. Et.² no. 606, p. 354.

a. Gk. ι =origl. y , e.g. in the common st.-formative sf. origl. ya , Gk. ω , thus $\pi\acute{\alpha}\tau\rho-\omega-\varsigma$ (fatherly), origl. $p\acute{a}t\alpha\rho-y\alpha-s$; $\tau\epsilon\lambda\epsilon\acute{\iota}\omega$, thence $\tau\epsilon\lambda\acute{\epsilon}\omega$ (finish), for $*\tau\epsilon\lambda\epsilon\sigma-y\omega$, pres. fm. in ya fr. st. $\tau\epsilon\lambda\epsilon\varsigma$ ($\tau\acute{\epsilon}\lambda\omicron\varsigma$, neut. end), etc., vid. § 26.

Here there occurs also a transposition of origl. y after a liquid cons. to Gk. ι before the liquid, e.g. $\phi\theta\epsilon\acute{\iota}\rho\omega$ (destroy) fr. $*\phi\theta\epsilon\rho-y\omega$, etc., v. § 26, 3.

b. Gk. ϵ =origl. y , e.g. $\kappa\epsilon\nu\epsilon\acute{o}\varsigma$ (empty) for $*\kappa\epsilon\nu\gamma\omicron\varsigma$, as is shown by Aiol. $\kappa\acute{\epsilon}\nu\nu\omicron\varsigma$ fr. Sk. $\zeta\acute{u}n\gamma\alpha-s$ beside $*\kappa\epsilon\nu\gamma\omicron-\varsigma$ we may infer an origl. $k\acute{v}a\eta\gamma\alpha-s$ common to both; $\sigma\tau\epsilon\rho\epsilon\acute{o}\varsigma$ = $\sigma\tau\epsilon\rho\acute{\epsilon}\rho\acute{o}\varsigma$ (hard, solid) fr. $*\sigma\tau\epsilon\rho-\gamma\omicron\varsigma$; $\theta\upsilon\rho\epsilon\acute{o}\varsigma$ (door-stone, door-shaped shield) fr. $*\theta\upsilon\rho\gamma\omicron\varsigma$, with origl. sf. ya , fr. $\theta\acute{u}\rho\alpha$, door. v. § 26, 2.

c. Gk. ζ =origl. y , e.g. $\sqrt{\zeta}\nu\gamma$ in $\zeta\epsilon\acute{\iota}\gamma\nu\nu\mu\iota$ (bind), $\zeta\upsilon\gamma\acute{o}\nu$ (yoke), Lat. $iug-um$, Sk. $yug\acute{a}m$, etc., Lat. Sk. origl. $\sqrt{y}ug$ (iungere); $\zeta\acute{\epsilon}\omega$ (seethe, intr.), $\sqrt{\zeta}\epsilon\varsigma$, cf. $\check{\epsilon}-\zeta\epsilon\sigma-\mu\alpha\iota$, $\zeta\epsilon\sigma-\tau\acute{o}\varsigma$, O.H.G. $j\acute{e}s-an$ (H.G. $g\ddot{a}ren$), f.f. of root is yas ; $\zeta\acute{\epsilon}F\alpha$ (spelt), Lith. $y\acute{a}vas$, pl. $yavai$ (barley), Sk. st. $yava-$ (grain).

Note.—A d has been here developed bef. origl. y , for $\zeta=dz$ or dy , precisely as in other langg. we find a change fr. y to dy , and further to $d\check{z}$, e.g. Lat. *maiores*, middle-Lat. *madiorem*. It. *maggiore*, i.e. *madzore*; Prākrt *gutta-*, i.e. *džutta*=*yukta*. G. Curtius (Gr. Et.² p. 550 sqq.) compares this dy for y with gv for v , which appears not unfrequently in later periods of speech (e.g. It. *guastare* fr. Lat. *uastare*). Curt. also adds $\delta\iota$ =origl. y , in sf. $\delta\iota\omega-$ (e.g. $\kappa\rho\nu\pi\tau\acute{\alpha}-\delta\iota\omicron\varsigma$, secret)=origl. ya , and $\delta\epsilon$ = $*\delta y$ =origl. y in sf. $\delta\epsilon\omicron-$ (e.g. $\acute{\alpha}\delta\epsilon\lambda\phi\acute{\iota}-\delta\epsilon\omicron-\varsigma$, nephew), and

further δ =origl. y by entire loss of y after the δ wh. it pro- § 65.
duced, through intermed. step. $*\delta y$. This case is indisputable in
Boiôt. $\delta\upsilon\rho\acute{o}-\nu$ (yoke) = $*\delta y\rho\acute{o}-\nu = \zeta\rho\acute{o}-\nu$ = origl. $yuga-m$ (yoke);
further G. Curt. assumes it in $\delta\acute{\eta}$ (iam) for $*dy\acute{a}$, $*y\acute{a}$, perh. an
instr. pron. st. origl. ya , cf. Lat. *iam*, Lith. *yaú*, Goth. H.G.
ju, and others fr. same st.; it then becomes evident that the δ
of apparent sf. $-\iota\delta-$ is nothing but iy for i , e.g. $\mu\acute{\eta}-\nu\iota-\varsigma$ and
 $\mu\acute{\eta}-\nu\iota\delta-\varsigma$ fr. $\mu\eta-\nu\iota-\varsigma$ (wrath; $\sqrt{ma}$, think, also be wroth, sf. *ni*)
 $\theta\acute{\epsilon}-\tau\iota-\varsigma$ and $\theta\acute{\epsilon}-\tau\iota\delta-\varsigma$ (each case formed by sf. *ti*), also $\phi\rho\omicron\nu-\tau\acute{\iota}\delta-\varsigma$,
 $\epsilon\rho\iota\delta-\varsigma$ bes. $\epsilon\rho\iota-\nu$, etc.; everywhere therefore we must presuppose
in these cases a Gk. f.f. such as $*\mu\eta-\nu\iota y-\varsigma$, $*\theta\epsilon-\tau\iota y-\varsigma$. Also
the sf. $a\delta$ and others with δ are due to origl. y acc. to Curtius.
Though we cannot treat in detail of the deductions of G.
Curtius, we may remark in general on his opinion, that whilst
 y is remarkably common in st.-formation of Indo-Eur., d is
a rare element, so that we see scarcely any other possibility of
bringing the above-named Gk. fms. into harmony with those
of the kindred langg. The assumption of so many termns. in
special cases of later Gk. forms is, however, not perfectly cer-
tain; nevertheless that $y=\delta$ in $\delta\upsilon\rho\acute{o}\nu$ is beyond doubt. Further
the dental certainly corresponds to origl. y in $\chi\theta\acute{\epsilon}\varsigma = *\chi\delta\acute{\epsilon}\varsigma$,
 $*\chi\delta y\epsilon\varsigma$, $*\chi y\epsilon\varsigma$ = Sk. *hyas* (yesterday), f.f. *ghyas*, cf. Lat. *her-i*,
hes-ternus, Goth. *gis-tra-dagis*. What we admit in these cases
is possible in others too.

d. Gk. ϵ = origl. y , e.g. $\eta\pi\alpha\rho$ (liver), cf. Lat. *iecur*, Sk. *yákr̥t*;
 $\alpha\gamma\iota\omicron\varsigma$ (holy), Sk. *yaḡyas* (to honour, worship), origl. $\sqrt{yag}$;
 $\omega\rho\alpha$ (season), cf. O.Bulg. *jāre* (n. year), Goth. *yēr*, O.H.G. *jār*;
 $\upsilon\sigma-\mu\acute{\iota}\nu-$ (retained only in loc. sg. $\upsilon\sigma-\mu\acute{\iota}\nu-\iota$), $\upsilon\sigma-\mu\acute{\iota}\nu\eta$ (combat),
 $\sqrt{\upsilon\varsigma}$ bef. μ for $\upsilon\theta$ = Sk. *yudh* (fight), e.g. in *yudh-ma-s* (fight,
fighter), *yudh-māna-m* (fight), which agrees with the Gk. in
the sf. also; $\upsilon\mu\epsilon-\acute{\iota}\varsigma$ (you), cf. Sk. *yuśmá-t* (abl.; it here depends
of course from the stem only), Lith. *jūs* (you), etc.

e. In Gk. y is entirely lost (cf. § 27), e.g. initial y in Aiol.
 $\upsilon\mu\mu\epsilon-\varsigma$ (you), cf. Sk. *yuśmá-t* (abl.); $\delta\tau\tau\iota$ in Sappho fr. st. $\acute{o}$ -
=origl. $ya-$. In the middle of words this loss is more frequent;
after consonn., e.g. in termn. of fut. $-\sigma\omega$ for $*\sigma y\omega$, cf. Dôr. fm.
 $-\sigma\acute{\iota}\omega$ = Sk. and origl. $-sy\acute{a}-mi$; betw. vowels the loss of y is
commonest of all, as in the termns. of derivative vbs. $-\acute{\epsilon}\omega$, $-\acute{\alpha}\omega$,
 $-\acute{\omicron}\omega$, which alike represent the origl. and Sk. $-ay\acute{a}mi$, e.g. $\phi\omicron\rho\acute{\epsilon}\omega$

§ 65. (bear)=Sk. and origl. *bhār-āyāmi*; in cases like *τελέω* fr. *τελείω*, for **τελεσ-γω*, with origl. sf. *γα* fr. st. *τελες-* (*τέλος* neut. end), in *-νω* for **-υγω* (*φύω* earlier *φυίω*, f.f. *bhuyāmi*, etc.); in gen. sg. masc. and neut. of *ο-st.*, origl. *α-st.*, e.g. *ἵππου* fr. *ἵπποο*, and this certainly fr. *ἵπποιο*, which stands for **ἵπποσγο*, origl. *akvasya*; *πλέον* (more) bes. *πλείον*, f.f. *pra-yans*, comp. fr. *√par*, *pra* in *πολ-ύ-* (many), f.f. *par-u-*. Thus in most cases, before *y* entirely disappeared, it became *i*.

Note.—The assimln. of *y* to other consonn., e.g. *λλ=λγ* and the like, and its combination with gutt. and dentt. as *ζ, σσ*, is treated of under ‘sound-laws,’ § 68.

2. Origl. *s*=Gk. *σ, ς*, is lost.

a. Gk. *σ*=origl. *s* in termn. and bef. mutes, more rarely bef. vowels, e.g. *√ἐς*, origl. *as* (esse), *ἐσ-τί*, Sk. and origl. *ás-ti* (he is); st. *μενες-* n. *μένος* (might, strength), origl. and Sk. *mānas*; sf. of nom. sg. masc. fem. *-s*, e.g. *πόσι-s*, *ῥψ=Fόπ-s*, Sk. and origl. *pāti-s*, origl. *vāk-s*; sf. gen. sg. *-os*, origl. *-as*, e.g. *Φοπ-ός*, origl. *vāk-as*, Sk. *vāk-ás*, etc.; *√στορ*, Sk. and origl. *star*, e.g. in 1 sg. pres. *στορ-έννυμι*, *στόρ-νυμι* (spread), Sk. *str-ṇōmi*, origl. *star-naumi*, etc.; *√στα*, *ἵστημι* (set), origl. *sta-stā-mi*, Lat. and origl. *sta*; *σῦς* bes. *ῑς* (swine), Lat. *sūs*, O.H.G. *sū*; *σέβ-ομαι* (be in awe of), *σεμ-νός* (awful) for **σεβ-νος*, *σοφ-ός* (wise), and others show likewise init. *s* bef. vowel; *σιγάω* (am silent) bes. O.H.G. *swīgēn* has exceptionally *σ* for older *sv*, which regularly should become *ς*; it is also found in *σελ-ήνη* (moon), fr. origl. *√svar* (shine), and perh. in some other instt., cf. *σέλ-ας* (sheen), *έλ-άνη* (torch), with usual sound-change, fr. same root (cf. G. Curt. Gk. Et.² p. 625). This *σ* bes. *ς*, we must prob. consider to be an archaism, which has been partially retained.

b. Gk. *ς*=origl. *s*, when it is initial before a vowel or origl. *v*, e.g. *√ἐδ*, *ἔδ-ος*, *ἔδ-ρα* (seat), *ἔζομαι* (set myself, sit) for **ἔδ-γομαι*, Lat. *sed*, origl. and Sk. *sad* (sit); *ἐπτά* (seven), Lat. *septem*, origl. and Sk. *saptán-*; *√έπ* in *ἔπ-ω*, *ἔπ-ομαι* (follow),

Lat. *sequ-or*, Sk. $\sqrt{sak}$, origl. *sak*; ὕπνος (sleep), origl. and Sk. § 65. *svápnas*; ἡδύς (sweet), f.f. Sk. and origl. *svādús*; pron. $\sqrt{é}$, *ó*, in *oũ*, *oĩ*, *é* (sui, sibi, se), *ός* (suos), origl. and Sk. *sva-*; ἐκυρός (father-in-law), f.f. *svakuras*, Sk. *ḡvácúras* for *svácúras*, Lat. *socer*, Goth. *svaihra*, etc.

Note.—It is not probable that the ϵ (which regularly represents *s*) in words which origly. began with *sv* compensates for the *v*, and that *s* afterwards entirely disappeared from before it. If the earlier lang. shows *F* even then, we may prob. assume that the sign of the asp. was not written bef. *F*, and that we must theref. read *Fé* and the like as *hve*; the long duration of *s* in Gk. seems proved by parallel fms. in diall., such as σφός.

Not uncommonly we find medial ϵ after vowel transferred to initial ϵ bef. vowel; e.g. *ίερός* (strong, holy) fr. **ίερος*, **ίσερος* = Sk. *īśirá-s* (strong, fresh); *είρόμην* fr. **έ-έπομην*, **έ-σεπομην*, $\sqrt{έπ}$ (follow) for **σεπ*, origl. *sak*; *είστήκειν* fr. **έ-έστηκειν*, **έ-σεστηκειν*, $\sqrt{στα}$ (stand), redupld. *sa-sta*, **σε-στα*; *εῦω* bes. *εῦω* (kindle), $\sqrt{ύς}$, origl. *us*, Sk. *uś* (burn), f.f. *ausāmi*, in Gk. first **εῦσω*, **εῦώ*; *έως* (dawn) for **έώς* fr. **εῦώς*, **έFώς*, cf. Aiol. *αὔως* for **αῦσως* (*ήώς* by compens. lengthening for **άFσως*), f.f. of st. is *aus-as-*, cf. Sk. *uś-ás-* (f. dawn), fr. same $\sqrt{us}$, Lat. *aurōra* for **aus-ōs-a*, likewise, as in Gk., with step-formn. of root; *ήμαι* (sit) for **ήσ-μαι*, cf. Sk. *ās-ē* for **ās-mai*, here in Gk. the init. ϵ became fixed by analogy throughout, and is added also in *ήσ-ται* for **ήσ-ται* = Sk. *ās-tē*; *ήμεῖς* (we), cf. Sk. *as-má-t*, *ήμεῖς* thus stands by compens. lengthening for **άσ-μεις*, whence the parall. fm. *ἄμμες* = **άσμες*, in which the *σ* has become assimilated to the *μ*; in *ήμεῖς* therefore the real *s* is doubly represented.

Note.—At first sight *έός* bes. *σφός* and *ός* seems clearly fr. a Gk. f.f. **σFος*, viz. *έός* for **έός* (*ehos*) fr. **έFος* (*ehvos*), and this fr. **έσFος*, **έ-σFος* for **σFος*, with the favourite vowel-prefix, which does not occur in *σφός* and *ός*; but when we recollect the Lat. *suus*, earlier *souos*, i.e. **seuos* (§ 33, 2), we are

§ 65. led back to a special Gr.-Ital. f.f. **sevos* (cf. Lith. *sávo* fr. an unused **sava-s* suus), which necessarily becomes in Lat. *souos*, *suus*, in Gk. *έFος*; then too we must understand *τεός*=**τεFος*=*tuus*, i.e. **tovos*, **teros*, Lith. *táva-s* (tuus). Cf. § 26 n.

Sometimes ' appears as a later addition; it seems that the sensibility of the lang. to the distinction betw. ' (*h*) and ' (Semit. 'elif') began to decay rather early (cf. c.), thus e.g. in *ίππος* (horse) fr. **ικFος*, cf. the extant fm. *ίκκος*, Lat. *equos*, Sk. *áçvas*, f.f. *akvas*; that ' occurs here only in later times is proved by forms like *Λεύκιππος*, *Άλκιππος*, which otherwise would have been pronounced **Λευχιππος*, **Άλχιππος*; *ύστερος* (later)=Sk. *út-taras*; *ύ* is so frequently an initial sound, for origl. *su*, *sva*, that the more uncommon beginnings which would properly be *ύ*, followed the analogy of *ύ*; here belongs prob. *ύδωρ* (water), cf. Boiôt. *οὔδωρ*, Lat. *unda*, Sk. *ud-am*, *ud-akám* (water), Goth. *vatō*, Lith. *vandũ* (with earlier *vad*=*ud*); *ύφ-η*, *ύφ-ος* (web), *ύφ-αίνω* (weave), cf. Germ. *√wab* (weave), Sk. *ūrṇa-vābh-i-s* (m. spider, lit. woolweaver), *√vabh*, fr. which therefore may arise regularly a fm. *ubh*, Gk. *ύφ*; for **ύδ*, **ύφ*, in these words, we must presuppose an origl. *vad*, *vabh*, for which through loss of *a* arose *ud*, *ubh*.

c. In Gk. origl. *s*, or rather ' , which arose fr. origl. *s*, is entirely lost (cf. § 28). This occurs regularly in middle of words betw. vowels, and more rarely in initio bef. vowels, whilst it is regular bef. initial *ν* and *ρ*; e.g. *μένος*, gen. *μένους* fr. *μένεος*, **μενεσος*, f.f. and Sk. *mánasas*; *φέρη* fr. **φερεσαι*, origl. *bharasai*; *μῦς* (mouse), gen. *μύς*=Lat. *mus*, *muris*, both fr. **musas*; *Fiός* (poison) for **Fισος*=Lat. *uirus*, Sk. *viśa-s* and *viśa-m*; etc. Yet we also find *s* kept betw. vowels, e.g. *δίδο-σαι*, *τίθε-σαι*, *ἴστα-σαι*.

In initio bef. vowels ' has fallen out in *ά-* (for and bes. *ά-*), *ό*=origl. and Sk. *sa-* (with), e.g. in *ά-δελφείος*, *ά-δελφός* (brother, lit. couterinus, cf. *δελφύς* uterus); *ά-λοχος* (spouse, consors tori, cf. *λέχος*, bed); *ό-πατρος* (having the same father, cf. *πατήρ*), etc., bes. *ά-πας* (all); *έτεός* (true, correct)=Sk. *satyá-s*; *√έχ*

(in ἔχ-ω hold, have)=Sk. *śah* (*śah-atē*, he holds, carries; this § 65. $\sqrt{\epsilon}\chi$ =*sagh* is confused in Gk. with $\sqrt{vagh}$, uehere); *ιδίω* (sweat), Sk. and f.f. *svīdyāmi*, bes. *ιδ-ρώς* (sweat); *ἡδ-ος* (pleasure, delight) bes. *ἡδ-ύς* (sweet)=Sk. and origl. *svād-ús*, $\sqrt{svad}$; *ὅλο-ς* (Old-Ep. and Iôn.) bes. *ὅλος* (whole), Gk. f.f. *solvo-s*=Lat. *saluo-s*, *sollo-s*=Sk. *sārva-s*; *ἔ-σταλ-κα*, pf. fr. pres. *στέλ-λω* (place, send) for **ἔ-σταλ-κα*, **σε-σταλ-κα*; *ἔ-σπαρ-μαι*, pf. pass. fr. *σπείρω* (sow)=**σπερ-γω*, similarly for **ἔ-σπ*, **σε-σπ*. We see that the dropping of the *h*-sound, which has taken place throughout in mod. Gk., began even very early (G. Curt. Gr. Et.² p. 612 sqq.). The feeling of the lang. for *h* was weakened even in early Gk. (cf. supr. 2, b.).

Note.—The st. *ὄντ-* in *ὄν*=**ὄντ-ς*, *οὔσα*=**όντγα*, *ὄν*=**όντ*=origl. *as-ant-*, pres. part. act. of origl. $\sqrt{as}$ (*esse*), only apparently belongs here. The earlier fms. of this part. *έών*, etc., point to a once-existent fm. **έόντ-*, **έσ-οντ-*, with $\sqrt{\epsilon}\varsigma$ preserved, fr. which fm. the *s* regularly dropped out, **έσ-οντ-* thus became *έοντ-*, later the *ε* fell off, and thus arose *όντ-*.

s falls away bef. *ν* in *νύς* (bride, daughter-in-law), Lat. *nurus*, but O.H.G. *snur*, *snura*, Sk. *snušā*, O.Bulg. *snūcha*, accordingly we must assume also a Gk. f.f. **σνυσο-ς*; $\sqrt{\nu\nu}$ in *νέF-ω* (swim), impf. however in Hom. *έννεον* fr. **έ-σνεF-ον*, Sk. and origl. $\sqrt{snu}$ (flow, drip).

s is lost bef. *ρ* in $\sqrt{\rho\nu}$ (flow), *ρέω*, *ρυτός*=Sk. and origl. *sru*, Germ. *stru*, with inserted *t*, in *ström*, Lith. *sru* and *stru*, Scl. *stru* in *o-strov-ŭ* (*περίρρυτος*, i.e. isle). Also here *s* is preserved by assimiln. to *ρ*, e.g. *έρρύην*, *έρρευσα* for **έ-σρυ-ην*, **έ-σρευ-σα*.

Also in $\sqrt{\mu\epsilon\rho}$ in *μέρ-μερ-ος* (careful), *μέρ-ιμνα* (care), *μάρ-τυς* (witness), as in Lat. *me-mor* and Germ. *māri* (felt), the *s* is lost which is preserved in Sk. *smar*, pres. *smārāmi* (I remember, recall). The same loss perh. occurs elsewhere, though *σμ* was not disliked as an initial sound.

Before other sounds the loss of *s* is rarer, yet cf. *ταῦρο-ς* (bull), Lat. *tauru-s*, O.Bulg. *turŭ*, with Sk. *sthūrā-s* (bull), Zend

§ 65. *ῥtaora-* (larger cattle, draught-oxen), Goth. *stiur* (bull, calf); sts. the interchange betw. *στ* and *τ* is prob. merely a dialectical one, e.g. *τέγ-ος* bes. *στέγ-ος* (roof), *στέγ-ω* (cover), Lith. *stóg-as* (roof), *stég-ti* (to cover), Sk. *√sthag*, origl. *stag* (cf. Lat. *teg-o*, Germ. *decken*, *√dak*, without initial *s*). For further exx. of this phenomenon, which is hard to decide upon, vid. G. Curt. Gr. Et.² p. 621 sqq.

The assimiln. of *s* to other consonn. is treated, § 68; the loss of *s* with compens. lengthening, § 28.

3. Origl. *v*=Gk. *υ*, *F*, which was lost in the later langg.; origl. *v* is expressed by *ϵ*.

a. Gk. *υ*=origl. *v*, e.g. *δύω*, *δύο*, which bes. *δώδεκα* proves an early Gk. st. *δFo*=Sk. *dva-*; the same holds good in *κύων* (dog), bes. Lat. *canis* for **quani-s*, Sk. *ḥvā* (nom. sing. for **ḥvan-s*, st. *ḥvan-*, *ḥun-*), and in some other cases. It is very hard to decide whether *v* or *u* was the origl. here; perh. *uv* (Engl. *w*) is the earliest.

On the Aiolic vocalisation of *v* between vowels (*χεύω*=*χεFω*, etc.), so too on the transposition of *v* near liquid consonants, as e.g. *γουνός*=Aiolic *γόννος* from **γυνFος*, st. *γυνυ-* (knee), with *-ος* of the gen. sg., before which *υ*, that is *u*, passes over into *F*, *δουρός*, *δούρατος*, fr. **δωρFος*, **δωρFατος*, from which are explained also *δωρός*, *δώρατος*, by loss of *v*, cf. nom. *δόρυ* (spear), v. supra § 26 b, 1, 3.

b. Gk. *F*¹ which was lost in the later stage,=origl. *v* (cf. § 27), e.g. *Foῖνος* (wine), cf. Lat. *uīnum*, O.Lat. *ueinom*, f.f. of st. *vaina-* (or, acc. to Gk., *vāina-*); *Foῖκος* (house), Lat. *uīcus*, i.e. O.Lat. *ueicos*, Sk. *vēṣa-s*, origl. *vaika-s*; *Fέργον* (work), *√Fεργ*=Sk. *vrḡ*, *ūrḡ*, Germ. *vark* (work, to work), origl. *varg*; *√Fιδ* (see, know), origl. Sk. *vid*, Lat. *uid*, Germ. *vit*, e.g. in *Fιδ-μεν*=Sk. and origl. *vid-māsi*, *Foῖδα*=Sk. *vēda*, Goth. *vait*,

¹ J. Savelsberg, "de digammo eiusque immutationibus dissertatio," pars i. Aquisgrani, 1864; pars ii. 1866.

f.f. *vivāida*; √*Fεπ*, speak=Lat. *uoc* for **uec*, Sk. *vaḱ*, origl. *vak*, § 65. e.g. in *Ἑπ-ος* (word)=Sk. *vák-as* (speech); *ὄFις* (sheep)=Lat. *ouis*, Lith. and origl. *avìs*; *ῥον* for **ὠFιον*, f.f. *āvya-m*, fr. origl. *avi-s*, Lat. *auī-s* (bird); *νέFος* (new)=Lat. *nouus* for **neuos*, Sk. and f.f. *náva-s*; *πλέF-ω* (sail), √*πλυ*=Lat. **plou-o* for **pleu-o* (pluo), Sk. and origl. *pláv-āmi*; *ρέF-ω* (flow), √*ρύ*, origl. and Sk. *sráv-āmi*, √*sru*, cf. *ρέυ-μα* (stream); sf. *-Fεντ-*=Sk. and origl. *-vant-* (e.g. in *στονό-Fεσσαν*=*-Fετ-γαν*, with loss of nasal); *ναῦς* (ship), gen. *νᾶFός*=Sk. and origl. *nāus*, gen. *nāv-ás*; after consonn. e.g. in *δώδεκα* (twelve), *δῖς* (twice), for **δFω-δεκα* **δFι-ς*, st. *δFo-*, *δFι-*, origl. *dva-* (cf. *δύο*); *δορός*, *γόνατος*, fr. **δορFος*, **γουνFατος*, cf. *δόρυ* (spear), *γόνυ* (knee), etc.

Note.—Thus *vy* can disappear in medio betw. vowels; this occurs in sf. *tav-ya*, formed by *ya* and step.-formn. of stem termn. of abstracts in *tu*, sounded in Gk. as *τέο*, e.g. *δοτέος* (dandus)=Sk. *dātáryas*; *θετέος* (ponendus)=Sk. *dhātáryas*.

c. Gk. ' = origl. *v* in *ἔσπερος*, *ἐσπέρα* (evening), cf. Lat. *uesper*, *uespera*; *ἴσ-τωρ* bes. *ἱσ-τωρ*, a fm. which we expect according to *Fίδ-μεν*, st. *Fιδ-τορ* (knowing, witness), thence *ἱστορ-ία* (questioning, history), √*Fιδ*; *ἔννυμι* (clothe), *εἶμα* (garment), Aiol. *Φέμμα*=**Fέσ-νυμι*, **Fεσ-μα*, √*Fες*, cf. Lat. *ues-tire*, Sk. and f.f. of √*vas*: ' may, however, here have arisen also fr. *s*, and then been transposed: cf. supr. 2 b.

Note.—In isolated exx. *β*=origl. *v*, *βούλομαι* (I will), which we hold stands for **βολνομαι* (cf. Sk. *vrñé*, f.f. *var-na-mai*); to which Aiol. *βόλλομαι* and *βόλλα*=*βουλή* (will, council) seem to bear evidence; *ou* would thus arise fr. *o* by compensatory lengthening, in place of the lost *v*; √*βολ* for **Fολ* corresponds to the Lat. *uel*, *uol* (in *uel-le*, *uol-t*), Sk. and origl. *var* (choose, will); *ὄροβο-ς* (vetch) bes. Lat. *eruo-m*, O.H.G. *araweiz*, cf. H.G. *erbfse*. For other exx. of this correspondence of sound *v*. G. Curt. Gr. Et.² p. 514 sqq. Dialectically *β* for origl. *v* occurs more often, e.g. Lakón. *βέργον*, *βιδεῖν*, for *Φέργον* (work), *Φιδεῖν* (see), origl. √*varg*, √*vid*; Lesb. Aiol. *βρίζα* (root), *βρόδον* (rose), for *Φρίζα*, *Φρόδον*, etc. Yet it is not unlikely that here (except in comb.

§ 65. $\beta\rho=F\rho$) β is practically only a character representing the v -sound instead of F .

Quite beside the ordinary rule we find $\sigma\phi$ =earlier sv in pron. st. $\sigma\phi\epsilon$ -, $\sigma\phi\omicron$ - ($\sigma\phi\epsilon\iota\varsigma$, you, $\sigma\phi\acute{\epsilon}\text{-}\tau\epsilon\rho\omicron\varsigma$, $\sigma\phi\acute{\omicron}\text{-}\varsigma$, your)=Sk. and origl. sva -; in $\sigma\phi\acute{\omega}$ (you two) for $*\sigma F\omega$, $*\tau F\omega$, fr. $\sigma\acute{\upsilon}$, Dôr. $\tau\acute{\upsilon}$, origl. tu (thou); here $\sigma\phi$ arises, prob. early, for sp , in consequence of the aspirating force of s (v. sub. § 68); so, too, $\sigma\phi\acute{\omicron}\gamma\gamma\omicron\varsigma$ bes. $\sigma\phi\acute{\omicron}\gamma\gamma\omicron\varsigma$, $\sigma\phi\omicron\gamma\gamma\iota\alpha$, which corresponds in root to the Goth. *svamms*, st. *svamma*- (Lat. *fungus* is perh. borrowed fr. Gk.); sp here occurs exceptionally for sv , as takes place sometimes in Zend; in Hom. $\phi\acute{\eta}$ (as) for $*\sigma\phi\eta$, cf. Goth. *svē* (as), the initial s has been lost (G. Curt. p. 387).

Origl. v is said to be= μ in $\acute{\alpha}\mu\nu\acute{\omicron}\varsigma$ (lamb) for $*\acute{\alpha}F\iota\text{-}\nu\omicron\text{-}\varsigma$, fr. origl. *avi-s*, Gk. $\acute{\alpha}F\iota\text{-}\varsigma$ (sheep), and in other single instt. more or less doubtful (G. Curt. p. 521).

Still more doubtful is the change from v to γ (G. Curt., p. 527 sqq.).

On the assimiln. of v to other consonn. e.g. $\tau\acute{\epsilon}\sigma\sigma\alpha\rho\epsilon\varsigma$ = $*\tau\epsilon\sigma F\alpha\rho\epsilon\varsigma$, $*\tau\epsilon\tau F\alpha\rho\epsilon\varsigma$, v. 'sound-laws.'

§ 66. Nasals.

1. Origl. n =Gk. ν (cf. sound-laws for medial and final loss of origl. n in Gk.); e.g. $\nu\acute{\epsilon}F\omicron\varsigma$ (new)=Sk. and origl. $n\acute{\alpha}\nu\alpha\varsigma$; $\nu\alpha\acute{\upsilon}\varsigma$ (ship)=Sk. *nāus*, Lat. *navis*; $\acute{\alpha}\text{-}\nu\acute{\eta}\rho$ (man), st. *νερ*=Sk. and origl. *nar*-; $\acute{\epsilon}\nu\nu\acute{\epsilon}F\alpha$ (nine), Lat. *nouem*, Sk. and f.f. *návan*-; $\sqrt{\nu\epsilon\kappa}$ in $\nu\acute{\epsilon}\kappa\text{-}\upsilon\varsigma$, $\nu\epsilon\kappa\text{-}\rho\acute{\omicron}\varsigma$ (corpse)=Lat. *nec* in *nec-are*, Sk. *naç*, origl. *nak*; neg. $\acute{\alpha}\nu$ =origl. and Sk. *an*-; $\sqrt{\acute{\alpha}\nu}$, origl. and Sk. *an* (blow) in $\acute{\alpha}\nu\text{-}\epsilon\mu\omicron\varsigma$ (wind)=Lat. *an-imus*, cf. Sk. *an-ilás* (wind); $\sqrt{\gamma\epsilon\nu}$ in $\gamma\acute{\epsilon}\nu\text{-}\omicron\varsigma$ (race), $\gamma\acute{\iota}\text{-}\gamma(\epsilon)\nu\text{-}\omicron\mu\alpha\iota$ (become)=Lat. *gen*, origl. *gan*; $\sqrt{\mu\epsilon\nu}$, origl. and Sk. *man* (think) in $\mu\acute{\epsilon}\nu\text{-}\omicron\varsigma$ (mind, might)=Sk. *mán-as*; 3 pl. vb. $\text{-}\nu\tau\iota$ ($\text{-}\nu\sigma\iota$)=Sk. and origl. $\text{-}nti$, e.g. $\phi\acute{\epsilon}\rho\omicron\nu\tau\iota$, $\phi\acute{\epsilon}\rho\omicron\upsilon\sigma\iota$ =Sk. and origl. *bháranti*, etc.

Before gutturals in Gk. the nasal becomes guttural, origl. nk , ng , ngh =Gk. $\gamma\kappa$, $\gamma\gamma$, $\gamma\chi$; bef. labials it is labial. Accordingly the radical nasal, origl. n , which occurs after the root in the case of certain present-forms, remains, as in $\tau\acute{\epsilon}\mu\text{-}\nu\omega$ (I cut; cf. aor. $\acute{\epsilon}\text{-}\tau\alpha\mu\text{-}\omicron\nu$), is ν bef. dentt., e.g. $\lambda\alpha\nu\theta\text{-}\acute{\alpha}\nu\omega$ (escape notice), cf. $\acute{\epsilon}\text{-}\lambda\alpha\theta\text{-}\omicron\nu$; it becomes μ bef. labb.; e.g. $\lambda\alpha\mu\beta\text{-}\acute{\alpha}\nu\omega$ (take), cf.

ἐ-λαβ-ον; γ bef. gutt., e.g. λαγχ-άνω (get by lot), cf. ἐ-λαχ-ον. § 66. The same interchange is seen besides naturally in compds. where συν- is changed to συμ-, συγ-, according to the quality of the following conson.

Note 1.—√γαμ in γάμ-ος (marry), γαμ-έω (marry), is, like Lith. √gam (*gim-ti*, am born, *pri-gim-tis*, nature, *gam-in-ti*, beget, furnish), a further fmn. fr. √γα (γε-γα-ώς), developed early to γε-ν (the meang. 'beget' through that of 'marry'); μ is here not fr. ν in γεν. In γαμ-βρός (son-in-law) for *γαμ-ρο-ς we conjecture a 'popular' etymology fr. γαμ-έω, through which an earlier *γαν-ρο-ς=Lat. *gener*, i.e. **gen-ro-s* (son-in-law), may have passed to *γαμ-ρος; cf. Lith. *žén-ta-s* (son-in-law), f.f. *gan-ta-s*, O. Bulg. *zētī* (id.), f.f. *gan-ti-s*, similarly fr. √gan; cf. § 75, 2, n.

Note 2.—Ἄλλος (other)=Lat. *alius*, Goth. *alis*, we hold to be unconnected with Sk. *anyá-s* (other), with G. Curt., and see in it a fmn. fr. origl. pron. √ar. That such a root existed is proved by st.-fmative sf. *ra* (v. post). Corss. (Krit. Beitr. p. 295 sqq.) divides them thus: *a-li-s*, *a-liu-s*, **á-lyo-s*, because he holds the *a* to represent pron. √a (dem. e.g. Sk. gen. sg. masc. nt. *a-syá*), *li*, *lyo*, to be sff. *tā-li-s*, *quā-li-s*,

2. Origl. *m*. = Gk. μ, ν (the latter in termn.), e.g. st. με-, μο-, ἐμε-, ἐμο- (pron. pers. 1) = Lat. *me-*, Germ. *mi-* (in *mi-ch*, *mi-r*), Sk. and origl. *ma-*, thence -μι, pl. -μεν, Dôr. -μες, 1 sg. pl. vb. = origl. and Sk. -*mi*, -*māsi* (e.g. εἶ-μι = origl. *ai-mi*, Sk. *é-mi*; ἴ-μεν = Sk. and origl. *i-māsi*); μέσσο-ς (μέσος) = *μεθ-γος (v. post, § 68, 1, e) = Lat. *mediu-s*, Sk. and origl. *mādhya-s*, Goth. *midji-s*; st. μήτερ- (mother), Sk. and origl. *mātár-*; √μεν, *μνα*, origl. and Sk. *man* (think), in μι-μνή-σκω (remember), μέν-ος (mind, might) = Sk. and origl. *mānas*; μέθυ (intoxicating drink), Sk. and origl. *mādhū*, O.H.G. *mētu*; ἅμα (together, with), ὁμό-ς = Sk. *sama-s* (similar, like), *sama-m*, *samā* (ὁμοῦ), cf. Lat. *sim-ilis*, *sim-ul*, Goth. *sama* (same); √Fεμ (ἐμέω) = Lat. *uom* in *uom.o*, for **uemo*, Lith. *vem* (1 sg. pres. *vem-iù*), Sk. and origl. *vam* (spue, 1 sg. pres. *vām-āmi*). Final *m* becomes ν, e.g. sign of acc. ν = origl. *m*, e.g. τό-ν = Sk. and origl. *ta-m*, cf. Lat. *is-tu-m*; ν = *m* as sf. of 1 pers. sing., e.g. ἔφερο-ν = Sk. and origl. *ábhara-m*.

§ 66. *Note.*—The exx. which are intended to prove medial *ν* to be a representative of origl. *m* (cf. Curt. Gr. Et.² p. 476 sqq.) are all doubtful. Thus e.g. *βαίνω* (go) fr. **βαν-γω*, which must not be assigned to Sk. *√gam*, but to *√ga*, comes fr. the common formatives of the present st. *na* and *ya*; in *χθών* (earth), st. *χθον-*, bes. *χθαμαλός* (lowly, on the earth), cf. *χαμαί* (on the earth), Zend st. *zem-* (earth), O. Bulg. *zemya*, *zemlya*, Lith. *zéme* (earth), the *ν* seems to have penetrated inwards from the termn.: so, too, perh. st. *χιών*- (*χιών*, snow) bes. Lat. *hiem(p)s*, Sk. *hima-s* (snow, cold), Zend st. *zim-*, *zima-* (winter, cold), O. Bulg. *zima-*, Lith. *žemà* (winter).

§ 67. *r-* and *l-*sounds.

Origl. *r*=Gk. *ρ*, *λ*.

Gk. *ρ*=origl. *r*, e.g. in *√ρϑ* (be red), Sk. and origl. *rudh*; suff. *-ρo*, Sk. and origl. *-ra*, both in *ἐ-ρϑ-ρός* (red)=Sk. *rudh-irá-s*, Lat. *ruber*, i.e. **rub-ro-s*, origl. *rudh-ra-s*; *√αρ* in *αρ-όω* (plough), *ἄρ-οτρον* (a plough), cf. Lat. *ar-o*, *ar-atrum*, Goth. *ar-yan*, Lith. *ár-ti*, Scl. *or-ati* (plough); *√ορ* in *ορ-νυμι* (rise), Lat. *or*, Sk. *ar* in *ῥ-ῥόμι* (orior); *√ρϑ*, Sk. and origl. *sru*, flow, etc.

Gk. *λ*=origl. *r*, e.g. in *√λυκ* in *λευκ-ός* (white), Lat. *luc*, Germ. *luh*, Sk. *ruk*, origl. *ruk* (shine); *√πολ*, *πλε*, Sk. and origl. *par* (fill), in *πολύς* (many), Sk. *purús* for origl. *parus*, *πίμ-πλη-μι* (fill); *ἐ-λαχύς* (small)=Sk. *laghús*; *δολιχός* (long), Sk. *dīrghás*, Zend *dareghō*, origl. *dargha-s*; *ὅλος* (whole) for **όλFos*, Lat. *sollus* for **soluos*, Sk. *sárva-s*, etc.

§ 68. SOME IMPORTANT SOUND-LAWS.

MEDIAL.

1. Assimilation.

a. Perfect assimiln. of a preceding to a following sound; e.g. of *s* to *ν*, *μ* following, *ἔννυμι* (clothe)=**Feσ-νυμι*; Aiol. *ὄρεννος* (mountainous)=**ὄρεσ-νος* fr. *ὄρος* (mountain), st. *ὄρεσ-* sf. *-νο*; Aiol. *ἔμμι* (am)=**ἐσ-μι*; *εἰ-μί*, *ὀρει-νός*, represent the double cons. by compensatory lengthening. Not unfrequently consonants which were afterwards lost are preserved in

such assimilns., e.g. *περίρρυτος* (sea-girt) for **περι-σρυ-το-ς*, √*ρύ* § 68. (flow, *ρέF-ω*) for **σρυ*, Sk. and origl. *sru*, Germ. *stru* (with inserted *t*), etc.; *ἄρρηκτος* (unbreakable, unbroken) for **ἄ-Fρηγ-το-ς*, √*Fραγ* (*Φρήγ-νυμι*, break, *Φρήξις*, rent, for **Φρηγ-τι-ς*); *φιλομειδής* (freely smiling) for **φιλο-σμει-δης*, √*μι* for **σμι*, Sk. and origl. *smi*, O. Bulg. *smi*, etc.

The assimiln. of momentary labb. to following *μ* is well known; e.g. *γράμμα* (writing) for **γραφ-μα* (*γέ-γραμμαι* for **γεγραφ-μαι*, 1 pf. med. fr. *γράφ-ω*, write), etc., and the assimilns. which perh. occur only in compds., e.g. *συνλέγω*, *συρρέω*, and the like.

In the commonest of these cases, i.e. in assimiln. of all the dentals (including *ν*) to a following *ς*, the double *ς* so produced was not tolerated in the later form of lang., even when *ς* was medial and followed a short vowel: only the archaic (Hom.) lang. shows such forms as *ποσσί* fr. **ποδ-σι* (loc. pl. fr. st. *ποδ-*, foot); throughout *ς* is the only trace of the process of assimiln., not seldom (especially in nom. sing. and where *ντ*, *νδ*, *νθ*, were originally existent) accompanied by compensatory lengthening of precedg. vowels (cf. § 28), in which cases, perh. not common, we must assume an assimiln. of the *ν* by resolution into a vowel-sound. This is a well-known sound-law, to which belong such exx. as loc. pl. *σώμα(τ)-σι*, *πο(δ)-σι*, *κόρυ(θ)-σι*, *δαίμο(ν)-σι*. The *ς* which produces the assimiln. is often unorigl., i.e. has arisen, through the action of a previous sound-law (v. infr.), from *τ*, e.g. *πέιςις* (feeling) fr. st. *πενθ-* (cf. *πένθος*, grief) and suff. *-σι-ς* fr. *-τι-ς*. Compensatory lengthening occurs in such cases as *εἰδώς*=**FeιδFοτ-ς*, *δαίμων*=**δαιμον-ς*, *φέρουσι*=**φερονσι* fr. *φέροντι*; *ν*+dent. must both be lost before *ς*, e.g. *σπείσω* fr. **σπενδ-σω*, *πείσομαι* fr. **πενθ-σομαι*, *τιθείς* fr. **τιθεντ-ς*, *χαρίεις* fr. **χαρι-Fεντ-ς* (*φέρων*, however, fr. **φεροντ-ς*, v. § 28, 3; *χαρίεσσα* fr. **χαριFετ-γα* [v. e], without compensatory lengthening, because no *ν* was originally there).

Moreover, in this place belong the cases in which the assimiln. takes place together with the loss of the former consonant, e.g.

§ 68. διδάσκω (learn) for *διδαχ-σκω, cf. διδαχ-ή (teaching); λάσκω (cry out, speak) for *λακ-σκω, cf. ἔ-λακ-ον; ἔψευκα for *ἐψευδ-κα fr. ψεύδ-ω (tell lies), etc.

b. Complete assimiln. of a following to a preceding sound.

This kind of assimiln. is, like the former, an especial favourite in the Aiol. dialects, whilst elsewhere, instead of the double consonn., compensatory lengthening (§ 28) of the preceding vowel, or transposn. of *v* and *y* generally occurs. Thus *F*, *y*, and *σ* become assimilated to a preceding liquid, *F* and *y* sometimes to other sounds also, viz. *σ*, *y*, to *τ*, *δ*; e.g. γόννος=γουνός =*γον*F*-ος, gen. fr. st. γουν- (knee); st. πολλό- for *πολ*F*ο-, a further fm. through *ο*, origl. *α*, fr. st. πολύ- (many), origl. *par-u-*; ἵππος (horse) fr. *ἵπ*F*ος, ἱκ*F*ος (cf. sideform ἱκκος), origl. *ak-va-s*; κτέννω (kill)=κτείνω=*κτεν-*y*ω; χέρρων=χείρων (worse) =*χερ-*y*ων, etc. In the case of *λy* the assimiln. has been retained in other diall.; στέλλω (send)=*στελ-*y*ω; ἄλλος (other) =*ἄλ*y*ος, Lat. *alius*; except ὀφείλω (owe) fr. *ὀφελ*y*ω, and perh. a few others; πτίσσω (peel)=*πτισ-*y*ω (ἔ-πτισ-μαι), cf. Lat. *√pis* in *pinso*, *pis-tor*, Sk. *piś* (e.g. *pi-náš-ti*, Lat. *pinsit*); this does not often happen, *s* usually is lost, and also *y* at a later period, cf. supr. § 65, 1, *a*, *e*; πόδ-εσσι fr. *ποδεσ*F*ι, -σ*F*ι=origl. -*sua*, is termn. of loc. pl., ποδε- is the noun-st. fr. earlier ποδ- (foot); in this case also the later lang. has only one *σ*, e.g. πόλεσι, γλυκέσι, which never disappears from between the two vowels, because it stands for *σσ*. τέτταρες, τέσσαρες (four), fr. *τετ*F*αρες (f.f. *katvāras*), and thence *τεσ*F*αρες is an ex. of *F* assimild. to a mom. sound. *ττ* for *τυ*, *θy*, *κy* (apparently *γγ*, v. infr. *e*, *β*), *χy* is produced in the same way, since *κy* first became *τυ*, as this sound-change occurs in many langg., and the aspiration (of *θy*, *χy*) becomes lost before *y*.

Thus, e.g. ἐρέτω (I row) fr. *ἐρετ-*y*ω, cf. ἐρετ-μός (oar); ἥττων (less, worse) fr. *ἥτ*y*ων for *ἥκ-*y*ων, cf. ἥκ-ιστος (superl.); ἐλάττων (less, smaller) for *ἐλατ*y*ων, and the latter for *ἐλαθ-

γων, **ἐλαχ-γων*, cf. *ἐλάχ-ιστος* and *ἐλαχύς* (little). These § 68. forms in *ττ* have by-fms. in *σσ* (v. infr. e, β), and have not arisen through an unparalleled change of *σσ* into *ττ*, but one produced by a divergence of diall. in the treatment of the same fund-fms. as underlie the fms. in *σσ*. Accordingly, since e.g. *πτίσσω* (v. supr.) stands for **πτισ-γω*, no *t*-sound ever was in existence here, and so no parallel fm. **πτιττω* occurs.

δδ, initial δ, for δγ, γγ, a sound which did not become δγ until late, is likewise dialectic; e.g. Boiôt. Lak. *Δεύς* for **Δγευς* (*Ζεύς*); Boiôt. *σφάδδω* for **σφαδ-γω* fr. **σφαγ-γω* (*σφάζω*, cut the throat), √*σφαγ* (*ἐσφάγ-ην*); *σαλπίδδω* for **σαλπιδ-γω*, **σαλπινγ-γω* (*σαλπίζω*, trumpet); st. *σαλπινγ-* (*σάλπινγξ*, *σάλπινγγος* (trumpet). This also is the explanation of Att. *ἴδω* (do) fr. √*Φεργ* (pf. *ἔοργα*, i.e. *Φέφοργα*, *Φέργο-ν*, work), Goth. *vark*, for **Φερδ-γω*, **Φεργ-γω*, from which we ought to have found **Φερζω* acc. to the rule, but this form seems to have been avoided on account of the unpleasant combination ρζ, cf. *ἴδω*. *Φρέζω*, Boiôt. *Φρέδδω*=**Φρεγ-γω*, which differs from **Φερδ-γω* merely in transposition from *Φεργ* to *Φρεγ*. So also δ fr. δγ is produced in place of origl. γ (v. supr. § 65, c, n.).

The same assimiln. occurs, except in archaic remains such as *ἔρσω*, *ῶρσα*, *χέρσος* (*χέρρρος*), *θάρσος* (*θάρρρος*), *πέφανσαι* (which perh. is hardly authenticated), beside medial combinations, as *λσ*, *ρσ*, *νσ*, *μσ*, e.g. Aiol. *ἔστελλα*=*ἔστειλα*=**έστελ-σα*; Aiol. *ὀρράτω*=*ὀρσάτω*; Aiol. *ἐγέννατο*=*ἐγείνατο*=**έγενσατο*; Aiol. *ἐνεμμα*=*ἐνειμα*=**ένεμσα*; thus *ἔφθηνα* stands for **έφαν-σα* *ἡγγειλα* for **ήγγελ-σα*, etc. Thus *χήν* (goose), gen. *χην-ός* fr. **χεν-ς*, **χενσ-ος*, cf. Lat. (*h*)*ans-er*, Sk. *hã-sas*, O.H.G. st. *gansi-*, Lith. *žąsi-s*, O. Bulg. *gąsi*; *μήν* (month), Iôn. Aiol. *μείς*, gen. *μην-ός* fr. **μεν-ς*, cf. Lat. *mens-is*, Sk. *mās-* (origl. *ma-nt-*, pres. part. act. √*ma*, measure); *ὄλλυμι* (destroy) stands for **ὀλ-νυμι*.

c. An assimiln. of preceding to following sounds. It is well known that τ and σ can be preceded only by mute mom. sounds (*λεκ-τός*, *λέκ-σις*, i.e. **λεγ-σις*, √*λεγ*), δ by none

§ 68. but sonant mom. sounds (γράφ-δην, √γραφ), θ by none but aspp. (λεχ-θήναι, √λεγ).

Before ν labb. pass into their nasals, e.g. σεμ-νός (awful) for *σεβ-νος, cf. σέβ-ομαι (I dread), yet they are found, e.g. ὕπ-νος (sleep), in opposition to *som-nus* (**sop-nus*).

Bef. labb. ν notably passes into the lab. nasal μ (e.g. ἔμ-πειρος for *έν-πειρος), bef. gutt. into the gutt. nasal γ (e.g. σνγ-καλέω for *σνν-καλεω), cf. § 66, 1.

Bef. μ the dentt. τ, δ, θ, often pass into their spirants, e.g. ἦνυσ-μαι fr. ἀνύτ-ω (bring to pass, finish), πέ-πεισ-μαι for *πε-πειθ-μαι, etc.; yet Ἰόν. ὀδ-μή occurs beside later ὀσ-μή (smell), √ὀδ; ἴδ-μεν (we know) bes. ἴσ-μεν; ἀριθ-μός, ἀτ-μός, κεκορυθ-μένος, and others, do not show the change to σ.

Further, the change of gutt. κ, χ, before μ into γ is well known, e.g. δόγ-μα, √δοκ; τέ-τυγ-μαι, √τυχ; yet χ often remains, e.g. δραχμή. This law was likewise incompletely applied in the earlier (Ἰόν.) langg., e.g. ἴκ-μενος, ἀκαχ-μένος.

Sometimes nasals seem to change preceding mom. sounds into aspp., e.g. λύχ-νος (light, torch) fr. √λυκ (λευκ-ός, white), origl. *rūk*; ἀκ-αχ-μένος (sharpened, pointed), redupl. √ἀκ (be sharp); cf. ἀκ-ωκ-ή (point), and others.

The same influence is exercised by ρ, λ, in many cases, e.g. suff. -θρο, -θλο, bes. origl. *tra*, Zend *thra* (here the spirants have the force of aspp.), e.g. βά-θρο-ν (base), √βα (go); κλεί-θρον (lock), fr. κλείω, κληίω, κλήω (lock); θέμε-θλον (ground-work), etc., bes. ἄρο-τρο-ν (plough)=Lat. *arā-tru-m* (ἀρόω, I plough), etc.

Before ι in stem- and word-formative particles (except in Dôr. dial.) τ is changed to σ, e.g. φησί (he says), Dôr. φατί; the -τι of 3rd pers. sing. is kept in ἐσ-τί (he is); the abstracts in -σι-s for -τι-s, e.g. φά-σις, in Hom. and tragg. φά-τις (speech); πέψις (cookery, √πεπ, f.f. *kak*, cook) fr. *πεπ-τι-s, f.f. *kak-ti-s*; suff. γα, Gk. -ιο, forming -τγα, with stems ending in t-, ta- (the stem-termn. a of ta being lost, which is regularly the case bef. suff. γα), Gk. -τιο, and hence -σιο, e.g. fr. πλοῦτο-s (wealth) is

fmd. Dôr. πλούτ-ιο-ς, and hence πλούσιο-ς (rich); fr. ἐνιαυτό-ς § 68. (year), Dôr. ἐνιαύτ-ιο-ς, and hence ἐνιαύσιο-ς (yearly); st. γερωντ- (n. sing. γέρων, old man) with sf. *ya*, Gk. *ia*, makes γερωντία, and thence γερουσία (senate); f.f. (*d*) *vikati*, Dôr. *ἑλκατι*, *εἵκατι* (perh. fr. **ἑλκατι*), Att. *εἴκοσι* (twenty); from Dôr. φέρωντι, τιθέντι (3 pl.), f.f. *bharanti*, *dadhanti*, come *φέρουσι, *τιθενσι, and thence by rule (v. supr.) φέρουσι, τιθεῖσι (Iôn.), etc. Yet in Att. and Iôn. is found φά-τι-ς (speech), √*φα*, and the like.

Also bef. *υ* this change of *τ* to *σ* sometimes takes place, thus in σύ for Dôr. *τύ* (thou), cf. Lat. and Lith. *tu*; suff. -*συνη*, f.f. -*tu-nā*, further fmn. of common abstract sf. -*tu* (-*tv-a*).

d. An assimiln. of following to preceding sounds. *y* in the combn. *dy* is so similar to the preceding dent. sonant *d*, that it becomes a dental sonant spirant (French or Polish *z*), *dy* thus becomes *dz* (acc. to Slav. or French pronuncn.), written *ζ*, e.g. Ζεύς fr. **Δγευς*=Sk. *dyāus* (√*dyu*=*div*), cf. early Lat. *Diou-is*; Aiol. *ζά*=**δya* for *διά* (through); *ἕζομαι* (sit, seat myself)=**σεδ-γομαι*, √*έδ*=*σεδ*; *σχίζω* (split) for **σχιδ-γω*, √*σχιδ*; *τρά-πεζα* (table) for **τετρα-πεδ-γα* (four-footed), cf. Lat. st. *ped-* (*pes*, *ped-is*, foot), etc.

Here belongs the aspiration of origly. unaspirated consonn. through influence of preceding prolonged-(liquid) sounds. In Greek this influence is especially exercised by *s*, cf. Sk. § 52: i.e. **σχιδ-γω*, *σχίδ-η* (splinter), √*σχιδ*, for and bes. √*σκιδ* in *σκίδ-νημι* (divide, scatter), cf. Lat. *scid* in *scindo*, Goth. *skid* in *skaida* (cut), Sk. *khid*, i.e. origl. *skid*, in *khi-ná-d-mi* (slit); *πάσχω* (suffer) for **πα-σχω* or perh. **παν-σχω*, √*πα* in *πα-θ* (*ἔ-παθ-ον*), and *πεν-ομαι* (endure, tire myself), further formations in *θ* and *ν*; the *σ* sometimes disappears before the aspp. which it has called into existence, e.g. *ἔρχομαι* (come), for **έρ-σχομαι*, *έρ-σκομαι*, √*έρ* (come, go), cf. Sk. *rĕkĕhāmi*, also *ārĕhāmi*=**έρχω*, origl. 1 sing. act. *ar-skā-mi*, med. *ar-ska-mai*; *κρίθῃ* (spelt) for **χρίθῃ* (cf. § 64, sub fine, and 2 infr.), and this for **χρισθῃ*, **χριστῃ*, cf. O.H.G. *gērsta*, etc.

§ 68. The nasals also seem to have this aspirating effect sometimes, e.g. Boiôt. -*νθι* for -*ντι*, 3 p. pl. act. vb.; ὀμφ-ή (voice) for **Φομπ-η* fr. √*Feπ*, origl. *vak* (speak); ἐγχ-ος (nt. spear) fr. √*ἀκ* (be sharp), cf. ἄκ-οντ- (ἄκων, javelin).

Perh. ρ, λ, are the cause of aspiration in τρέφ-ω (nourish), which thus by assumption may be for *τερφω bes. τέρω (sate, delight, cf. τέρπεσθαι ἐδητύος), Sk. *tarp* (be sated, delighted), Lith. *tàrp-ti* (thrive); πλάθ-ανος, πλαθ-άνη (flat cake), bes. πλατ-ύς (broad), Lith. *plat-ūs*, etc., πλάτ-η (plate, oar-blade). Concerning 'unorigl. aspiration,' cf. G. Curt. Gr. Et.² p. 439 sqq.

e. Mutual assimilation (complete or partial) of two sounds, each affecting the other.

a. γγ becomes ζ=dz (v. d supr.), as γ bef. γ becomes d, γ after d becomes z, e.g. κράζω (cry), i.e. **kradzō* fr. **κραδγω*, and this fr. **κραγ-γω*, √*κραγ*, cf. κέ-κρᾱγ-α; ἄζομαι (dread) fr. **ἀγ-γομαι*, cf. ἄγ-ιος (holy); μέζων, μείζων (greater), the latter having, moreover, γ transferred to the preceding syll. (cf. § 26), fr. **μεγ-γων*, cf. μεγ-άλη, μέγ-ας (great), etc.

In νίζω (wash) bes. χέρ-νιβ-ος (χέρνιψ, water for handwashing), νίπτω (wash)=**νιβ-τω*, the earlier root-fm. *nig*, Sk. *niḡ*, is retained (cf. § 63). Λάζομαι (grasp) bes. λαμβάνω (take) is obscure, unless it be the unique ex. of ζ=βγ, formed perh. on the analogy of the common fms. in -αζω, -αζομαι.

β. τγ, θγ, κγ, χγ, become σσ; in τγ and θγ, γ perh. became the dent. mute spir. s, after dental mutes, whereby arose τς, θς, then the preceding mute dentt. assimilated themselves to this σ; because σσ=τγ, θγ, also in Dôr., we must not assume that τγ (θγ) passed next into σγ, as τι into σι (v. sup. c), and this σγ into σσ by rule (b), for in Dôr. τ remains before ι; κγ, χγ, became firstly τυ, θυ, as of course gutt. so often pass into dentt. bef. γ, and then these sounds became σσ in the way above described; e.g. ἐρέσσω (row) fr. **ἐρετ-γω*, cf. ἐρετ-μός; κρέσσω, κρείσσω (stronger, better), with transposn. of γ (cf.

μέζων, μείζων), fr. *κρετ-γων, cf. κράτ-ιστος; κορύσσω (I arm) § 68. fr. *κορυθ-γω, cf. κε-κόρυθ-μαι; βάσσω for *βαθ-γων, cf. βαθ-ύς (deep); πίσσα (pitch)=*πικ-γα, cf. *pix*, *pic-is*; ἥσσω (less, worse) for *ἥκ-γων, cf. ἥκ-ιστος; ἐλάσσω (smaller) for *ἐ-λαχ-γων, cf. ἐ-λάχ-ιστος, ἐ-λαχ-ύς, Sk. *lagh-ús*.

Not unfrequently σσ has apparently arisen from γγ: in these cases thus much is clear, that in the older state of langg. a fundamental κ is always found still preserved, and that this κ was not softened to γ till a later period, after κγ had been incorporated into a fixed group of sounds; e.g. πλήσσω (strike) bes. πέπληγον, πληγή (blow), but origl. √πλακ, cf. πλάξ, πλακ-ός (flat, plate), Teut. *flah*, Lith. *plàk-ti* (strike), whence *plók-sztas* (flat, adj.); φράσσω (inclose)=*φρακ-γω, but ἐ-φράγ-ην with softening of κ to γ, cf. Lat. *farc-io*, etc. Cf. supr. § 62.

Note 1.—βράσσω must be assigned to βραχ-ύς (short), not to βραδ-ύς (slow); so G. Curt. Gr. Et.² p. 600.

Note 2.—Likewise we mentioned in § 62, above, that κγ is still preserved in cases such as πέσσω (cook) bes. πέψω, πέπων (ripe); ὄσσα (voice) bes. ἔπος; ὄσσε (eyes) and ὄσσομαι (see) bes. ὄψομαι (*πεκ-γω, Sk. *paḥ*, Lat. *coc*; ὄσσα=*Φοκγα, √Φεκ, √Φοκ, origl. *vak*; ὄσσε=*ὄκ-γε, ὄσσομαι=*ὄκγομαι, √ὄκ, origl. *ak*, cf. *oc-ulus*, Lith. *ak-ìs*).

f. Apparent insertion of a consonant between two concurrent consonants. νρ and μρ, also μλ, as in other langg. (e.g. French *gen-d-re* fr. Lat. *gener*, *generum*, **genrum*; *nombre* fr. Lat. *numerus*, **numrus*; *humble* fr. Lat. *humilis*, **humlis*), become νδρ, μβρ, μβλ, i.e. *n* and *m* thereby are joined with follg. *r* and *l*, in an easier combination, because they preserve the extremities of momentary consonn.; *n* becomes *nd*, *m* becomes *mb*, to which the subsequent *r*- or *l*-sound was merely lightly joined; e.g. ἀν-δ-ρ-ός for *ἀνρ-ος, gen. st. ἀνερ- (man); μεσ-ημ-β-ρία (mid-day) for *ημ-ρια, cf. ἡμέρα (day); ἄ-μ-β-ροτος (deathless) for *ἄ-μρο-τος, √μρο=Lat. *mor* (*mori*); μέ-μβλω-κα (pf.) for *με-μλω-κα, fr. μολ-εῖν (go, come), √μολ, μλο; in βροτός the μ has fallen away from bef. β, βροτός stands for

§ 68. *μβροτος (preserved in ἄ-μβροτος), and this for *μρο-τος, past part. from √*mar*, *mra* (mori), cf. Sk. *mar-ta-s* (a mortal, man, Rigved. I. 84, 8, acc. to Kuhn, Beitr. iii. 236); the same process takes place in βλίττω (cut honey) for *μβλιττω, fr. *μελιτ-γω, st. μελιτ- (μέλι, honey); βλώσσω (go, come) for *μβλωσσω fr. *μλωσσω, √*mol* in μολ-εῖν, etc.

Note.—In πτόλις, and such like cases, bes. πόλις (city), cf. Sk. *puram*, *purī*, √*par* (fill); πτόλεμος bes. πόλεμος (war), cf. πελεμίζω (brandish), and Lat. *pello*; πτίσσω (peel)=*πτισ-γω for *πισγω, √*pis*=Lat. *pis* (pinso), Sk. *piś*, πτ stands for π without any visible cause. They seem to be dialectic fms.

g. The ejection of *s* from between consonn., e.g. τέτυφ-(σ)θε, is well known.

Loss of *s* between vowels is treated of § 65. In like cases τ also disappears, but not so often; e.g. κέρως for κέρατ-ος (gen. sing. st. κερατ-, horn); φέρει (3 sing. pres. act.) fr. *φερε-τι, origl. *bhara-ti*. The dent. nasal also is subject to similar decay in known cases, e.g. μείζους for μείζον-ες (n. pl. masc. fem. st. μείζον-, greater).

h. Transposition, as in θάρσος bes. θράσος, δέδορκα bes. ἔδρακον: it is not easy to ascertain which arrangement is here the primitive one.

Note.—τέ-θνη-κα bes. ἔ-θαν-ον, and the like, are primitive deviations from root-fms., and must not be treated according to Gk. sound-laws. Cf. 'root-formation.'

2. Dissimilation. Here belong the known changes of mom. dent. bef. τ and θ to σ, so as to facilitate pronunciation; this change is found in Eran. Lat. and Slavogerm. also, e.g. ἀνυσ-τός fr. ἀνύτ-ω; ἄσ-τέον fr. ἄδ-ω; πεισ-θῆναι fr. πείθ-ω; πισ-τός for *πιθ-τος, etc.

Sometimes two consecutive aspp. are avoided by changing the former or latter into an unasp. conson., e.g. ἐ-τέ-θην, ἐ-τύ-θην, for *ἐ-θε-θην, *ἐ-θυ-θην, √*θε*, *θυ*, cf. τί-θη-μι, θύω; σῶ-θη-τι for *σω-θη-θι, the termn. of 2 p. sing. imp. is -θι, origl. *dhi*, cf.

κλῦ-θι, origl. *kru-dhi*, etc. This change scarcely ever takes § 68. place except in the case of *θ* (in *φ* and *χ* perh. only in compds., e.g. ἀμπ-έχω, ἐκε-χειρά).

For a similar phenomenon in the case of root-fms., which origly. began and ended with aspp., v. supr. § 64, sub fine).

Moreover, the attempt to avoid pronouncing similar sounds close together causes the contraction of two similar or like consonn. into one, by means of evaporation of the vowel that lies between them, e.g. *τράπεζα* (table) for **τετρά-πεζα* (four-footed); *τέτραχμον* for earlier *τετρά-δραχμον* (four-drachm piece); *ἀμφορεύς* (two-handled jug) for earlier *ἀμφι-φορεύς*, etc.

3. The aspirates. Whenever by sound-laws aspp. which terminate a root become unasp. consonn., the aspiration falls back upon the *τ* which begins the root; the same change takes place when *θ* follows upon the root-termn., notwithstanding that the asp. remains before *θ*, e.g. st. *τριχ-*, cf. *τριχ-ός*, but **θρικ-ς*, i.e. *θρίξ* (hair); *τρέχ-ω* (run), but *θρέξομαι*; *τύφω* (fume), but *θύψω*; *τρέφ-ω* (nourish), but *ἐθρέφθην*, etc. In cases like the last mentioned the aspiration before the *θ* appeared to the Greek instinct for language to be caused by it (the *θ*), and similarly also where the aspiration occurs in the case of e.g. *π*, *β*; accordingly the sound that ended the root was only characterized as aspirate by the retrogression of the aspiration upon the initial conson.

For the law by which, in the case of roots which origly. began and ended in aspp., the initial consonn. lost their aspiration, v. supr. § 64, sub fine.

4. Law of Reduplication. Of two initial consonn. the former only was admissible into the syll. of redupln.,—hence the aspp. are redupld. through their first element alone (*χ*, i.e. *kh*, through *κ*; *θ*, i.e. *th*, through *τ*; *φ*, i.e. *ph*, through *π*)—e.g. ἵ-στη-μι (set), i.e. **σι-στη-μι* for *sti-stā-mi*; γέ-γραφ-α (have written) for **γρε-γραφ-α*; πέ-φν-κα (have been born) for **φε-φν-κα*;

- § 68. *τι-θη-μι* (place) for **θι-θη-μι*; *κί-χρη-μι* (lend, borrow) for **χι-χρη-μι*, and this for **χρι-χρη-μι*, etc.

In the case of more consonantal combinations, the first consonant also falls away, so that instead of redupln., only a vowel appears, e.g. *ἔ-γνω-κα* (have learnt) for **γε-γνω-κα*; *ἔ-κτον-α* (have killed) for **κε-κτον-α*, etc. Cf. Sk. redupln., § 59.

§ 69.

TERMINATION.

The only consonn. tolerated *in fine* in Gk. were *ς* and *ν* (generally fr. *μ*; this is also the case in the N. European langg. of the Teut. stem), e.g. *πόσι-ς*, origl. *pati-s*; *πόσι-ν*, origl. *pati-m*; and further *ρ* also, e.g. *πάτερ*, voc. f.f. *patar*, n. sing. *πατήρ*, f.f. *patars* (*κ* is found only in *ἐκ*, shortened fr. *ἐξ* 'out,' and in *οὐκ* 'not,' which likewise is prob. a shortened fm.). Other conson. were either cast off, or changed into *ς* or *ν*.

Thus the frequent final *t* of Indo-Eur. is thrown off in Gk. (cf. Lat. *nouō* fr. *nouōd*, origl. *navāt*, abl. sing.), or changed to *ς*, e.g. *τό* (the, neut.), Sk. and origl. *ta-t*, Lat. *(is)-tu-d*, Goth. *tha-t-a*; *ἔφερε* (3 sg. impf.), Sk. and origl. *ábharat*; *ἔφν* (3 sg. aor.), Sk. *ábhūt*; *ἔφερον* (3 pl. impf.), origl. *abharant*; *φέρων* (acc. sg. neut. pres. part. act.) for **φεροντ*; *τέρας* (wonder, sign) for **τερατ*, cf. gen. *τέρατ-ος*; *εἶδος* (neut. pres. part. act. 'knowing') for **εἶδFοτ*, cf. gen. *εἰδότ-ος*, etc. In consequence of loss of final *ι*, *θ* became final; when this occurred, *θ* also became *ς*, e.g. *δός* (give) fr. **δοθ* for **δο-θι*, origl. *da-dhi* (imper. aor. *√δο*, origl. *da*, dare). *δ* drops off: *παῖ* (voc.) for **παιδ* (n. sg. *παῖς*, child); so also *κ* in *γύναι* (voc. woman) for **γυναικ* (cf. e.g. gen. *γυναικ-ός*); *κτ* in *ἄνα* (voc.) for **ἄνακτ* (*ἄναξ*, gen. *ἄνακτ-ος*, lord), *γάλα* (n. acc. milk) for **γαλακτ* (e.g. gen. *γάλακτ-ος*), etc. From *ντ* only *τ* is lost, e.g. *γέρον* (voc. fr. n. *γέρων* for **γεροντ-ς*, gen. *γέροντ-ος*, old man) for **γεροντ*.

The final *m* so common in Indo-Eur., esp. as sign of acc. and element of 1st sing. of vb., is usually replaced by *ν* in Gk., e.g. *πόσι-ν*, Sk. and f.f. *pāti-m*; *νέFo-ν*, Sk. and f.f. *náva-m*; *ἔφερο-ν*

(1 sing.), f.f. and Sk. *ābhara-m*, etc. More rarely it coalesced § 69. with the precedg. vowel; this is probably the reason why precedg. *a* was lengthened, and hence also in the above lang. it remained as *ā*, and did not change into *ε*, e.g. *πατέρ-α* = **πατερ-ā* fr. **πατερ-αν*, f.f. *patar-am*; *ἔδειξα* (1 sg. aor.) = **ἐ-δεικ-σā*, f.f. of termn. *-sa-m*, cf. Sk. *ā-dik-śam*; *δέκα*, cf. Lat. *decem*, Sk. *dāśan-*, etc.

Where there are more than one consonn. of which *s* is the last, the last *s* is cast off regularly, in the n. sing. generally, with compensatory lengthening, e.g. *φέρων* for **φεροντ-ς*, *μήτηρ* for **μητερ-ς*, *ποιμήν* for **ποιμεν-ς*, *εὐμενής* for **εὐμενες-ς*; yet *s* is retained also, as e.g. in *τιθείς*, *διδούς*, etc., fr. **τιθεντ-ς*, **διδοντ-ς*, and, in known cases, the foregoing sounds also, e.g. *φάλαγξ* (gen. *φάλαγγ-ος*, phalanx), *λύγξ* (gen. *λυγκ-ός*, cough), *φλόξ* (gen. *φλογ-ός*, flame), *ὄψ* (gen. *ὀπ-ός*, voice); even *ἔλμινς* for **ἐλμινθ-ς* (gen. *ἔλμινθ-ος*, intestine worm), *πείριν-ς* for **πειρινθ-ς* (gen. *πείρινθ-ος*, hamper), *ἅλς* (gen. *άλ-ός*, salt), which end in displeasing combinations.

The well-known *ν ἐφελκυστικόν* is no relic of an earlier state of the lang., but a peculiar and late phenomenon in Gk., e.g. *ἔφερε-ν*, Sk. and f.f. *ābharat* (3 sg. impf.); in these cases the *ν* does not appear, therefore, until the origl. *t* had already been lost, and the feeling for lang. had become accustomed to treat the form as ending in vowel; *φέρουσι-ν*, Sk. and f.f. *bhāranti* (3 pl. pres.); *ποσσί-ν*, f.f. *pad-svi* (loc. pl.).

On the 1st pers. pl. of the vb. this *ν* has taken firm hold; the f.f. of this termn. is *-masi*, hence rose *-mas*, which is kept in Dôr. *-μες*; through the loss of final *s*—which occurs here and there even in Gk. (in Lat. it is notoriously common), e.g. in *οὔτω* bes. and for *οὔτως* (thus)—fr. *-μες* arose **-με*, and upon this was grafted *ν*, at first prob. ephelkustik, and thus was produced *-μεν*, e.g. Sk. and origl. *bhārāmasi*, hence Sk. *bhārāmas*, Gk. (Dôr.) *φέρομες*, **φερομε*, *φέρομε-ν* (we must not think of a change of *s* to *n* in this case, any more than elsewhere throughout the range of the Indo-Eur. lang.).

§ 70.

CONSONANTS IN LATIN.

The table of consonn. is to be found in § 30.

The Lat. lang. is esp. characterized by lack of the *aspp.*, which were represented by the corresponding unaspirated sonants, and by unorigl. spirants *f*, *h*; the latter in such a way that *f* (repres. by *b*, in medio) may stand for any origl. asp., *h* almost exclusively = origl. *gh*.

k (written *c*, *q*) remains always unchanged, but here and there drops away in initio; it does not become *p* or *t*, as in the other Indo-Eur. langg. The origl. spirants *y*, *s*, *v*, are generally retained, though *s* very often passes into *r*, and *y* and *v* often drop out, and are interchanged with *i* and *u*.

The consonn. are subject to numerous sound-laws: assimilation; dissimilation; change from *t* to *s*; from *s* to *r*; medial, initial, and final loss (the latter in a still higher degree in archaic Lat.)—all remove the consonantal system of Lat. widely from the origl. condition of the Indo-Eur. lang.

§ 71.

EXAMPLES.

Origl. mom. mute unaspirated consonn.

1. Origl. *k* = Lat. *k*, i.e. *c*, *q*. Origl. *k* often attaches to itself a *v*, by a sound-law not yet understood (cf. Goth.). The written character, with a few archaic exceptions, represents *k* by *c*; before *u* (when other vowels follow = *v*) *k* is represented by its equivalent *q* (at an earlier period also before the *u* which forms the syll., e.g. *pequnia*), e.g. $\sqrt{coc}$ in *coc-tus*, *coqu-o* (cook), origl. *kak*, cf. Gk. $\pi\epsilon\pi$, Sk. *paṭ*; *quinque* (five), origl. *kankan*, cf. Gk. $\pi\acute{\epsilon}\nu\tau\epsilon$; $\sqrt{quo}$ in *quo-d* (which), etc., origl. *ka*, cf. Gk. $\pi\omicron$, earlier $\kappa\omicron$; *-que* (and), Sk. *-ka*, origl. *ka*, cf. Gk. $\tau\epsilon$; *quatuor* (four) for **quatuores*, origl. *katvāras*, cf. Gk. $\tau\acute{\epsilon}\tau\tau\alpha\rho\epsilon\varsigma$; st. *cord-* in *cor* (heart) for **cord*, gen. *cord-is*, origl. *kard*, cf. Gk. $\kappa\rho\alpha\delta\text{-}la$; $\sqrt{qui}$ in *qui-s*, *qui-d* (what), origl. *ki*, cf. Gk. $\tau\acute{\iota}\text{-}\varsigma$, $\tau\acute{\iota}$; $\sqrt{qui}$ in *qui-es* (rest), origl. *ki*, cf. Gk. $\kappa\iota$ in $\kappa\epsilon\acute{\iota}\text{-}\tau\alpha\iota$; $\sqrt{clu}$ in *clu-o* (hear),

in-clu-tus (famed), origl. *kru*, cf. Gk. κλυ; √*scid* in *scindo* (split), § 71. origl. *skid*, cf. Gk. σχιδ; *canis* (hound) for **cvan-is*, origl. *kvan-s*, cf. Gk. κύων, κυν-ός; √*dic* in *deic-o*, *dāc-o* (say), -*dīc-us* (saying), origl. *dik*, cf. Gk. δικ in δεικ-νυμι; *decem* (ten), origl. *dakan*, cf. Gk. δέκα; √*luc* in *lūc-eo* (shine), *louc-em*, *lūc-em* (n. lux, light), origl. *ruk*, cf. Gk. λυκ; √*loc* in *loc-utus*, *loqu-i* (speak), origl. *rak*, cf. Gk. λακ; √*uoc* for **uec* in *uōc-em* (n. uox, voice), *uoc-are* (call), origl. *vak*, cf. Gk. Φεπ; suff. -*co*, fem. -*ca*, origl. -*ka*, fem. -*kā*, e.g. *ciui-cu-s*, *uni-cu-s*, cf. Gk. -κο-ς, etc.

In Lat. as in Gk. (cf. § 62) *k* is sometimes softened into *g*, e.g. *ui-gin-ti*, *tri-gin-ta*, bes. *ui-cen-sumus*, *tri-cen-sumus* (*uigesimus*, *trigesimus*, cf. εἴ-κο-σι, τριά-κον-τα), -*gin-*, -*cen-*, is here a relic of (*de*)*cem*, f.f. *dakan*; *neg-otium* = **nec-otium*; *gubernator* bes. κυβερνήτης, etc.

Note 1.—This is prob. the case also in *glōria* (glory) for **clōria*, **clōsia*, a further fm. of st. **clōs-* for **clouos-*, **cleuos-* = Gk. κλεφεϛ-, Sk. *grāvas-* (glory), Slav. *sloves-* (n. acc. *slovo*, word), root origly. *kru* (hear), as Sk. *gravas-ya-* (famous), *cravas-yā* (famousness, Kuhn, Zeitschr. iii. 398), yet the *ō* is strange, for we should have expected *ū*, cf. *in-iūria* = **ious-ia*, fr. *ious*, *iūs*, a further fm. fr. **iouos*, **ieuos*.

Note 2.—The pronunciation of *c* bef. *i* became, as in other langg., that of palat. *k* (perh. like Germ. *k* in *kind*): the preference for *c* before *i*, where another vowel follows, was the stronger, because in these cases *i* was nearly the same as *y*, so that the combinations *cio*, *ciu*, etc., were not only sounded like *kio*, *kIU*, but tolerably early (precisely as in other langg. also) were pronounced *tyo*, *tyu* (Ital. *cio*, *ciu*), whence arose the common fluctuation in writing about the end of the second or the beginning of the third century A.D. (Corss. Krit. Nachtr. p. 48). The change of *i*, *y*, after *t*, into *s*, *š* (*tyo* = *tšo*), does not occur till the Romance period.

Note 3.—In the pronoml. stems, *hi-*, *ho-* (*hi-nc*, *ho-nc*), notwithstanding the regularly corresponding Sk. **ghi-*, *gha-* (in *hi*, then, *ha*, *gha*, important particles), ought not prob. to be separated from Goth. *hi-*, *hva-*, Slav. *š-*, *kŭ-*, Lith. *sz-*, *ka-*, i.e. origl. *ki-*, *ka-*, on account of the perfect similarity of their functions; further, in √*hab* in *hab-eo*, *hab-ēs* = Goth. *hab-a*, *hab-ais* (I have, thou hast), cf. Osk. *hip-ust* (habuerit), *haf-iest* (habebit),

§ 71. whose initial conson. is, as in Goth., *k* (Goth. $\sqrt{hab}$ also corresponds to Lat. $\sqrt{cap}$ in *cap-io*); Lat. *h* seems to be origl. *k*, a permutation which is found sporadically in Sk. *hrd-*, *h'd-aya-* (heart)=origl. *kard-* (cf. Lat. *cord-*, Gk. *καρδ-ία*, Goth. *hairt-ō*) [the antiquity of this *h* in Aryan is shown by Zend *seredhaēm* =Sk. *hr'dayam*]. With Bopp, therefore, I now hold the Lat. pron. stems *hi-*, *ho-*, to be parallel-fms. to origl. *ki-*, *ka-*, regularly represented in Lat. by *qui-*, *ci-*, *quo-*, *cu-* (*qui-s*, *ci-tra*, *quo-d*, *cu-ius*, used as interrog. and relat.), and so, too, $\sqrt{hab}$ in *hab-ēre*, as a parallel-fm. to *cap* in *cap-ere*, for Goth. *b* can be=origl. *p*, and *b* may possibly arise in Lat. through softening from *p* (*bibo*, drink,=origl. *papāmi*). The correspondence of Lat. *h* to Goth. *h* remains none the less remarkable, but esp. the conformity of the two langg. as regards *habēre*, whose perfect identity, nevertheless, no one denies. But we must not suppose words were borrowed in either case. Other views are found in Corss. Krit. Nachtr., p. 89 sqq.; Comp., 1st ed., p. 715.

Note 4.—Accordingly *p* is not in Lat.=origl. *k* (but cf. Osk. and Umbr.); words in which *p* seems=origl. *k* are therefore borrowed. Thus *Petronius*, *Epona*, are Keltic, cf. Lat. *quatuor*, *equos*; *popina* is Osk., cf. Lat. *coquina*, *coquere*; *palumbes*, bes. Lat. *columba*, must prob. be derived fr. Osk., and *limpidus*, too, bes. *liquidus*, must be a dialectic, and not originally a Roman by-form, in which case both words, as is often maintained, were identical; if *lupus* is really=Gk. *λύκος*, it must therefore also be attributed to Osk., Sab., or Umb., but beyond doubt it belongs to Zend; *u-rup-i-s*, *raop-i-s* (name of wild beasts of the breed of dogs), $\sqrt{rup}$, *rup* (rend, cf. Spiegel, Zeitschr. xiii. 366); *sap-io* (taste of), *sap-iens* (wise), does not belong to *sucus*, Gk. *ὀπρός* (*sap*), but to O.H.G. $\sqrt{sab}$ (understand, pf. *int-suab*; Mid. H. G. pres. *ent-sebe*, pf. *ent-suop*), Gk. *σοφ-ός* (wise), *σαφ-ής* (intelligible, clear), with unorigl. asp. (v. supr. § 62, 3, n. 2); *saep-io* (hedge in), *prae-saep-e* (crib, stall), does not agree with Gk. *σηκό-s* even in root-vowel (Lat. *ae*=*ai*, Gk. *η*=*ā*); *trepit* (vertit; Paul. Ep., 367; Curt. Gr. Et.² 411) seems to be borrowed from Gk. *τρέπει*.

2. Origl. *t*=Lat. *t*; e.g. in *tu* (thou), origl. *tu*, cf. Gk. *τύ*, *σύ*; $\sqrt{to}$ in *is-tu-d* (dem.), origl. *ta*, *ta-t*, cf. Gk. *τό*; $\sqrt{ten}$ in *ten-tus* (held, stretched), *ten-or* (holding, length), *ten-eo* (hold), *ten-do* (stretch), origl. *tan*, cf. Gk. *τα*, *τεν*; st. *tri-* (three) in *trēs*, *trīs*, *treis*, origl. *tri-*, cf. Gk. *τρι-* in *τρεῖς*; $\sqrt{sta}$ (stand) in *sta-tus*,

sta-re, origl. *sta*, Gk. *στα*; $\sqrt{teg}$ (cover), origl. *stag*, Gk. *σται*; § 71. $\sqrt{pet}$ in *pet-o* (make for), *im-pet-us* (onset), *penna* fr. *pes-na*, **pet-na*, origl. *pat* (fly, fall), cf. Gk. *πετ*; $\sqrt{uert}$ in *uert-ere* (turn), origl. *vart*; suff. *-to*, fem. *-ta*=*-tā*, cf. Gk. *-τό-*, *-τη*, e.g. in *da-tu-s*, origl. *da-ta-s*, Gk. *δο-τό-ς*; *-t*, 3 p. sing., *-nt*, 3 pl. vb., origl. *-ti*, *-nti*, cf. Gk. *-τι*, *-ντι*, e.g. *fer-t*, *fero-nt(i)*, Sk. and origl. *bhāra-ti*, *bhāra-nti*, Gk. *φέρει-(τ)ι*, *φéro-ντι*, etc.

Note 1.—On final *t*, cf. § 79: for Lat. *br*=Gk. *θρ*, origl. *tr*, § 77, 1, c.

Note 2.—The change fr. *τι* bef. vowels to *ts* (*z*) occurs first in Romance langg.

3. Origl. *p*=Lat. *p*, e.g. $\sqrt{po}$ in *po-tus* (drink), origl. *pa*, cf. Gk. *πο* in *πό-σις*; in *bi-bo* (drink), f.f. *pa-pāmi*, *p* has been softened into *b*, a change occurring also in other isolated cases (cf. Corss. Krit. Nachtr. p. 176 sqq.); **po-ti-s* in *impos*, *compos*, *im-po-tem*, *com-po-tem* (unable, able), *po-t-est* (he can), *-po-te*, *-pte* (a noticeable affixed particle, e.g. *ut-pote*, *suo-pte*), Sk. and origl. *pá-ti-s* (lord), Gk. *πό-σι-ς*, origl. $\sqrt{pa}$ (protect); *pa-ter* (father), origl. *pa-tar-s*, cf. Gk. *πα-τήρ*, same root; $\sqrt{ple}$ in *plē-nus* (full), origl. *par*, *pra*, cf. Gk. *πλε*; *ped-is* (gen.; n. *pes*, foot), Sk. and origl. *pad-ās*, cf. Gk. *ποδ-ός*; $\sqrt{spec}$ in *spec-io*, *spic-io* (see), *spec-ies* (appearance), Sk. *paç* for **spaç*, O.H.G. *spah* (in *spēh-ōn*, espy, *spāh-i*, shrewd), origl. *spak*; $\sqrt{tep}$ in *tep-eo* (am warm), *tep-or* (warmth), Sk. and origl. *tap*; $\sqrt{sop}$ in *sop-ire* (make sleepy), *som-nus* (sleep) for **sop-nus*, Sk. and origl. *svap*, cf. Gk. *ύπ-*, etc.

Note.— $\sqrt{flu}$, *flug* (*fluc-tus*), a later and further fm. fr. *flu*, in **flou-o*, *flu-o* (flow), does not belong to *πλυ*, Sk. *phu*, Slav. *phu*, etc., for Lat. *f* is not=origl. *p*: this root is represented by Lat. *plu* (*plu-it*, i.e. **plou-it*, it rains); perh. Lat. *flu* is to be placed beside Gk. *φλύ-ω* (swell, overflow), *οἰνό-φλυξ*, *-φλυγ-ος*; so Curt. Gr. Et.² 271; we can scarcely take *flu* for **sflu*, and this for **sflu* fr. **stru* for *sru* (flow), with Ad. Kuhn (Zeitschr. xiv. 223); in the latter case Lat. *flu*, i.e. **flouo*, stands equal to Sk. *srāvāmi*, Gk. *ρέFω*; *flu-men* for **sθroumen*, **sθreumen*, essentially =*ρέFμα* for **σρευμα*, O.H.G. *strou-m*, Pol. *strumień* (running stream).

§ 72. Momentary sonant unasp. consonants.

1. Origl. *g*=Lat. *g*, *gv* (*gu*), *v*.

Lat. *g*=origl. *g*, e.g. $\sqrt{\text{gen}}$ in *gi-g(e)n-o* (beget), *gen-us* (race), *gna* in *gnā-tus* (one born, son), origl. *gan*, cf. Gk. $\gamma\epsilon\nu$; $\sqrt{\text{gno}}$ in *gnō-sco* (learn), *gnō-tus* (known), origl. *gna*, transposed fr. *gan*, cf. Gk. $\gamma\nu\sigma$ in $\gamma\iota-\gamma\nu\acute{\omega}-\sigma\kappa\omega$; *genu* (knee), cf. Gk. $\gamma\acute{o}\nu\nu$, Sk. $\acute{g}\ddot{a}nu$, Goth. *kniū*; $\sqrt{\text{ag}}$ in *ago* (drive), origl. *ag*, pres. *ag-āmi*, Gk. $\acute{\alpha}\gamma$ in $\acute{\alpha}\gamma-\omega$; $\sqrt{\text{iug}}$ in *iugum* (yoke), *iung-o* (join), Sk. *yug*, *yug*, origl. *yug*, cf. Gk. $\zeta\upsilon\gamma$, etc.

Lat. *gv* (*gu*)=origl. *g*. As origl. *k* developed into *qu* (*kv*), so also *g* (=origl. *g* and *gh*, cf. § 73, 1) into *gv*: this *gv* is, however, retained only after *n*; it also occurs after *r*, bes. *g*, in *urgueo* bes. *urgeo* (urge), $\sqrt{\text{urg}}$, origl. *varg*, cf. Sk. *varḡ* (shut out), Lith. *vėrḡ-ti* (urge). Between vowels this *g* has become assimilated to the *v* (without lengthening of a previous short syll.), so that the *v* alone therefore remains. In this way it happens that Lat. *v* betw. vowels may be origl. *g* and *gh*, e.g. $\sqrt{\text{uig}}$ for **guig*, cf. Germ. *quick* in *uixi* (pf.)=**uig-si*, *uic-tus* (diet)=**uig-tus*, but *uīu-os* (alive), *uīu-o* (live) for **uigu-os*, **uigu-o*. For further exx. of this interchange of sound *v*. sub 'gh' (v. Corss. Krit. Beitr., p. 68, on interchange of *g* and *gv* in Lat.).

Note 1.—*fluxi*, *fluc-tus*, *con-flūg-es* (confluence), bes. *fluo*, i.e. **flou-o* (flow), show indeed a further fmn. of $\sqrt{\text{flu}}$ to *flug*, as Gk. $\phi\lambda\nu$ to $\phi\lambda\nu\gamma$ (§ 71, 3 n.); we see, however, no ground for the assumption that *fluo*, **flou-o*, together with *fluu-ius* (river), have passed through fms. **flogu-o*, **flugu-ium* (Corss. Ausspr. etc., i.¹ 44). In this case the root-fm. is preserved without *g*.

Note 2.—Cf. exx. cited under *gh*, § 73, 1, and sound-laws, § 77, 1. a.

Note 3.—In *bos*, *bouis* (ox)=Gk. $\beta\omicron\upsilon\varsigma$, $\beta\omicron\phi\acute{o}\varsigma$ =Sk. *gāus* (gen. *gōs* prob. represents origl. *gav-as*), cf. O.H.G. *chuō*, *b*=origl. *g*, a correspondence of conson. otherwise foreign to Lat.; accordingly the word is probably borrowed. G. Curt. Gr. Et.² nos. 639, 642, brings forward *super-bus*, *super-bia* (proud, pride), which he takes to stand for **super-bios*, as=Gk. $\acute{\upsilon}\pi\acute{\epsilon}\rho-\beta\iota\omicron\varsigma$ (overween-

ing), *-βla* (presumption); *-βios* however=Sk. *gi*, pres. *gáy-āmi* § 72. (triumph), f.f. *gi*; *bo-ere*, *bou-are* (cry, sound), *re-bo-are* (re-sound), with Gk. *βο-ή* (call, cry) fr. Sk. *√gu* (let sound), Old Bulg. *gov-orŭ* (noise); *super-bus* is, however, not precisely similar to *ὑπέρ-βιος*, a word compounded according to Gk. principles (for we should then be obliged to consider it borrowed), but rather a special Lat. fmn. like *acer-bus*, *mor-bus* (Corss. Krit. Beitr. 61), and *boare* with *βοή* need not by any means be referred to Sk. *gu*, O. Bulg. *gov-orŭ*. It seems to me to be a mere imitative sound.

Note 4.—*c* and *g* were not distinguished in earlier Lat. writing, but prob. in the spoken lang. only.

Note 5.—Bef. *n* we are now accustomed in pronunciation to change Lat. *g* to gutt. *ñ*, i.e. the *g* becomes assimild. to *n*, according to its scale, becoming nasal: instead of *mag-nus*, *dig-nus*, etc., we say *mañ-nus*, *diñ-nus*. This is the same interchange of sound which is seen quite early in the lang., e.g. in *Sam-nium* for **Sab-nium*, *som-nus* for **sop-nus*. Spellings such as *singnum* make it probable that even as early as the times of the later Cæsars, people had begun to pronounce *signum* as *siñnum*. Yet we cannot consider this pronounc. of *gn* as *ñn* to be ancient, because the Roman grammarians do not mention it. From this later pronunciation of *gn* we must distinguish the principle on which *gn* was treated in Romance langg., where it became a palatal *ñ*, e.g. Ital. *magno*, *degno* (pron. *maño*, *deño*), Fr. *magne*, *digne* (pr. *mañ*, *diñ*). Therefore the above-named pronunciation of Lat. *gn* cannot have arisen through Romance influence.

2. Origl. *d*=Lat. *d*, rarely *l*.

Lat. *d*=origl. *d*, e.g. *√da* in *dā-tus* (given), Sk. and origl. *√da*, cf. Gk. *δο*; *√dom* in *dom-are* (tame), Sk. and origl. *√dam*, cf. Gk. *δαμ-άω*; *dom-us* (house), Sk. and origl. *dam-as*, cf. Gk. *δόμ-ος*; *dent-em* (tooth, acc.), Sk. and origl. *dánt-am*, cf. Gk. *ὀ-δόντ-α*; *√uid* in *uid-ere* (see), Sk. and origl. *vid*, Gk. *ῥιδ*; *√ed* in *ed-o* (eat), Sk. and origl. *ad*, cf. Gk. *ἐδ*; *√sed* in *sed-eo* (sit), Sk. and origl. *sad*, cf. Gk. *ἐδ*, etc.

Lat. *l*=origl. *d* in *initio*, and, more rarely, medially bef. vowels, e.g. *lacrima* (tear) fr. *dacrima* (Festus), cf. *δάκρυ*, Goth. *tagr*, O.H.G. *zahar*; *lēuir* (father-in-law), cf. *δᾱήρ*, st. *ḍāep*, for **ḍauep*, **ḍauep* (Ebel, Zeitschr. vii. 272), Sk. st. *dēvár*-, n. sing.

§ 72. *dēvā*, also *a-st. dēvará-s*, O.H.G. *zeihhur*, Lith. *dēveri-s* (known to me through the Dictionary only), O. Bulg. *děverī*; *lingua* (tongue), earlier *dingua*, cf. Goth. *tuggō*, Germ. *tunge*; *ol-ere* (smell) bes. *od-or* (scent), cf. ὀδ-ωδ-α, ὀδ-μή, ὀσμή. Sometimes both the *d-* and *l-*forms remained extant; thus *im-pel-imentum* bes. *im-ped-imentum* (hindrance), fr. st. *ped-* (pes, foot); *de-lic-are* bes. *de-dic-are* (dedicate), √*dic* (*dīc-o*, *δεικ-νυμι*, etc.), etc.

3. Lat. *b* may be origl. *b* (v. § 46, 3), e.g. in *bal-are* (bleat), cf. Gk. βλη-χή (a bleating), βλη-χάομαι, Slav. *blě-jā*, O.H.G. *blā-zan* (bleat), an onomatopoëtic word; *brevis* (short), corresponding to Gk. βραχύς, Slav. *brüzū* (quick); √*lab* in *lāb-itur* (glides, sinks), *lap-sus* = **lab-tus* (past part.), Sk. √*lab*, *lamb* in *lāmb-atē* (he sinks, falls).

§ 73. Momentary sonant aspirated consonants.

Note 1.—*f* may represent any of the aspp., and is placed mainly in *initio*; medially *b* occurs instead of *f*; yet *rūfu-s* (red), *scrofa* (sow), *Afer* (African), *sifilus* and *sifilare* (Fr. *siffler*, Zeitschr. xvi. 382) bes. usual *sibilus* (whistling, piping), *sibilare* (to whistle, pipe), etc., with medial *f* betw. vowels, according to the principles of the other Italian langg., whose influence perh. made itself felt in these words (Corss. Krit. Nachtr. p. 194, sqq.). In *signi-fer*, *pesti-fer*, and the like, *f* evidently arises from the perceptible connexion with *ferre*, whilst in *ama-bam*, etc., fr. √*fu* (*fui*, etc.), origl. *bhu* was no longer felt.

Note 2.—*ch*, *th*, *ph*, are not Latin but Gk. sounds, which did not come into use till a comparatively late period, and are yet unknown in the earlier lang. Further details as regards the history of these ways of spelling belong to the special gr. of Lat.

1. Origl. *gh* = Lat. *g*, *gv* (*gu*), *v*, *h*, *f*.

Lat. *g* = origl. *gh*, e.g. √*ger*, *gra*, in *ger-men* (bud), = Lith. *zel-mū*, st. *zel-men-* (sprout), *grā-men* (grass), origly. a side-form of *ger-men*, cf. O.H.G. *gruo-ni* (green), *gra-s* (grass), Sk. *hār-it-*, *hār-ita-* (green), Zend *zairita-* (yellowish-green), Gk. *χλο-ή* (green, grass), O. Bulg. *zel-enū* (green), Lith. *žėl-ti* (grow green,

wax), *zál-ias* (green), *zól-ě* (grass, greens), origl. $\sqrt{ghar}$, *ghra* § 73. (be green, yellow, grow green); *grā-tu-s* (pleasant), cf. Osk. Umbr. $\sqrt{her}$ (wish), *χάρ-ις* (grace), *χαίρω*, i.e. **χαρ-γω* (rejoice), Sk. *har-yāmi* (love, desire), Germ. $\sqrt{gar}$ (desire), e.g. in O.H.G. *gēr-ōn* (desire), origl. $\sqrt{ghar}$, *ghra*; *grando* (hail) bes. Sk. *hrād-unī*, Gk. *χάλαζα*, i.e. **χαλαδ-γα*, **χλαδγα* (v. § 29, 1), origl. root therefore *ghrad*; except before *r* and in *ger-men* Lat. *g*=*gh* is confined to the middle of words; $\sqrt{ang}$ in *ang-o* (throttle, kill), *ang-ustus* (narrow), *ang-or* (pain), *ang-īna* (quinsy), origl. $\sqrt{angh}$, Gk. *ἀγχ ἀχ* in *ἄγχ-ω*, *ἄχ-νυμαι*, *ἄχ-ος*, Sk. *ah*, *āh*, Goth. *agg*, origl. *agh*; $\sqrt{lig}$ in *lig-urio*, *li-n-g-o* (lick), origl. *righ*, Sk. *rih*, *lih*, Gk. *λιχ* in *λείχ-ω*, *λίχ-νος*, Goth. *lig*; $\sqrt{mig}$ in *mi-n-g-o*, *mēio*, for **migio*, origl. *migh*, Sk. *mih*, Gk. *μιχ* in *ὀ-μιχ-έω*, *ὀ-μίχ-λη*.

Lat. *gv* (*gu*), *v*=origl. *gh* (cf. § 72, 1, and § 77, 1, a), e.g. *angu-is* (snake), *angu-illa* (eel), cf. Gk. *ἐχ-ις* (viper), *ἐγχ-ελυς* (eel), Sk. *ah-is*, i.e. **agh-is*, Lith. *ang-īs* (snake), *ung-urýs* (eel), O.H.G. *unc* (snake); in *nix* (snow), i.e. **nig-s* fr. **snigh-s*, gen. *niu-is* for **nigu-is*, **snigh-as*, is found—as also we see fr. Lith. $\sqrt{snig}$, in *snig-ti* (to snow), *snėg-a-s* (snow), and Gk. *νίφ-α* (snow, acc.), *νίφ-ει* (it snows)—an origl. $\sqrt{snigh}$ as a basis, which is clearly shown in Sk. *snih* (be moist); *breu-is* (short) for **bregu-is*, Gk. *βραχύς*; *leu-is* (light) for **leguis*, cf. *ἐ-λαχύς*, Sk. *laghú-s*. In *breuis* and *leuis* the correspondence of *v* to *gu* ought prob. to be explained as occurring through change of origl. *gh* to *gv*, but rather through the introduction of a secondary *i* into the previously existing stems *bregu-*, *legu-*, =*braghu-*, *raghu-*. Nevertheless even thus the origl. *gh* is involved in the *v*, because the *gh*, or rather its Lat. equivalent *g*, has become assimild. to the *v*.

Note.—Therefore *g* may represent both origl. *gh* and *g*; in such cases as *mag-nus* (great) bes. *μέγ-as*, *ego* (I) bes. *ἐγώ* (§ 64, 1), we must not permit ourselves to determine that Lat. *g* is = origl. *gh*, merely on account of Sk. *mah-ánt-*, *ahám*,

§ 73. since the corresponding Goth. fms. *mik-ils*, *ik*, show the unasp. conson.

Lat. *h*=origl. *gh*, esp. in *initio*, very rarely in *medio*, e.g. *hiem-ps* (winter), cf. Gk. *χιών* (snow), *χείμα* (storm), *χειμών* (winter), Sk. *himá-s* (snow, cold), Slav. *zima* (winter, cold), Lith. *žemà* (winter); *homo* (man), earlier *hemo*, st. *homen-*, *hemen-*, cf. Goth. *guma* (man), st. *guman-*, Lith. *žmũ*, st. *žmen-* (mankind), which collectively point to a f.f. *ghaman-*; *holus*, *helus*, *heluola* (greens), $\sqrt{ghar}$ (be green), cf. *χλο-ή*, Sk. *hár-ita* (v. sub *g*=*gh*); *haed-us* (he-goat, Cod. Medic. Vergili), cf. Goth. *gaitis* (f. she-goat), O.H.G. *geiz*, the initial conson. of this word was therefore *gh*; $\sqrt{veh}$, pres. *ueh-o* (carry, draw), $\sqrt{vagh}$, pres. *vagh-āmi*, Sk. *vah*, pres. *váh-āmi*, Zend *vaz*, pres. *vaz-āmi*, Gk. *Feχ* in *Φόχ-ος* (waggon), Goth. *vag* in (*ga-*)*vig-a* (move), *vig-s* (way), Slav. *vez*, pres. *vez-a*, Lith. *vez*, pres. *vez-ù*.

The *h* easily comes to be entirely lost, e.g. in *anser* (goose) for **hanser*, cf. Sk. *hāsá-s*, O.H.G. *gans*, st. *gansi-*, Slav. *gāsi*, Lith. *žasi-s*; *olus* for earlier *holus* (v. supr.); *uia* (way) fr. **ueh-ia*, **ueia*, **uīa*, $\sqrt{ueh}$, cf. the completely analogous Lith. *vėžė* (track), i.e. **režya*, f.f. of Lith. and Lat. word, thus *vagh-yā*; *nēmo* (no man), fr. **ne-hemo*, etc.

Note.—*h* is often found where it should not be, by false analogy, e.g. *humerus* for *umerus*, which is warranted by MSS., cf. Gk. *ὤμο-ς*, Sk. *āsa-s* and *āsa-m*, Goth. *amsa*, st. *amsan-*; in later times *h* was noticeably often placed bef. initial vowel: *h* must therefore have fallen out of use in many cases tolerably early.

Lat. *f*=origl. *gh*, e.g. *fel* (gall), st. *felli-*, clearly fr. **felli-*, cf. Gk. *χολ-ή*, *χόλ-ος*, O.H.G. *galla*, Slav. *žlúčĭ*, $\sqrt{ghar}$ (be green); *for-mu-s*, *for-midus* (hot), cf. Sk. *ghar-má-s* (heat), Sl. *grě-ti* (to warm), *gor-ěti* (burn), Germ. *warm* for **gwarm* fr. **gar-m*, all of which point to a $\sqrt{ghar}$ (on Gk. *θερ-μός*, *θέρ-ομαι*, v. supr. § 64, 2. n.); *fra-gra-t* (*fragrare*, emit odour), provided it really comes from a redupln. of $\sqrt{ghra}$, cf. Sk. *gi-ghrā-ti*, *ghrā-ti* (stinks,

Benf. Or. u. Occ. iii. 69); *fu-tis* (tub), *fū-tilis* (unstable, cf. Curt. § 73. Gr. Et.² no. 203, p. 156), $\sqrt{fu-d}$, *fundo* (pour), cf. Gk. $\sqrt{\chi\upsilon}$ in $\chi\acute{\epsilon}F-\omega$, Teut. *gu-t*, in Goth. *giut-an* (pour).

Since *f* and *h* correspond to origl. *gh*, and *h* easily disappears altogether, we can explain such forms as *faedus*, *fēdus*, bes. *haedus*, *aedus*, *ēdus* (cf. *geiz*); *folus* bes. *holus* and *olus* ($\sqrt{ghar}$); *fostis* bes. *hostis* (foe; Goth. *gasts*, guest, points distinctly to the origl. initial *gh*; in both langg. the meaning has been developed in divergent lines, cf. Corss. Krit. Beitr. 217 sqq.); *fordeum* bes. *hordeum*, prob. for **hortum*, **horsteum*, cf. O.H.G. *gersta*, Gk. $\kappa\rho\acute{\iota}\theta\eta$ for **χρῖστη* (§ 68, 1, d; on this word cf. Corss. Krit. Nachtr., p. 104 sqq.); *festūca* (stalk, switch) bes. *hasta* (spear), cf. Goth. *gazds* (thorn), O.H.G. *gart* (thorn), **gartya* (*gardea*, *kertia*, *gerta*), initial origl. *gh* therefore; and the like. Cf. the change fr. *gh* to *f* in cases such as Engl. *enough* (pron. *inʊf*), A.S. *genōh* (genug); *laugh* (pr. *lāf*), A.S. *hleahhan*, Goth. *hlahyan* (laugh), etc.

Note 1.—No ex. of *b*=origl. *gh* seems to be found.

Note 2.—The origl. $\sqrt{ghar}$ (be green) is found also in fms. *ger* (germen), *gra* (grāmen), *hel* (helus), *hol* (holus), *ol* (olus), *fol* (folus), and *fel* (fel). In the other langg. also the feeling of relationship of the different words which spring from this root has been lost.

2. Origl. *dh*=Lat. *d*, *f*, *b*.

Lat. *d*=origl. *dh*, e.g. *mediu-s* (middle-)=origl. and Sk. *mādhyā-s*, Gk. $\mu\acute{\epsilon}\sigma\sigma\omicron\varsigma$, i.e. **μεθυο-ς*, Goth. *midji-s*; *aed-es* (house, origly. fire-place, cf. *aes-tus*, *aes-tas*, fr. **aed-tus*, **aed-tas*), $\sqrt{idh}$, origl. Gk. $\alpha\acute{\iota}\theta-\omega$, Sk. *indh*, cf. O.H.G. *eit* (fire); *uidua* (widow), cf. Sk. *vidhavā*, Goth. *viduvō*.

Hence it arises that the origl. roots *da*, *dha* (give, set), may become intermixed, e.g. *ab-do* (do away, hide), *con-do* (found), *crē-do* (believe), belong not to *da-re* (give), but to a root lost in its uncompounded fm., corresponding to Gk. $\tau\acute{\iota}-\theta\eta-\mu\iota$, Sk. *dā-dhā-mi*, O.H.G. *tuo-m*, cf. Sk. *grad-dadh-āmi* (believe); of the coin-

§ 73. cidence of the origl. *da*, *dha* (as in Zend), we find proof in *uen-di-t* (sells) bes. *uēnum dat* = Sk. and origl. *vaśnam dadhāti*, *ῶνον τίθησι*, *dat* therefore stands here most likely as representative of *dha*, Gk. *θε*, not of *do*, Gk. *δο*; further, *do* which has become like a *sf.*, e.g. in *albi-du-s*, *ari-du-s*, *sordi-du-s*, is prob. to be referred to this root, as the similar roots also in Lat. are elsewh. still practically used as suffixes (e.g. *laua-cru-m*, *ludi-cru-s*, *ala-cri-s*, *uolu-cri-s*, cf. $\sqrt{\text{kar}}$ (make); *late-bra*, *fune-bri-s*, cf. $\sqrt{\text{bhar}}$, *ferre*, etc.). In uncompounded words $\sqrt{\text{dha}}$ is in Lat. *fa*, *fe*; v. post.

Note.—*r* for *d* fr. *dh* is altogether sporadic, in *meri-dies* (mid-day) fr. **medi-dies* (*medius* = *mādhyas*, cf. *μεσ-ημβρα*, Germ. *mit-tag*, Sk. *madhyāhna-s* fr. *madhya-*, *medius*, and *ahan-*, day); in the case of *ar* = *ad* (*ar-uorsus*, etc.), the comparison with words of the kindred langg. is not easy (cf. regular change of *d* to *r* in Umbrian).

Lat. *f* = origl. *dh*, e.g. *fūmus* (smoke), cf. Sk. *dhūmās*, Lith. *dūmai* (pl. n. sing. would be *dūma-s*), Slav. *dymū*, O.H.G. *toum*, Gk. *θύ-ος* (burnt sacrifice), $\sqrt{\text{dhu}}$; *fores* (pl. door), *foris* (passage), *foras* (outwards), cf. Gk. *θύπα*, Goth. *daúr*, O.H.G. *tor*, *turi*, Sl. *dverž*, Lith. *durýs*, Sk., however, *dvāra-m*, *dvār-*, Ved. *dur-* with *d*, not *dh*, to which the S.- and N.-European langg. point; *fer-us*, *fer-a*, *fer-ox* (wild), cf. Gk. *θήρ*, *θηρ-lov*; *fir-mus* (fast), *frē-tus* (trusting to), *frē-num* (bridle), *for-ma* (shape), cf. Sk. *dhār-imán-* (id.), $\sqrt{\text{dhar}}$ (hold); *fio* = **feio* (become), f.f. *dhayāmi*, $\sqrt{\text{dha}}$ (set, do), Gk. *θε*, Goth. *da*, from which also the secondary $\sqrt{\text{fac}}$ is formed (*fac-io*, make), likewise *fā-ber* (wright), st. *fa-bro-*, cf. Sk. *dhā-tar-* (founder, ordainer; Kuhn, Zeitsch. xiv. 229 sqq.).

In *rūfus* (red) = Goth. *raud-s*, f.f. *rāudha-s*, $\sqrt{\text{rudh}}$, medial *f* stands also for origl. *dh*, whilst *rub-er* (red), *rub-igo* (rust), are regular, and show *b* for *f* (v. supr. n. 1), but collateral *raud-us* (clod), origl. $\sqrt{\text{rudh}}$, cf. Sk. *rudh-irā-m* (blood), Gk. *ῥ-υθ-ρός*, and hence we find this root in Lat. as *rud*, *ruf*, *rub* (for *rutilus*, v.

infr.). Cf. the *f*-like pronuncn. of *th* in Eng. and *θ* in mod. Gk; § 73. in Russian Gk. *θ*=*f* in pronunciation.

Lat. *b*=origl. *dh* in medio, e.g. *rub-er*, st. *rub-ro*=*ἐ-ρυθ-ρό-*, Sk. *rudh-i-rá-*, origl. *rudh-ra-*, *√rub*, Sk. *rudh*, Goth. *rud*, O.H.G. *rut*, Scl. *rŭd* (be red); *über* (udder), i.e. **ouber*, Gk. *οὔθαρ*, Sk. *údhar-*, *údhās-*, *údhan-*, M.H.G. *üter*, *iuter*, root-syll. origl. *audh*; *über* (adj. rich), i.e. **oiber*, cf. Sk. *édh-atē* (increases), *√idh* (Walt. Zeitschr. x. 77); *uerbum* (word)=Goth. *vaúrd*, H.G. *wort*, f.f. *vardha-m*, cf. Lith. *várda-s* (m. name); *barba* (beard), stands bes. Norse *bardhr*, H.G. *bart*, Lat. *b*=Germ. *t*, *d*, must be der. fr. origl. *dh*.

3. Origl. *bh*=Lat. *b*, *f*, *h*.

Lat. *b*=origl. *bh* in medio, e.g. *ambō* (both)=Gk. *ἄμφω*, cf. Sk. *ubhāú*, earlier *ubhā*, Goth. *bai*, nt. *ba* (with loss of init. sound), Scl. *oba*, f.f. of st.=*ambha-*; *lub-et* (pleases), Sk. *√lubh* (desire), Goth. *lub* (in *liub-s*, dear, *-lubō*, love, etc.); *nēbula* (mist), *nūbes* (cloud), Gk. *νεφέλη*, *νέφος*, Sk. *nábhas* (cloud, sky), O.H.G. *nēbal*, Scl. *nebo* (sky); *-bī* in *ti-bī*, *i-bī*, (*c*)*u-bi*, corres. to Sk. *-bhyam*, sf. dat. sg. (only preserved in certain cases, e.g. *tú-bhyam*, *-bhya*=Lat. *ti-bī*); *-bus*, sf. dat. abl. pl.=Sk. *-bhyas*, cf. Gk. *-φιν*, both alike containing particle *bhi*: *√fu* in verb. fms. composed by it begins with *b*, e.g. *ama-bam*, *ama-bo*, for **ama-fam*, **ama-fo* (v. post. "conjugation").

Lat. *f*=origl. *bh*, e.g. *√fa* in *fā-ri* (speak), *fā-tum* (utterance, fate), origl. *bha*, cf. Gk. *φα* in *φη-μί*, *φω-νή*, *φά-τις*, Sk. *bhā-ś* (speak); *√fer*, pres. *fer-o* (bear), cf. Gk. *φερ* in *φέρ-ω*, origl. and Sk. *bhar*, pres. *bhár-āmi*; *√fu* (be) in *fu-turus*, *fu-am*, Sk. and origl. *bhu*, Gk. *φν* in *φύ-ω*, *φν-τός*; *√fug* in *fug-io* (flee), *fug-a*, cf. Gk. *φνγ* in *φεύγ-ω*, *φνγ-ή*, Sk. *bhuḡ*, Goth. *bug*, pres. *biuga*, origl. *bhug*; *frāter* (brother), origl. *bhrātar-s*, cf. Gk. *φράτωρ*, Sk. *bhrātā*, Goth. *brōthar*, etc.

Lat. *h* is very rarely=origl. *bh*; e.g. in *hor-da* bes. *for-da* (bearing), *√fer*, origl. *bhar*; in *mi-hi*, *-hi* stands for *-bi*, which we should have expected, as also in Sk. *má-hyam* for **ma-bhyam*,

§ 73. cf. *ti-bi*, Sk. *tú-bhyam*; in both langg. the initial *m* seems to have had a dissimilating influence on the *bh*. We must not hence venture to assign a fm. *ma-hyam* to the origl. langg., for the origl. could only be sounded *ma-bhyam* (or *ma-bhiam*, *ma-bhiyam*, cf. § 3), a f.f. which diverged later into Sk. *má-hyam*, Lat. *mi-hei*; in dat. pl. of *a-st.*, in *-is* fr. *-ois*, *-ais*, origl. *-a-bhyams*, *-ā-bhyams* (v. 'decl.'). origl. *bh* has entirely disappeared, perh. through intervening *h* (cf. *mīhi*); so too prob. *ama-ui* for **ama-fui*, *√fu*, origl. *bhu* (be).

Note.—In some exx. a Lat. *tenuis* stands apparently for an asp.; these are *rutilus* (fiery red) bes. Sk. *√rudh*, Gk. *ῥυθ*; *pati* (suffer) bes. Gk. *παθεῖν*; *pūtēre* (stink) bes. Gk. *πύθ-εσθαι*; *putāre* (calculate) bes. Gk. *πυθέσθαι* (learn), otherwise distinct from it in use; *sapiens* (wise) bes. Gk. *σοφός*; *latēre* (escape notice) bes. Gk. *λαθεῖν*, Sk. *√rah* for origl. *radh*. Cf. L. Meyer, Gr. of Gk. and Lat. Langg., i. p. 51; G. Curt. Gr. Et.² p. 374, Kuhn's Zeitschr. ii. 355; Grassmann ap. Kuhn, id. xii. 86 sqq.; Corss. Krit. Beitr. p. 75 sqq., 79 sqq. Herein we concur in the conclusions of Curt. and Corss., which amount to this,—that in the above-named words also *t* and *p* are not=origl. *dh*, *bh*, Gk. *θ*, *φ*. *ru-tilus* (cf. *fu-tilis*, *mu-tilus*) seems to have sf. *-tilo*, and to stand peculiarly for **rud-tilus*, **rus-tilus* (v. post.), like early Lat. *ad-gre-tūs*, *e-gre-tus*, for **-gred-tus*, **-gres-tus* (class. *gressus*, *√grad*, *gred*, in *grad-iōr*, step), *pa-tior* however is a later fm. fr. *√pa*, which is otherwise formed in Gk. *πα-θ*, *πεν-θ* (*πένθος*, suffering, grief); to the origl. existence of the shorter root-fm. *pa*, *πα*, the fms. *πέν-ομαι* (am in want), *πον-έω* (suffer, labour), point; therefore *πε-ν*, *πο-ν*, give evidence to *πα*, just as *γε-ν*, *γο-ν* (beget), do to a real pre-existent *γα* (*n* is a common secondary root-termn.). The same explan. holds good in *puteo*, where *t* belongs to the origl. root as little as does *θ* in *πύ-θομαι*; the root is *pu*, which clearly occurs in Lat. *pūs*, gen. *pūris* (matter), i.e. **pou-os*, **pou-es-os*, f.f. *pav-as*, *pav-as-as*, cf. *πύ-ον* (id.), Sk. *pū-yatē* (becomes foul, stinks), *pū-ya-s* (matter), Lith. *pū-ti* (be-foul), O.H.G. *fū-l* (foul), f.f. *pau-ra-s*. *Pu-tare* fr. *putus* (pure), lit. = 'make clean, clear,' and has therefore nothing to do with Gk. *πυθέσθαι*, Sk. *√budh*, etc.; *σοφός* stands for **σοπος* with unorigl. aspn., cf. supr. § 62, 3, n. 2. Thus *latēre* alone remains unexplained bes. *λαθεῖν*, a solitary instance, for which we must not try to make good a consonantal change which is otherwise unknown.

CONSONANTAL PROLONGED-SOUNDS.

Spirants *y, s, v*.

§ 74.

1. Origl. *y*=Latin *j* (written *i*), *i*.

Lat. *j*=origl. *y*, initial and medial, yet not commonly between vowels, and almost only after long vowels, e.g. *cū-ius*, *plebē-ius*, or when a conson. has assimilated itself to the *y*, as in *āio*, *māior*, *mēio* (v. post.), e.g. $\sqrt{iug}$, Sk. *yug*, Gk. $\zeta\upsilon\gamma$, origl. *yug*, in *iu-n-go*, (join), *iug-um* (yoke)=origl. and Sk. *yug-ām*, Gk. $\zeta\upsilon\gamma-όν$, Goth. *yuk*, O.Bulg. *igo*=**jǔg-o*; pronl. $\sqrt{ya}$ in *ia-m* (already), cf. Lith. *yaú*, Goth. *yu* (already); *ius* (broth), cf. Sk. *yūśa-s*, *yūśa-m* ('pease-soup,' 'the water in which pulse of various kinds has been boiled;' Wilson), Scl. *iucha*; *iuuenis* (young man), cf. Sk. *yúvan-*, Goth. *yuggs*, Scl. *yunū*, Lith. *yaúnas* (young); *āio* (say) for **ag-io*, pres. fm. in sf. origl. *ya*, $\sqrt{ag}$, origl. $\sqrt{agh}$, cf. *ad-āg-ium* (saying), Sk. *ah* (say); *māior* (greater) fr. **mag-ior*, comp. sf. *-ior*, earlier *-ios*, Gk. *-iov*, Sk. *-yās*, *-īyās*, origl. *-yans*; *mēio*=**migio*, i.e. **migh-yāmi*, pres. fm. in origl. *ya*, etc.

Lat. *i*=origl. *y* after consonn., e.g. *med-ius*=origl. and Sk. *mādhyas*, cf. $\mu\acute{\epsilon}\sigma\sigma\omicron\varsigma$ =* $\mu\epsilon\theta-y\omicron\varsigma$; *patr-ius* (father-), origl. *patar-ya-s*, cf. $\pi\acute{\alpha}\tau\rho-\iota\omicron-\varsigma$, Sk. *pitr-ya-s*, st. origl. *patar-*, sf. *ya*; *siem*, *siet* (1, 3, sg. opt. pres.), origl. *as-yā-m*, *as-yā-t*, cf. $\epsilon\tilde{\iota}\eta\nu$, $\epsilon\tilde{\iota}\eta$, fr. * $\epsilon\tilde{\iota}\sigma-y\eta-\mu$, * $\epsilon\tilde{\iota}\sigma-y\eta-\tau$, Sk. *syā-m*, *syā-t*, opt. pres. $\sqrt{as}$ (be); *capio* for **cap-yō*, i.e. **kap-yā-mi*, pres. in origl. *ya*, etc.

Not uncommonly *y* disappears entirely, thus regularly betw. vowels, as, e.g. *moneo* (remind, warn), f.f. *mānayāmi*, causative from $\sqrt{men}$ (*men-tem*, *me-min-i*), origl. *man* (think); *sēdo* (seat, set), fr. **sēdao*, **sēdayo*, Sk. and origl. *sādāyāmi*, caus. from $\sqrt{sed}$ (*sedere*), origl. *sad*; further before *i* and *e* which stands for *i* (§ 35, § 38), e.g. *capis*, *capit*, for **capyis*, **capyit*, i.e. *kap-ya-si*, *kap-ya-ti*, bes. *capio*, i.e. *kap-yā-mi*; *obex* (obstacle, hindrance), gen. *obicis*, for **obyex*=**ob-yic-s*, *ob-yic-is*, $\sqrt{iac}$ (cf. *iac-io*, *ob-iic-io*, *ob-ic-io*); yet elsewh.

§ 74. after consonn. also, e.g. *minor*, *minus* (less), for **min-ior*, **min-ius*, origl. sf. *-yans*, compar.-fmn.; *ero*, *eris*, *erit*, fr. **eso*, **esis*, **esit*, for **esyo*, **esyis*, **esyit*, f.f. *as-yā-mi*, *as-ya-si*, *as-ya-ti*, pres.-fmn. through *ya* of √*as*, which expresses fut. meaning, cf. Sk. *s-yā-mi*, *s-yā-si*, *s-yā-ti*, Gk. ἔσομαι for *ἐσ-γο-μαι; *-bus* sf. of dat. and abl. pl. origl. *-bhyams*, Sk. *-bhyas*, etc.

2. Origl. *s*=Lat. *s*, *r*.

Lat. *s*=origl. *s*. Initially, generally also finally, medially betw. mute consonn.; betw. vowels *s* passes over into *r* almost always in the class. lang. Before sonant consonn. *s* partly falls out (becomes assimld.), partly likewise becomes *r* (v. 'sound-laws'), e.g. √*sed* (*sed-ere*), origl. and Sk. *sad*, Gk. ἔδ, Goth. *sat* (*sit*); *septem* (*seven*), Sk. and origl. *sáptan*, Gk. ἑπτὰ; √*sta* (*stand*), e.g. in *sta-tus*, origl. *sta*, Gk. στα, Sk. *stha*; √*ster* in *ster-no* (*strew*), Sk. and origl. *star*, Gk. στρο; √*es* in *es-t*, origl. and Sk. *as*, Gk. ἐσ in ἐσ-τί; √*us* (*burn*) in *ur-o*, *us-tus*, origl. *us*, Sk. *uš*; *-s*, sf. of nom. sg., origl. and Sk. *-s*, Gk. *-s*, Goth. *-s*, Lith. *-s*, e.g. *equo-s*, origl. *akva-s*, Gk. ἵππο-ς, Sk. *áçva-s*; sf. *-os*, *-es*, e.g. *gen-os*, *gen-us* (*race*), gen. *gen-er-us*, *gen-er-is*, origl. *gan-as*, *gan-as-as*, cf. Gk. γέν-ος, *γεν-εσ-ος=γένους, Sk. *gán-as*, *gán-as-as*, etc.

Lat. *r*=origl. *s* (cf. sound-laws, § 77, 1. f.).

3. Origl. *v*=Lat. *v* (in writing undistinguished fr. *u*), *u*.

Lat. *v*=origl. *v*, e.g. √*vid* in *uideo* (*see*), Sk. and origl. *vid*, Gk. *Fiδ*; √*vom* for **vem* in *uom-o* (*spue*), Sk. and origl. *vam*, Gk. *Fεμ*; √*voc* for **vec* in *uoc-are* (*cry*), *uōc-em* (*acc. voice*), origl. *vak*, Sk. *vaḥ*, Gk. *Fεπ*; √*reh* in *ueh-o* (*carry*), origl. *vagh*, Sk. *vah*, Gk. *Fεχ*, Goth. *vag*; √*vol* in *uol-t* (*he wills*), Sk. and origl. *var* (*uelle*); *oui-s* (*sheep*), origl. *avi-s*, Lith. *avi-s*, Sk. *ári-s*, Gk. *ὄFις*; *nouo-s* (*new*), origl. and Sk. *náva-s*, Gk. *véFo-ς*, etc.

Note.—Though *quis*, *quod*, *anguis*, *suavis* are the usual ways of writing those words, yet here, too, *u*=*v* (thus *qvís*, *qvod*, *angvís*, *svavis*), because this *u* is not metrically=vowel.

Lat. *u*=origl. *v* after mom. consonn. and *n*, e.g. *quatuor* (four), § 74. Sk. *katvāras*, Gk. *τέτταρες*=**τετFαρες*, Goth. *fidvōr*, origl. *katvāras*; this *u*=*v* seems secondarily to have the force of a conson., whence e.g. the lengthening by position of the short *a*, expressed in the spelling *quattuor*; esp. often *u*=origl. *v* in the origl. st.-fative sf. *-va*=Lat. *-uo*, *-vo*, later *uu*, *vu*, which in Lat. were sounded *-uo* (later *-uu*), fem. *-ua*, after most consonn., except *r*, *l*, *q*, e.g. *al-ūo-s* ('the nourishing—'), √*al* (*al-o*, nourish); *ar-ūo-m* ('the ploughed—'), √*ar* (plough); *eq-ūo-s* (horse), origl. *ak-va-s*, Sk. *ác-va-s* ('the running—'), origl. √*ak* (run), etc.; but *uac-uo-s* (empty), √*uac*; *noc-uo-s* (hurtful), *re-lic-uo-s* (left over) bes. *re-liq-vo-s*, √*noc*, *lic* (altogether usage often wavers betw. *v* and *u*, as *aquāe*, *acuam*, bes. *aqua*; *tenvia*, *genva*, bes. *tenuia*, *genua*, etc.); *con-tig-uo-s* (contiguous), √*tag* (*tango*); *de-cid-uo-s* (falling off), √*cad* (*cad-o*); *in-gen-uo-s* (inborn, free), √*gen* (*gi-gn-o*, *gen-us*); *sūd-or* (sweat), *sūd-are* (sweat), prob. for **suid-or*, **suid-are* (as e.g. gen. *senatus* for *senatuis*), and this for **svid-or*, **svid-are*, √*svid*, cf. *ιδίω* for **σFιδ-ιω*, Sk. *svid-yāmi*, O.H.G. *swizzan*, *sweiȝ*, *swiȝ*, earlier *svit*, origl. *svid* (sweat), etc.

Note.—*suūs* (his) is not=*sva-s*, but was sounded *sovos* in the earlier lang.; accordingly we have also *tuūs*=*toros*; in Lat. and in Gk. there is here a step-fmn. of *u* to *eu*, *ou* (*έός*, *τεός*=**seu-os*, **teu-os*), whilst the other langg. show *v*.

Not unfreq. *v* disappears entirely, thus e.g. *se*, *si-bi* (himself), etc., for **sve*, **svi-bi*, fr. st. origl. *sva-*; *te* (thee), *tī-bi* (to thee), for **tve*, **tvi-bi*, cf. Sk. *tva-m* (n. sg.); for origl. initial *sva-*, so occurs regularly (v. supr. § 33); *canis* (hound) for **cvan-is*, cf. *κύων*, Sk. st. *çvan*, f.f. *kvan-*; *suadeo* (recommend) for **suadveo*, fr. *suavis* (sweet)=**suadv-i-s*, cf. G. *ἡδύς*, Sk. *svādú-s*; *deus* (god)=**dēus*, **dēvo-s*, **deivo-s*, **dīvo-s*, f.f. *daiva-s*, cf. Sk. *dēvá-s*, Lith. *dēva-s*. The later lang. permits frequent loss of *v* from betw. vowels, e.g. *suus*, *suum*, for earlier (inscrr.) *souos*, *souom* (**survus*, **survum*); *fluunt*, earlier (inscrr.) *flouont*; *fui*=**fuvi*, and so, too, in other like cases; *boum* for *bouum*; *prudens* fr. *prouidens*;

§ 74. *nōlo*=**neuolo*; *amarunt*=*amauerunt*, etc. Yet *nouos*, *ouis*, etc., with *v* preserved, are the only fms. found.

Note.—On the alleged change of *v* to *b* in Lat. v. Corss. Krit. Beitr., 157 sqq. Only in *ferbui*, pf. fr. pres. *ferueo* (boil), *v* after *r* and bef. *u* has become *b*; *bubile* bes. *bouile* (ox-stall) seems caused by the analogy of *bu-bulus* (ox-); *opilio*, *upilio* (shepherd), stand for **oui-pilio*, cf. *Pal-es*, αἰ-πολ-ος, βού-πολ-ος (Corss. ib. 152; Krit. Nachtr., p. 180 sqq.).

§ 75. Nasals.

1. Origl. *n*=Lat. *n*. As in other Indo-Eur. langg., so also in Lat., origl. *n* bef. gutt. consonn. becomes gutt., bef. labb. it becomes lab., i.e. *m*, (*n*=gutt. *n*, § 4). Exx.: *ne* (negation), in *ne-c*, *ne-fas*, etc., Sk. and origl. *na*; *in-*, Umbr. *an-*, Gk. ἀν-, Sk. and origl. *an-* (neg. in composn.); √*nec* in *nec-are* (kill), *noc-ēre* (hurt), Gk. νεκ, Sk. *naç*, origl. *nak*; st. *noc-ti* (night) in *noc-te-m*, origl. *nak-ti-*, cf. Lith. *nak-ti-s*, Gk. st. νυκτ-, Sk. *nákta-m* (adv. by night); *nāuis* (ship), Sk. and origl. *nāus*, Gk. ναῦς; √*gen* in *gen-us* (race), *gi-g(e)n-o* (beget), Gk. γεν, Sk. *gan*, origl. *gan*; *n* is common in suff., e.g. origl. *-na* in *plē-nu-s* (full), f.f. *prā-na-s*, origl. *par-na-s*, √*par* (fill), *na* fms. the perf. part. pass., but has also various other functions, e.g. *som-nu-s* (sleep) for **sop-nu-s*, origl. and Sk. *svāp-na-s*, Gk. ὑπ-νο-ς; sf. *-man*, e.g. in **gnō-men*, *nō-men* (name), Sk. *nā-man-*, origl. *gnā-man-*; *-nti*, *-nt*, fm. 3 pl. vb., e.g. **fero-nti*, *feru-nt*,=φέρο-ντι, Sk. and origl. *bhāra-nti*, etc.

Exx. of change of *n* to *ñ*, *m*, are found in pres. fmn., e.g. *iu-n-go* (join), √*iug*, *ru-m-po* (break), Sk. *lu-m-pāmi*, √*rup*, Sk. *lup*, which in f.f. were prob. *yug-nāmi*, *rup-nāmi*; only later did the nasal pass into the root, whereby arose *yungāmi*, *rum-pāmi*, i.e. *iungo*, *rumpo*.

Note.—On *gn* v. supr. § 72, 1, n. 5.

2. Origl. *m*=Lat. *m*, e.g. √*men* in *me-min-i* (remember), *men-tem*, *mens* (mind), *moneo* (warn), Gk. μεν, origl. and Sk. *man* (think); *mā-ter* (mother), μή-τηρ, Sk. *mā-tā*, origl. *mā-tar-s*;

√*mor* in *mor-i* (die), *mor-tuos* (dead), Sk. and origl. *mar*; √*uom* § 75. for **uem* in *uom-o* (spue) (§ 33), Gk. *Φεμ*, Sk. and origl. *vam*, etc. In sff. also *m* often occurs, e.g. sf. *-men*, origl. *man*, as in **gnō-men*, *nō-men*, Sk. *nā-man-*, origl. *gnā-man*; origl. sf. *-ma*, an intensitive, most often forming superl., esp. in combination with sf. *-ta*, as *ta-ma*, Lat. e.g. in *pri-mu-s*, *optu-mu-s*; *-m* 1 pers. sg., *-mus* 1 pl., e.g. (*e*)*s-u-m* fr. **es-mi*, Gk. *εἰ-μί* fr. same f.f., Sk. and origl. *ás-mi*; *feri-mus*, Gk. *φέρο-μεν*, Dôr. *φέρο-μες*, Sk. and origl. *bhárā-masi*; *-m* of acc. sing., e.g. *equo-m*, Sk. *áçva-m*, cf. Gk. *ἵππο-ν*, with *ν* for *μ*, acc. to Gk. sound-laws of termn., origl. *akva-m*, etc.

Note.—In *tene-brae* (darkness), prob. for **tenes-brae*, **temes-brae*, √*tam* in Sk. *tám-as* (darkness), O.H.G. *dēm-ar* (dawn), etc., *n* has arisen by dissimiln. fr. *m*, to avoid the labialism **temebrae*; in *nōnus* (ninth) for **nōmus*, **nouimus*, cf. *nouem* (nine), *septimus* bes. *septem*, *decimus* bes. *decem*, *primus*, etc., the init. *n* has had an assimilating influence; *gener* (son-in-law) does not stand for **gemer* on acct. of *γαμβρός* (on which cf. § 66, 1, n. 1), because **gemer* would have stood its ground like *uōmer* (ploughshare), also Sk. *gā-mātar-* (son-in-law) proves nothing, because it is a compd. of *gā* (come after) from √*ga*, origl. *ga* (gi-gn-ere), and *mā-tar-* (bearing, bringing forth); *gen-er*, st. *gen-ero-* for *gen-ro-*, is derived rather fr. √*gen* (beget), sf. *ra*, in this case with auxil. vowel *i*, pronounced *e* bef. *r* (§ 38).

r- and *l-*sounds.

§ 76.

Origl. *r*=Lat. *r*, *l*.

Lat. *r*=origl. *r*, e.g. *rex* (king), i.e. **rēg-s*, origl. *rāg-s*, cf. Sk. st. *rāj-* (id.); √*rub* in *rub-er* (red), *rub-ru-m*, cf. *ἐρυθ-ρός*, *ἐρυθ-ρό-ν*, Sk. *rudh-i-rā-m*, origl. *rudh-ra-s*, *rudh-ra-m*; √*rup* in *ru-m-p-o* (break), *rup-tu-s*, cf. Sk. *lup* (rumpere) in *lu-m-p-āmi*, *lup-tā-s*, Lith. *lup* in *lùp-ti* (flay); √*or* in *or-ior* (rise), *or-tus*, cf. *ὄρ-νυμι*, Sk. and origl. *ar*; √*ar* in *ar-o* (plough), cf. *ἀρ-ώω*, Scl. *or-ya*, *ar-atrum* (plough), cf. *ἀρ-οτρον*, O. Bulg. *or-alo* for **or-adlo*; √*fer*, 1 sg. pres. *fer-o* (bear), Gk. *φέρ*, 1 sg. pres. *φέρ-ω*, Sk. and origl. *bhar*, 1 sg. pres. *bhár-āmi*; *frā-ter* (brother), *φρά-τωρ*, Sk. *bhrātā*, origl. *bhrā-tar-s*, etc. *r* is frequent in

§ 76. stem-formative particles, thus in sff. *ro*, *ru*, origl. *ra* (*rub-ru-m*, origl. *rudh-ra-m*); *tōr*, origl. *tār* (*da-tōr*, origl. *da-tar-s*, n. sg.); *tro*, *tru*, origl. *tra*; in word-formative particles, i.e. in case- and person-terms., it does not occur.

Lat. *l*=origl. *r* (cf. 'sound-laws,' upon Lat. interchange of *l* with *r* for purposes of dissimiln.), e.g. $\sqrt{\text{loc}}$ (speak) in *loqu-or*, *loc-utus*, Gk. $\lambda\alpha\kappa$, Scl. *rek* (*rek-a*, loquor), origl. *rak*; $\sqrt{\text{luc}}$ in *luc-erna* (lamp), *lūc-em* (acc. light), Gk. $\lambda\upsilon\kappa$, Sk. *ruk*, Goth. *luh*, origl. *ruk*; $\sqrt{\text{lic}}$ in *linguo* (leave), *re-lic-tus*, Gk. $\lambda\iota\pi$ ($\lambda\epsilon\iota\pi\omega$), Sk. *rik*, origl. *rik*; $\sqrt{\text{lig}}$ in *lingo* (lick), Gk. $\lambda\iota\chi$ ($\lambda\epsilon\iota\chi\omega$), Sk. *lih*, origl. *righ*; $\sqrt{\text{lub}}$ in *lub-et* (it pleases), Goth. *lub* (*liubs*, love), Sk. *lubh* (desire), origl. *rubh*; *lewis* (light) fr. **legu-is*, cf. Gk. $\epsilon\text{-}\lambda\alpha\chi\acute{\upsilon}\text{-s}$, Sk. *laghú-s*, origl. *raghu-s*; *plē-nu-s* (full), f.f. *prā-na-s*, parall. fm. to *par-na-s*, Zend *perenō*, Sk. *pūrṇá-s*, i.e. origl. *par-na-s*, Goth. *fulls* for **ful-na-s*; *sollus* (whole, Fest.) for **soluo-s*, parall. fm. to *sal-uo-s* (whole), Gk. $\sigma\acute{\alpha}\lambda\phi\omicron\varsigma$, Sk. and f.f. *sár-va-s*; $\sqrt{\text{uol}}$, *uel*, in *uol-t* (he wills), f.f. *var-ti*, *uel-le* (will), for **uel-se* (v. post), Sk. and origl. *var* (choose), etc. In st.-formative particles also *l* is common.

§ 77. SKETCH OF SOME SOUND-LAWS WHICH ARE IMPORTANT FOR
COMPARATIVE GRAMMAR.

MEDIAL.

1. Assimilation. We omit here the assimilns. which occur in prepositional compds.; they bear a subordinate meaning for Compar. Gr., and belong to the Special Gr. of Latin. Further, except that they are treated as well known, they are not at all, or only briefly, mentioned.

a. Complete assimiln. of foregoing to following consonn. This occurs after long vowels, after which doubled consonn. cannot easily be made audible, and can scarcely be distinguished from evanescence (ejection) of the former conson.; whilst after short vowels the doubling of the conson. is the distinctive mark of real assimiln. As, however, the evaporation of one conson. bef. another can hardly be conceived of as con-

ditioned in any other way than by assimiln. to the follg. cons., we § 77. likewise treat here of cases where consonn. are lost before consonn.

The doubling of consonn. was not characterized in writing before Ennius; in inscrr. it does not appear in frequent use until after 640 A.V.C.

Note.—Upon the doubled tenuis in Lat. cf. C. Pauli, Zeitschr. xviii. 1 sqq., where many words of difficult etymol. are considered. Acc. to Pauli the doubling is not seldom unorigl., and arises 'through sharpened pronunciation.'

Exx. of complete assimiln. of foregoing to follg. consonn. after short vowels are found in *sum-mu-s* for **sup-mu-s*, cf. *sup-er*, *sup-er-ior*, *sup-remus*; *flamma* fr. **flag-ma*, cf. *flag-rare*; *serra* (saw), prob. fr. **sec-ra*, cf. *sec-are* (cut); *sella* fr. **sed-la*, cf. *sed-ere*; *lapil-lus* fr. **lapid-lus*, cf. *lapid-em*; *puel-la* fr. **puer-la*, **pueru-la*, cf. *puer*; *asel-lus* fr. **asin-lus*, **asinu-lus*, cf. *asinu-s* (ass); *esse* fr. **ed-se*, cf. *ed-o* (eat); *penna* fr. **pesna*, and this fr. **pet-na*, √*pet*, origl. *pat* (fly), etc.

Complete assimiln. of foregoing to follg. consonn. after long vowels; the spelling does not show the doubling in these cases. The assimiln. (dropping out) of *d*, *t*, and often *n* before *s*, is well known; a foregoing short vowel therefore becomes long, wherein we believe we see an evidence that a doubling of the conson. was once really in existence, e.g. *suāsi* fr. **suād-si*, pf. fr. *suād-eo*, etc.; *pēs*=**pēd-s*, cf. *pēd-em*; *milēs*, *milēs* only later, fr. **milēt-s*, cf. *milit-em*; *formōsus* fr. **formonsus*, sf. origl. -*vans* fr. -*vant*, whose *v* disappeared; *equōs* fr. **equon-s*, i.e. acc. sg. *equo-m*+pl.-sign *s*; *consul* bes. *cōsul*; *quotiens*=**quotient-s* bes. *quoties*; *ensor*, *censeo*, bes. rarer *cēsor*, *cēseo*, etc. Thus the lang. has sometimes decided early in favour of loss of *n*, whilst at others the *n* has stood exclusively for a longer time, and until a later period of written lang.

A follg. *j* assimilates itself not seldom to precedg. *g*; *j* is then written indivisibly, but the foregoing vowel, if short before, now becomes long (cf. § 39, 1), e.g. *mā-ior* fr. **māg-yor*, cf. *mag-nus*, √*mag*, origl. *magh* (wax); *ā-io* fr. **āg-yo*, cf. *ad-āg-ium*,

§ 77. $\sqrt{ag}$, Sk. *ah*, origl. *agh* (say); *mē-io* by dissimiln. (cf. § 38) fr. **mi-yo* for **mīg-yo*, cf. *mī-n-g-o*, $\sqrt{mig}$, Gk. $\mu\chi$, origl. *migh* (cf. § 74, 1). Bef. origl. sf. *-ya*, *g* remains, because here *y* changes into *i* (§ 74, 1), e.g. *ad-āg-iu-m*, *nau-frāg-iu-m*. Cf. the extensive loss of consonn. before *y* with compensatory lengthening in composition, e.g. *se(d)-iungo*, *pe(r)-iero*, *di(s)-iudico*, *tra(ns)-icio*, etc.

Loss of *g* bef. *v* without compensat. lengthening occurs, e.g. in *brēu-is* for **bregu-is*, cf. $\beta\rho\alpha\chi\acute{\upsilon}-s$; *lēu-is* for **lēgu-is*, cf. $\epsilon-\lambda\alpha\chi\acute{\upsilon}-s$; *niu-is* for **nigu-is*, cf. *nix*=**nig-s*, *ningu-o*; accordingly the same process must be assumed in *uīuo* for **uīgu-o*, cf. *uixi*, i.e. **uig-si*, $\sqrt{uig}$ (v. §§ 72, 1; 73, 1).

d disappears bef. *v* in *suāu-is* for **suād-uis*, cf. Gk. $\eta\delta\acute{\upsilon}-s$, Sk. *svādú-s*.

Bef. nasals sometimes *g*, oftener *c*, disappears (*c* may also remain and become *g*, v. *c* in this section), more rarely without, more often with compensatory lengthening, *c* was evidently softened to *g* before it fell out (v. *c*), e.g. *stī-mulus* (goad), *stī-mulo* (I goad), $\sqrt{stig}$, raised a step to *stīg* (*in-stīg-o*, urge), nasalized in *in-stinc-tus* (urged)=**in-sting-tus*, cf. Gk. $\sigma\tau\iota\chi\omega$ (prick)= $\sigma\tau\iota\gamma-y\omega$; *ex-ā-men* (swarm of bees, rank) for **ex-āg-men*, $\sqrt{ag}$ in *a-gere* bes. *ag-men*, *teg-men*, *seg-mentum* (*g* is common bef. *n*, e.g. *lig-num*, *dig-nus*, *mag-nus*, etc.); *uā-nus* (empty) fr. **uāc-nus*, cf. *uāc-uos* (empty); *dē-ni* (ten apiece) fr. **dēc-ni*, cf. *dēc-em*; *pī-nus* fr. *pīc-nus*, cf. *pīx*, *pīc-is* (pitch; *pīnus*, on acct. of the vowel, cannot be akin to $\pi\acute{\epsilon}\nu\kappa-\eta$, Germ. *vieh-te*, which point to a $\sqrt{puk}$); *nc* disappears thus in *quī-ni* (five apiece) for **quīnc-ni*, cf. *quinque* (five).

Before *m*, *c* disappears in *lū(c)-men* (light), where it is doubtful whether the vowel is simple or whether it is raised in the scale, whether fr. **lūc-men* or **louc-*, **lūc-men*; *cs*, i.e. *x*, disappeared bef. *m* in *sē-mestrīs* (six-monthly) for **sex-mestrīs*, prob. also in *tē-mo* (pole) for **tex-mo*, cf. O.H.G. *dīhs-ila*, and Sk. $\sqrt{takś}$ (compose, make).

Bef. *m*, *b* disappears, e.g. *glūma* (shell) for **glūb-ma*, cf. *glūb-ere* (pare); *grēmium* (lap) for **greb-mium*, cf. Sk. *gārbha-* (masc. id.), etc. (Corss. Krit. N. p. 236).

Bef. *l*, *x* has died out in *tē-la* (web), which, however, can only § 77. be explained as prob. coming fr. **tex-la*, cf. *tex-ere* (weave).

Bef. *c*, *d* and *t* disappear in *hoc* for **hod-c*, **hod-ce*, cf. *quod*; *ac* for **at-c*, cf. *atque*.

Bef. sonant consonn. *s* disappears, thus e.g. bef. *n* in *pō-no* for **pos-no*, cf. *pos-ui*; *cē-na* for **ces-na*, cf. Umbr. *ces-na*; *penis* for **pes-nis*, cf. *πέος* for **πες-ος*, Sk. *pās-as*; in *penna* for earlier *pesna* the assimiln. has been kept, *pesna* stands for **pet-na* (v. c), *√pet*, *πετ*, Sk. *pat* (fly), cf. *prae-pet-es* (aves; Fest.), O.H.G. *fēd-ara*, *fēd-ah*, Gk. *πτ-ίλον*, *πτε-ρόν* (feather, wing), etc.

Bef. *m*, *s* is lost in *rē-mus* (oar), cf. *tri-resmus* (three-oared) Col. Rostr., *res-mus* stands for **ret-mus*, cf. *ἐ-ρετ-μός*; *s* is lost without compensatory lengthening in *Cā-mēna* for *Cas-mena*, *√cas*, cf. *car-men*, Sk. *√cas*, *çās* (count, say).

Bef. *n* and *m*, *s* also becomes *r*. v. e.

Bef. *l*, *s* is lost in *corpu-lentus* for **corpus-lentus*, cf. *corpus*, *corpor-is*.

Bef. *d*, *s* is lost in, e.g. *iū-dex* for **iūs-dex*, *i-dem* for **is-dem*, *di-duco* for **dis-duco*, etc., but it remains in *trans-dūco*, *trans-do*, bes. *trā-dūco*, *trā-do*, further in cases like *eius-dem*, *cuius-dam*.

Bef. *b*, also, *s* is lost, e.g. *tene-brae* for *tenēs-brae*, and the like; v. post.

Bef. *d*, *r* is lost with compensat. lengthening in *pēd-o*, *pōd-ex*, bes. *πέρδ-ω*, Sk. *√pard*, O.H.G. *farz*, Lith. *perd* (1 sg. pres. *pėrdžu*=**perd-yu*).

The change of *r* to *s* by assimiln. is well known, e.g. *rūsum*, *russum*, bes. *rur-sum*, *sū-sum* bes. *sur-sum*, *retrō-sum* bes. *retror-sum*, etc.

Bef. *sc*, consonn. are lost, prob. only to make pronunciation simpler and easier; thus in *di-sco* for **dic-sco*, cf. *di-dic-i*; *po-sco* (where *sc* became fixed, though origl. only in pres., cf. *po-poss-i*), prob. for **porc-sco*, cf. *√proc*, *prec*, in *proc-ax*, *proc-us*, *prec-or*, cf. Germ. *frak*, *frag* (in Goth. *fraih-nan*-, N.H.G. *frag-en*); *mi-sceo* for **mig-sceo*, cf. *μῆγ-ννμῖ* (here, too, has the *sc* in Lat. grown into the root).

§ 77. Similarly *mis-tus* stands for and bes. *mics-tus*, *mix-tus*, and this prob. for **misc-tus*, cf. *misc-eo*; *tos-tus* for **tors-tus*, cf. *torr-eo* for **tors-eo*, Germ. *durs-t*, Sk. $\sqrt{tarš}$ (thirst), i.e. *tars*, to which prob. belongs *tes-ta* (crock, jar) for **ters-ta* (lit. 'baked,' 'burnt'); cf. *terra* (dry land) for **ters-a*.

It is certain that certain groups composed of more consonn. were lightened by the evaporation (ejection) of one of these consonn.

Thus after *r*, *l*, are lost gutt. *c*, *g*, when folld. by *t* or *s*, e.g. *sar-tus* for **sarc-tus*, cf. *sarc-io*; *tor-tus* for **torc-tus*, cf. *torqu-eo*; *ul-tor* for **ulc-tor*, cf. *ulc-iscor*; *in-dul-tus* for **in-dulc-tus*, and this for **in-dulg-tus* fr. *in-dulg-eo*, and so others; *sar-si* for **sarc-si*, cf. *sarc-io*; *tor-si* for **torc-si*, cf. *torqu-eo*; *mul-si*, *mul-sus*, for **mulg-si*, **mulg-sus*, fr. *mulg-tus*, cf. *mulg-eo*; *spar-si* for **sparg-si*, *spar-sus* for **sparg-sus* fr. *sparg-tus*, cf. *sparg-o*, etc.; *par-simonia* for **parc-simonia* fr. **parc-timonia*, like the underlying fm. *par-sus* fr. **parc-tus*, cf. *parc-o*; thus also *ursus* for **urcsus* fr. **urctus*, cf. Gk. ἄρκτος, Sk. *rkšas*.

On the other hand, *r**c**s* was tolerated in *fine*, in *arx*, *merx*.

Also the combinations *s-br*, *r-br* are avoided by the evaporation of the *s*, *r*, bef. *b*, e.g. *mulie-bris* for **mulier-bris* (or **mulies-bris*); *funie-bris* for **funes-bris* bes. *funer-a*, *funus*; *tene-brae* for **tenes-brae*, **temes-brae*, (§ 75, 2, n.); *fe-bris*, *he-bris*, for **fer-bris*, $\sqrt{fer}$ (in *fer-uor*, etc.), origl. *ghar* (§ 73, 1; Corss. Krit. Beitr. 204 sqq.; Ebel, Zeitschr. xiv. 78; cf. L. Meyer, Comp. Gr. ii. 235, 241). Similarly in above-mentioned *tos-tus* for **tors-tus*, etc.

Quintus for *Quinc-tus* is late, cf. common *Quinc-tius* bes. later *Quin-tius*; the same holds good in *au-tor* for *auc-tor* fr. **aug-tor*, etc. Yet it cannot be doubted that *c* was lost bef. *t* sporadically even at an earlier period of the lang. in such cases as *in-uītus* fr. **in-uīc-(i)-tus*, $\sqrt{uic}$, *uec*, Gk. *ἑκ (ἐκ-ών)*, Sk. *vaç*, i.e. *vak* (will): *in-uī-tare* fr. **in-uīc-(i)-tare*, $\sqrt{uic}$, *uec*, *uoc* (*uoc-are*), Gk. *ἑπ*, Sk. *vaḱ*, origl. *vak* (speak), etc. (cf. Corss. Krit. B. p. 4 sqq., and Krit. N. p. 47 sqq. where other views, however, are expressed). Also *Vitoria*, *Vitorius*, are supported

by inserr. as by-forms of *Victorius*, -a (Corss. Krit. N. p. 45 § 77. sqq.). v. another explanation of *inuītare*, etc., in § 39, 2.

b. Complete assimiln. of following to foregoing consonn. This branch of assimiln. is well represented in Lat.; thus e.g. *t* of superl. termn. -*timu-s* (origl. and Sk. -*tama-s*, retained in *op-timus*) is assimild. to *s* in -*is-simus* = **is-timus*; *is*, the shortest fm. of origl. -*yans*, which is in Lat. *iōs*, *iōr*, *ius*, is accordingly the compar.-sf. to which the superl. is added, e.g. *longis-simus* fr. **longis-tumu-s*; so too *t* of -*timus* becomes assimild. to *r* and *l* in those superll. which are fmd. fr. an unraised adj.-stem, e.g. *celer-rimus* fr. **celer-timu-s*, **facil-limus* fr. **facil-tumu-s*, etc., unless these superll. stand (as G. Curt. conjectures in a letter) for **celer-is-timus*, **facil-is-timus*, **celerstimus*, **facilstimus*, **celersimus*, **facilsimus*.

s is assimild. to *r* in *torr-eo* for **tors-eo* bes. *tos-tu-m* for **tors-tu-m*, *terra* for **ters-a*, origl. √*tars* (be dry), as in Germ. *dürr-e* bes. *durs-t*; *fer-rem*, *uel-lem*, are fr. **fer-sem*, **uel-sem*, cf. *ama-rem* for **ama-sem*, *fac-sem*, etc. (cf. Corss. Krit. B. 402 sqq.).

Perh. *y* has become similar to the preceding consonn. in pres. fmns. with doubled root-termns., as *pello*, *fallo*, *curro*, *mitto*, etc., though the combinations *lio*, *rio*, *tio*, are ordinary (v. pres.-st.).

v seems assimild. to preceding *l* in *pallor*, *pallidus*, for **pal-uor*, **pal-uidus*, cf. O.H.G. *falo*, *falaw-er*, *fahw-er*, Lith. and f.f. *pàlv-as* (fallow—of deer); *mollis*, prob. fr. **molvis*, **moldv-is*, = Sk. *mrdú-s*, f.f. *mardu-s*; *sollu-s* (totus) equal to *saluo-s*, Sk. *sárva-s*, Gk. ὅλος for *ὅλφος. In these double fms. (*sollus*:*saluos*::*pello*:*alius*) we must prob. recognize traces of a mixture of dialects.

t after *s* becomes assimild. to it, in *ensor*, *census*, √*cens*+sff. -*tor-*, -*tu-*, cf. Osk. *cens-tur*, *cens-tom* = *censum*. Moreover, assimiln. of *t* to foregoing *s* occurs in the many cases where fr. *d*, *t*+*t* arise (subsequently *st*, cf. 2, Dissimiln.); after short vowels the doubling is expressed in writing as well, after long vowels, and after consonn. we find regularly only one *s*; yet we find by their side spellings such as *fussus*, *cassus*, *diuissio*, *rissus*, etc.,—which have therefore a good foundation in the lang.,—

§ 77. e.g. *fissus* fr. **fid-tus*, **fis-tus*, √*fid* in *findo*, *fid-i*; *gressu-s* fr. **gred-tu-s*, **gres-tu-s*, cf. *grad-ior*; *fossa* fr. **fos-ta*, **fod-ta*, √*fod* in *fod-io*; *passus* fr. **pat-tu-s*, **pas-tu-s*, cf. *pat-ior*; *ēsum* for **essum*, which we might have expected, fr. **ēd-tu-m*, **es-tu-m*, cf. *ēd-o*; *clausus* fr. **claud-tu-s*, **claus-tu-s*, cf. *claud-o*; *ūsus* (rarely *ussus*, inscr.) fr. **ūt-tu-s*, **ūs-tu-s*, cf. *oit-ier*, *ūt-i*; *tonsu-s* fr. **tond-tu-s*, **tons-tu-s*, cf. *tond-eo*; *uicensus*, *uicēsumus*, fr. **uicent-tumu-s*, **uicens-tumu-s* (unless here, as in *deci-mu-s*, only *mo* was added, in which case the fm. would be **uiginti-mu-s*); *uersus*, *uorsus*, for **uers-tus*, **uors-tus*, fr. **uert-tus*, **uort-tus* (*uert-ere*), etc. On this Sound-law, cf. Corss. Krit. B. 418 sqq.

c. Partial assimiln. of foregoing to follg. consonn.

It is well known that bef. mutes mom. sonant consonn. become mute; e.g. *ac-tus* for **ag-tus*, cf. *ag-o*; *scrip-tus*, *scrip-si*, for **scrib-tus*, **scrib-si*, cf. *scrib-o*, etc.; in *uec-tus* bes. *ueh-o*, origl. *vagh-āmi*, we must assume a representation of origl. *gh* by Lat. *g*: origl. *vagh-ta-s*, Lat. **ueg-to-s*, *uec-tu-s*. On the other hand, *sec-are*, *salic-em*, stand bes. *seg-mentum*, *salig-nus*, etc.; the sonant consonn. *m*, *n*, here change *c* to son. *g*.

Lab. moment. consonn. pass into their nasals bef. *n*: *som-nus*, *Sam-nium*, for **sop-nus*, **Sab-nium* (cf. *sop-ire*, *Sab-īni*, *Sab-elli*).

The earlier lang. still shows *s* bef. nasals, softened fr. *t*, as *res-mu-s* (*rēmus*) fr. **ret-mu-s* (ἐ-ρετ-μός); *pes-na* (*penna*) fr. **pet-na* (√*pet*, fly, v. a).

Quadra-ginta bes. *quatri-duo* is peculiar; *t* bef. sonant *r* has become *d*.

From origl. *tr* in Lat. there have arisen sometimes **thr*, *dhr*, *br*, through the aspirating force of the *r* (v. supr. Gk., also Zend), (on *b* as a representative of origl. *dh*, v. § 73, 2), e.g. *consobrinus* (cousin) for **-sosbrinus* (*s* bef. *b* is lost regularly, v. sup.), and this for **sosdhrinus*, **sosthrinus*, **sostrinus*, fr. **sostor-inu-s*, st. **sos-tor-*, usu. **sosor-*, *soror-* (sister); *salūbris* fr. **salus-bris*, and this for **salus-dhris*, **salus-thris*, **salus-tris*, **salut-tris* (*salus*, *salut-is*). Cf. Ebel, Zeitschr. xiv. 78; Kuhn, Zeitschr. xiv. 222, xv. 238. On the other hand, Cors. Krit. N. p. 186 sqq.

d. Partial assimilation of following to foregoing § 77. consonants. This takes place esp. in the case of *t*, which, after nasals and liquids, commonly changes into spir. *s*; the same tendency is seen after gutt. (after *c*),—the latter occurs also in Sk. (v. § 52, 2, n. 2); e.g. *man-sum* for **man-tu-m* (*man-eo*); in *Leu-cesie*—important on acct. of *eu*, v. § 36—(voc.; title of Iuppiter) for **leucetie*, fr. **Leucentie*, cf. *Leucetios*, *Loucetios*, for **leucent-ios*, **loucent-ios*, further fmm. fr. **leucent-*, *loucent-*, pres. part. act. fr. **leuc-o*, **louc-o*, f.f. *rauk-āmi*, √*luc*, origl. *ruk* (Corss. Krit. B. 471); *t* has become *s* after origl. *n*, which afterwards was lost, in the same way; *pul-su-s* for **pul-tu-s* (*pel-lo*, *pe-pul-i*), *spar-sus* for **spar(g)-tu-s* (*sparg-o*), etc.; but by their side occur *ten-tu-s* (and *ten-su-s*), *sepul-tu-s* (*sepel-io*), *tor-tu-s* for **tor(c)-tu-s*, (*torqu-eo*), etc.; **mac-simu-s* thus is for **mag-timu-s* (*mag-nus*; cf. *op-timu-s*); *fixus*, i.e. *fic-su-s*, for **fig-tu-s* (*figo*); *noxa*, i.e. **noc-sa*, for **noc-ta* (*noc-eo*), etc., bes. *ac-tu-s* (*ag-o*), *fic-tu-s* (√*fig* in *fi-n-g-o*), and many others with retained *t*.

Regularly *t* does not pass into *s* after *n*, when *nt* belongs to one and the same word-formative particle, e.g. *feru-nt*, *fere-nt-em*, etc. (yet cf. above-mentioned *Leucesios* for **Leucentios*).

Lapsus for **lap-tu-s*, **lab-tu-s*, is singular (cf. *lab-i*), bes. *scrip-tu-s* (*scrib-ere*), cf. Corss. Krit. B. 420 sqq. (Ebel, Zeitschr. xiv. 245 sqq. here assumes an inserted *s*: **lap-stus*, **man-stum*, to which *t* was assimild.)

Note.—Yet *mend-ax* belongs prob. to *ment-iri*, according to the system laid down by Schuchardt, *Vocalismus des vulgärlateins*, Lpz. 1866; cf. however on this point Aufrecht in *Zeitschr.* ix. 232; Corss. Krit. B. 117 sqq.

e. Change of *s* to *r* betw. vowels, or betw. vowels and sonant consonn., also after vowels in termination (in the lang. in question). The sonant consonn. here change the mute *s* into sonant *r*. The same process takes place, e.g. in Germ. also (*war*, *wären*, for *was*, *wäsen*, √*was*, cf. *ge-wēs-en*, etc.), and in Sk. So, e.g. in *gener-is* (genus) for old Lat. **genes-os*; *maiores* fr. **maioses*; *erat* fr. **esat*, √*es*, etc.;

§ 77. *ueter-nus* fr. **uetes-nus* (*uetus*, *ueter-is*); *car-men* fr. **cas-men*, cf. Old-Lat. *Cas-mena*, √*cas*; *diur-nus*, *ho-dier-nus*, from an otherwise lost st. **dios-*, **dies-*=origl. *divas* (in *dies*, *diei*, the final *s* of the root has been lost), etc.; *arbor* for earlier *arbo-*; *amor* fr. **amos*, **amo-se*, etc. In *fine* this *r* for *s* is caused through analogy of the other fms. (*arbor-is*, *amar-is*). Betw. vowels *s* has remained but rarely, e.g. *nasus*, cf. Sk. *nas*, Scl. *nosŭ*, etc., *miser*, *uasa*, *posui*; regularly *s* only remains instead of *ss*, e.g. *casus* for *cassus* fr. **cad-tu-s*, etc. (v. b).

f. Loss of consonn. betw. vowels. Here too we see a kind of assimiln., in that sonant consonn. become thereby similar to the surrounding vowels, and are swallowed up by them, so that only the attendant accent remains.

In the Romance langg. this process is very common (e.g. *ducatus*, It. *ducato*, Sp. *ducado*, Fr. *duché*). The commonest case is the loss of *y* and *v*, as *moneo*, *monēs*, fr. **moneyo*, **moneyis*, f.f. *mānayāmi*, *mānayasi*; *amasti* fr. **amaisti*, *amauisti*; *fluont*, *fluunt*, fr. *flouont*, etc. Exceptionally *s* has been lost betw. two vowels (Corss. Krit. Beitr. 464 sqq.), thus e.g. in *uēr* (spring) fr. **veser*, cf. Gk. *ēap* for **Feσap*, Lith. *vasarà* (summer), Sk. *vas-antá-s* (spring), O. Bulg. *ves-na*; *uīs*, *uim*, bes. *uires*, *uirium*, st. *uisi-*, *uiri-*; prob. through analogy fr. origl. **divas-* arose a fm. *diēs*, *diēi*, bes. *ho-dier-nus*, fr. **dives-no-s*; fr. origl. and Sk. *nábhas-*, *nūbēs*, *nūbi-s*; fr. origl. and Sk. *sadas-* (cf. Gk. *ēdos*), *sēdēs*, *sēdi-s*, and other like forms. Further, loss of origl. *bh*, Lat. *f*, *b*, has certainly occurred in *ama-ui* for **ama-fui*, etc.; in dat. pl. e.g. *equīs*, f.f. *akva-bhya(m)s* (v. § 73, 3). On the doubtful loss of *c* betw. vowels, cf. § 39, 2; § 77, a, sub fin.; on loss of *h*, cf. § 73, 1.

g. Evident insertion of conson. betw. concurrent consonn. The change fr. *m* to *mp*, for the accommodation of *m* to the follg. *s*, *t*, is well known; it occurs in the best MSS. (e.g. in Cod. Medic. Vergili), e.g. *hiem-p-s*, *sum-p-si*, *sum-p-tus*, etc. Bef. the *s*, *t*, *m* became an audible conclusion, i.e. changed to *mp*.

2. Dissimilation.

t, *d*, before follg. *t*, change into *s* (as in Zend, Gk., Scl.-Germ.),

e.g. *eques-ter*, *pedes-ter*, for **equet-ter*, **pedet-ter*, cf. *equit-is*, § 77. *pedit-is*; *es-t*, *es-tis*, for **ed-t*, **ed-tis*, cf. *ed-o*; *claus-trum* for **claud-trum*, cf. *claud-o*; st. *potēs-tāti-* (*potestas*) for **potens-tāti-* fr. **potent-tāti-*, st. *potent-* (*potens*) + sf. *-tāti-*, etc.

Likewise through the striving after dissimiln. *-āli-s* is interchanged with *-āri-s*; the latter is found in those cases where the word-st. to which this secondary sf. is added contains an *l*, e.g. *mor-tali-s*, but *uolg-ari-s*, *popul-ari-s*, *epul-ari-s*.

In the dislike of the immediate succession of two like sounds is found also the cause of the contraction of two like or similar consonn., which are separated by only one vowel, into one, through evanescence of the intervening vowel (cf. Gk. § 68, 2; a similar phenom. in M.H.G. has been mentioned by me in Kuhn's Zeitschr. x. 160); thus *consuētūdo* for **consuēti-tūdo* (*con-suētū-s*), st. *aestāti-* for **aestitāti-* (*aestu-s*), st. *nūtrīc-* for *nūtrī-trīc-* (*nutrī-re*), *stipendium* for **stipi-pondium* (*stip-s*, *stip-is*), *uenēficus* for **uenēni-ficus* (*uenēnu-m*), etc. (L. Meyer. Comp. Gr. i. 281).

INITIAL.

§ 78.

In Lat. more than in the other kindred langg., where loss of initial consonn. occurs in the main only sporadically, initial consonn. are exposed to evaporation: of two initial consonn. the former often falls away, yet even one single conson. is found to disappear bef. a follg. vowel (*c* bef. *u*).

Thus no Lat. word begins with *sn*, *sm*, *sr*; where these combinations origl. occurred initially, the *s* is lost, and only the second conson. remains, e.g. *nix*, *niuis*, fr. **snig-s*, **snigv-is* (v. supr. § 72, 1), cf. Zend √*çniš* (snow), O. Bulg. *sněg-ŭ* (snow), Lith. *snėg-ti* (snow, v.), *snėg-as* (snow, n.), Goth. *snaiv-s* (snow); *nurus* (daughter-in-law) fr. **snurus*, cf. O.H.G. *snur*, Sk. *snušā*, *me-mor* (mindful) fr. **sme-mor* (cf. *spo-pond-i*, *ste-ti* for **ste-sti*, etc.), and this fr. **sme-smor*, as Sk. and origl. √*smar* (bethink; on √*flu*=origl. *sru*, v. § 71, 3 n.).

Neither does initial *vr*, *vl*, occur in Lat., e.g. *laqueus* (noose), cf. Goth. *vruggō* (sling), **vriggan* (wring, wind); *lacer* (torn),

§ 78. cf. *ράκος* (rag), Aiol. *βράκος*, i.e. *Φράκος*, Sk. *√vraçk*, i.e. *vraçk* (tear); *radix* (root), cf. *ρίζα*, Lesb. *βρίσδα*, i.e. *Φρίζα*, **Φριδ-γα*, Goth. *vaúrts* (root), O.H.G. *wurza*, *wurzala*, f.f. of root therefore=*vrad*, etc.

Bef. *f*, *s* has disappeared in *fallere* (deceive) bes. *σφάλλειν*, *fungus* (id.) bes. *σφόγγος*, *funda* (sling) bes. *σφενδόνη*, *fides* (lyre) bes. *σφίδη*; on the conjectured loss of *s* bef. *p*, v. Corss. Krit. B. 457.

More singular, on the other hand, are cases like *teg-o* (cover) for **steg-o*, cf. *i-steg-a* for **in-steg-a* (cover), Gk. *στέγ-ω*, *στέγ-η*, bes. *τέγ-η*, Lith. *stogas* (roof), in Germ. likewise the *s* is lost, cf. *deck-en*, *dach*; *tundo* (thump), *√tud*, bes. Goth. *stauta*, *√stut*, but Sk. *√tud*; *taurus* (bull), *ταῦρος*, O. Bulg. *turū*, but Goth. *stiur*, Sk. *sthūra-s*; *cau-ere* (beware) bes. Goth. *us-skav-yan* (be wakeful), origl. *√skav*, etc.; bes. freq. initial *st*, *sc*. Whilst, inversely, of *sc* only the *s* remains in *sirpeus* (rush—), *sirpea*, *sirpiculus*, *-la*, (junket), *sirpare* (bind), bes. *scirpus* (withe), *scirpeus*, *scirpea*, etc., cf. O.H.G. *scilaf*, *sciluf*, N.H.G. *schilf*, and perh. in some others (Corss. Krit. B. 31 sqq.). Also in *lā-tum* for **tlātum*, cf. *√tol* (tollo), init. *t* is lost. *p* bef. *l* has clearly been lost in *lien* (milt) bes. Sk. *plihán-*, *plīhán*, *σπλήν*; perh. in *lanx*, *lanc-is* (dish), bes. *πλάξ*, *πλακ-ός* (flat-, plate), O.H.G. *flah*; whether *lae-tus* (glad) is for **plai-to-s*, and belongs to Sk. *√pri* (love, cheer), *lau* in *lau-ere*, *lauare* (wash), stands for **plav*, and here a causative fmn. of *√plu* is seen, may seem doubtful (*lau* belongs prob. to same root as *luo*, and not to root *plu*). Upon loss of *c* bef. *l*, which is not yet beyond doubt in my opinion, cf. Corss. Krit. B. p. 2 sqq., Krit. N. p. 35 sqq. On the whole there is still considerable doubt and uncertainty in this branch, because we are confined to a few examples.

It is well known that it was not till historic times that men simplified *gn* into *n*, as e.g. in *nō-sco*, *nō-tus*, *nō-men*, fr. older *gnō-sco*, cf. *co-gnō-sco*, *gnō-tus*, *gnō-men*, cf. *co-gnō-men*; *narrare* fr. earlier *gnā-rigare*, from same *gnā-rus*, where the initial conson. is fully preserved, fr. same root as *gnō-sco*, origl. *gna* fr. *gan* (nosse: cf. *γι-γνώ-σκω*, Sk. *ghā*, Germ. *kan* and *kna*, etc.):

nā-tus for earlier *gnā-tus*, preserved in *co-gnā-tus*, √*gna* fr. *gan* § 78. (*gignere*), cf. *gen-us*. The same sound-law, by which an initial gutt. + *n* becomes *n*, occurs also in Eng.: the old initials *gn*, *kn*, are still noticeably written in Eng. of this day, in words like *gnat*, *gnaw*, *knowledge*, etc., but *g*, *k*, are no longer heard. Cf. loss of gutt. bef. nasals medially (§ 77, 1, a).

Similarly at a later period of the lang. *st* was lost before *l* (Corss. Krit. B. 461, cf. 149) in *st.* *stleiti-*, *sleiti-*, *leiti-*, *liti-* (*lis*, *suit*), bes. which we place O.H.G. *strīt*, N.H.G. *streit* (in *st.*-terminations, it is true, this does not occur in Lat. words), in Inscr. *slis* is seen, *stl* thus becomes *l* through *sl*: *stlātu-s*, *lātu-s* (broad), which is derived from origl. √*star* (*ster-no*, *strā-tus*, *σπορ-έννυμι*, etc.)—thus the origl. word means “spread”; *stlocu-s*, *locu-s* (place), which we refer to Sk. √*sthal*, further fmn. of *stha*, origl. √*sta* (stand), and others whose derivation is not quite clear.

As *suāuis* for **suaduis* (§ 77, 1, a), so *uiginti* for **duiginti*, cf. *duo*, Sk. *dva*; the dropping away of the *d* occurs nevertheless in Gk. too (*εἴκοσι*), in Kelt. (Erse *fiche*, *fichet*, i.e. *uiginti*), in Aryan (Sk. *vīçāti*, Zend *vīçaiti*), and thus dates from the earliest times. If **duiginti* had stood its ground to a later time, **biginti* would have arisen, as *bis* fr. **duis*, *bellum* fr. *duellum*, *bonus* fr. *duonus* (*duonoro*; Epit. Scip. Barb. f.): here through mutual influence *b* has arisen, as an assimiln. of *d* and *v*, since *d* became assimilated to *v* as regards quality (labial quality), and *v* became like *d* as regards quantity, i.e. became a momentary sonant conson.

Bef. *y*, *d* is lost in *Iouis*, etc., for **Dyouis*, cf. Old Lat. *Dioue* (*Ioui*), and Osk. *Diūvei* (Momms. Unterital. Diall. p. 255), Sk. *dyāu-s* (heaven), Gk. *Ζεύς* = **dyev-s*, etc., √*dyu* (= *div*, shine). The same loss is seen in *Iuno* for **Diou-no*, fmd. fr. same root (Corss. Krit. N. p. 142).

Even the favourite initial sound *qu* appears simplified to *u* in *uermis* (cf. Germ. *wurm*) for **quermis*, f.f. *karmi-s*, Sk. *krmi-s*, Lith. *kirm-elė* (worm; but cf. G. Curt. Gr. Et.² p. 485 sqq.);

§ 78. so too *v* appears to stand for *gv* in $\sqrt{uen}$ (uenire) = **guen* for **ge-n* (§ 77, 1), further fm. fr. $\sqrt{ga}$ (go), by means of *n*. At a very late period arose the loss of init. *c* bef. *u* in several fms. of interrog. pronn., e.g. in *u-bi* for **cu-bi* or **quo-bi*, kept in compd. *ali-cu-bi*, cf. Umbr. *pufe* (*p* = Lat. *c*); *u-nde* for **cu-nde*, kept in *ali-cu-nde*; *u-ter* for **cu-ter* (compar. fm. st. *cu* = *quo*-), cf. Osk. *piturus-pid* (i.e. utrique) with *p* = Lat. *c*, Gk. *πότερος*, earlier Iôn. *κότερος*, Sk. and f.f. *ka-tarás*.

§ 79.

FINAL.

The Lat. lang., as we have it, generally permits only single consonn. at the end of a word, but also groups of two and even three consonn., viz. nasal or liq. + mutes; mutes, *r*, *l*, *m*, *n* + *s*; *s* + *t*, e.g. *ferunt*, *hunc*, *uolt*, *fert*; *scrobs*, *ars* for **art-s*, and so in similar cases (but *uir* for **uirs*, *quatuor* for **quatuors*, fr. **uiro-s*, *quatuor-es*), *fers* (fr. *feris*), *puls* for **pult-s* (but *uis* for **uil-s*, f.f. *varsi*, "thou wilt," *sal* for **sal-s*, *s* lost), *hiem(p)s*, *ferens* for **ferent-s*, and so in such cases (but *nouōs*, *nouās*, for **nouons*, **nouans*); the combinations *rs*, *ls*, *ns*, were therefore tolerated in these cases where they stand for *rts*, *lts*, *nts*, i.e. when *s* alone = *ss*; *est*; nasal or liq. + mute + *s*, e.g. *hiemps*, *urbs*, *arx*, i.e. *arc-s*, *falx*, i.e. **falcs*; indeed our present final consonn., for by far the greatest part, did not become final until vowels had evaporated, and were not compressed until vowels had been lost. Yet in no case was a doubled conson. tolerated, in *fine*, e.g. *os*, *fel*, not **oss*, **fell*, cf. *oss-is*, *fell-is*; moreover, the combination of two mom. consonn. was not admissible, e.g. *lac* for **lact*, cf. *lact-is*, and *rd*, *cor* for **cord*, cf. *cord-is*; where these combinations should have been final, the latter conson. was discarded.

It was not until Lat. became a fixed written language in classical times that the termn. assumed a more definite existence. The earlier national archaic lang. shows in spelling a great indifference towards final consonn. In fact, the consonantal termns. *s*, *m*, *t*, important as they are for word-formn., were sometimes expressed in writing, sometimes omitted, which

we find to be the case in Umbr. also. This fact proves that in § 79. earlier times (and later also in the unformed branch of the Roman) the final consonn. were heard with difficulty, perh. as in many Romance langg. (e.g. *d* in Span., *t*, *nt*, etc., in Fr.). The correct lang. here introduced a fixed rule, after the pattern of the Gk.; the conson. was now either always written (the rule), or regularly discarded (the exception). A few exx. of the unsettled treatment of the termn. have remained in spelling even as late as the classical period.

We will treat separately of the final consonants, origl. *s*, *m*, *t*, since they are most important for grammar.

s is omitted in writing in the oldest inserr. in cases like *Tetio*, *Furio*, n. sg. for *Tetio-s*, *Furio-s*; *Corneli*, *Clodi*, etc., for *Cornelis*, *Clodis* = *Cornelios*, *Clodios* (Ritschl, Progr. of 12 March, 1861). Yet in the earliest lang. the loss of final *s* is mainly confined to n. sg. It is well known that even at a later time the poets were wont to neglect final *s* bef. initial consonn., and that the weak pronunciation of final *s* is otherwise attested. The written lang. in most cases decided in favour of the retention of the *s*. Nevertheless the wavering betw. retention and loss of final *s* in 2 p. sg. med. is obvious, e.g. *amabaris*, *amabare*; further in *magi-s* and *mage*, *poti-s*, *pote*, where, at the same time *i* was dulled to *e*.

The loss of *s* was regularly allowed, e.g. in n. pl. masc. of *o*-st., which in the older lang. still shows the *s* here and there, e.g. *heis*, *magistreis*, etc., bes. *hei*, *magistrei*; a later fm., as *hi*, *magistri*, was the one afterwards exclusively fixed upon; the same process takes place in gen. sg. fem. of *a*-stems, e.g. *suaes*, *dimidiaes*, later *ae* only is found, etc.

Through evaporation of the vowel of the last syll. *s* after *r* is lost, as in *puer*, *uir*, *quatuor*, *acer* (with auxil. vowel bef. *r*), for **pueros*, **uiros*, **quatuores* (cf. *τέσσαρες*), *acris*; more rarely this occurs after *l*, *wigil* for **wigilis*, **wigils*.

m, only faintly audible in *fine*, is likewise often unexpressed in earlier monuments of the lang., e.g. *oino*, *uiro*, *duonoro* (Epit.

§ 79. Scip.), bes. *pocolom*, *sacrom*, etc. In popular diall. this faint pronunciation of final *s* remains, as later inscrr. prove; the written lang., however, firmly maintained the letter in spelling. One effect of the weak pronunciation of final *m* must here be noticed, viz. that in verse it was not considered a conson. bef. vowels.

Also final *n* seems to have become only faintly heard, cf. *alioqui* bes. *alioquin* and the like (cf. however, Corss. Krit. B. 272).

Origl. final *t* had in earlier Lat. a weak sound, like a scarcely audible *d*; accordingly it is freq. omitted in writing, e.g. *patre* (Epit. Scip. Barb.) bes. *Gnainuod*, etc. In classical Lat. *d* for origl. *t* was sometimes retained in writing, thus e.g. in ntr. pronl. decl. e.g. *quo-d*=origl. *ka-t*, *id*=origl. *i-t*, etc. (the spelling in *t* is rarer in these cases), sometimes completely discarded, as in abl. sg., where *d*=origl. *t* has been retained in archaic Lat. only, but was not written in class. Lat., e.g. *equō-d*, *equō*=origl. *akvā-t*, Sk. *āçvā-t*; in termn. *-to* of imper. *t* has likewise been lost, e.g. origl. *as-tāt*, Osk. *es-tūd*, Lat. *esto* fr. **es-tōd*. Final *t* in Lat. is not origl., but has become final after vowel-loss, and thus remains in class. Lat., whilst archaic Lat. does not show this *t*, e.g. *īt*, f.f. **ei-ti*, origl. *ai-ti*; *uehit(i)*, *uehunt(i)*, **uehonti*, origl. *vaghati*, *vaghanti*, etc., but archaically *dede*=*dedet*, *dedit*, and even indeed *dedro*=*dedront*, *dederunt*.

Thus *nt* also in earlier times and colloquial lang. was barely audible in pronunciation; wherein lies the cause of the double fms. of the later fixed spelling of 3 p. pl. pf., as *fecerunt* (with entire termn. retained) and *fecere* (with lost *nt* and weakened vowel).

The clipping of final consonn. was even more prevalent in Umbr. than in Old Lat.; whilst the Osk. does not show this phenomenon, since there was a generally-received Samnite orthography before the time from which our earliest inscrr. date, and the popular variations in pronunciation were no longer followed in spelling.

LINGUISTIC PUBLICATIONS

OF

TRÜBNER & CO.,

57 AND 59, LUDGATE HILL, LONDON, E.C.

Ahlwardt.—THE DIVÁNS OF THE SIX ANCIENT ARABIC POETS, Ennábíga, 'Antara, Tarafa, Zuhair, 'Algama, and Imru'ol-gais; chiefly according to the MSS. of Paris, Gotha, and Leyden, and the collection of their Fragments: with a complete list of the various readings of the Text. Edited by W. AHLWARDT, Professor of Oriental Languages at the University of Göttingen. 8vo. pp. xxx. 340, sewed. 1870. 12s.

Aitareya Brahmanam of the Rig Veda. 2 vols. See under HAUG.

Alabaster.—THE WHEEL OF THE LAW: Buddhism illustrated from Siamese Sources by the Modern Buddhist, a Life of Buddha, and an account of the Phra Bat. By HENRY ALABASTER, Esq., Interpreter of Her Majesty's Consulate-General in Siam; Member of the Royal Asiatic Society. Demy 8vo. pp. lviii. and 324. 1871. 14s.

Alcock.—A PRACTICAL GRAMMAR of the JAPANESE LANGUAGE. By Sir RUTHERFORD ALCOCK, Resident British Minister at Jeddo. 4to. pp. 61 sewed. 18s.

Alcock.—FAMILIAR DIALOGUES in JAPANESE, with English and French Translations, for the use of Students. By Sir RUTHERFORD ALCOCK. 8vo. pp. viii. and 40, sewed. Paris and London, 1863. 5s.

Alger.—THE POETRY OF THE ORIENT. By WILLIAM ROUNSEVILLE ALGER, 8vo. cloth, pp. xii. and 337. 9s.

Alif Lailat wa Lailat.—THE ARABIAN NIGHTS. 4 vols. 4to. pp. 495, 493, 442, 434. Cairo, A.H. 1279 (1862). £3 3s.

This celebrated Edition of the Arabian Nights is now, for the first time, offered at a price which makes it accessible to Scholars of limited means.

Andrews.—A DICTIONARY OF THE HAWAIIAN LANGUAGE, to which is appended an English-Hawaiian Vocabulary, and a Chronological Table of Remarkable Events. By LORRIN ANDREWS. 8vo. pp. 560, cloth. £1 11s. 6d.

Anthropological Institute of Great Britain and Ireland (The Journal of the). Sir JOHN LUBBOCK, Bart., M.P., F.R.S., President. Published Quarterly.

Vol. I., No. 1. January–July, 1871. 8vo. pp. 120–clix, sewed. Illustrated with 11 full page Plates, and numerous Woodcuts; and accompanied by several folding plates of Tables, etc. 7s.

Vol. I., No. 2. October, 1871. 8vo. pp. 121–264, sewed. 4s.

Vol. I., No. 3. January, 1872. 8vo. pp. 265–427, sewed. Illustrated with 16 full-page Plates. 4s.

Vol. II., No. 1. April, 1872. 8vo. pp. 136, sewed. Illustrated with eight two-page plates and two four-page plates. 4s.

Vol. II., No. 2. July and October, 1872. 8vo. pp. 137–312. Illustrated with nine plates and a map. 6s.

Vol. II., No. 3. January, 1873. 8vo. pp. 143. With 4 plates. 4s.

Vol. III., No. 1. April, 1873. 8vo. pp. 136. With 8 plates and two maps. 4s.

Arabic and Persian Books (A Catalogue of). Printed in the East. Constantly for sale by Trübner and Co., 57 and 59, Ludgate Hill, London. 16mo. pp. 46, sewed.

500

1

June 24, 1874.

Arden.—A PROGRESSIVE GRAMMAR OF THE TELUGU LANGUAGE, with Copious Examples and Exercises. In Three Parts. Part I. Introduction.—On the Alphabet and Orthography.—Outline Grammar, and Model Sentences. Part II. A Complete Grammar of the Colloquial Dialect. Part III. On the Grammatical Dialect used in Books. By A. H. ARDEN, M.A., Missionary of the C. M. S. Masulipatam. 8vo. sewed, pp. xiv. and 380. 14s.

Asher.—ON THE STUDY OF MODERN LANGUAGES IN GENERAL, and of the English Language in particular. An Essay. By DAVID ASHER, Ph.D. 12mo. pp. viii. and 80, cloth. 2s.

Asiatic Society.—JOURNAL OF THE ROYAL ASIATIC SOCIETY OF GREAT BRITAIN AND IRELAND, from the Commencement to 1863. First Series, complete in 20 Vols. 8vo., with many Plates. Price £10; or, in Single Numbers, as follows:—Nos. 1 to 14, 6s. each; No. 15, 2 Parts, 4s. each; No. 16, 2 Parts, 4s. each; No. 17, 2 Parts, 4s. each; No. 18, 6s. These 18 Numbers form Vols. I. to IX.—Vol. X., Part 1, op.; Part 2, 5s.; Part 3, 5s.—Vol. XI., Part 1, 6s.; Part 2 not published.—Vol. XII., 2 Parts, 6s. each.—Vol. XIII., 2 Parts, 6s. each.—Vol. XIV., Part 1, 5s.; Part 2 not published.—Vol. XV., Part 1, 6s.; Part 2, with Maps, 10s.—Vol. XVI., 2 Parts, 6s. each.—Vol. XVII., 2 Parts, 6s. each.—Vol. XVIII., 2 Parts, 6s. each.—Vol. XIX., Parts 1 to 4, 16s.—Vol. XX., 3 Parts, 4s. each.

Asiatic Society.—JOURNAL OF THE ROYAL ASIATIC SOCIETY OF GREAT BRITAIN AND IRELAND. *New Series.* Vol. I. In Two Parts. pp. iv. and 490, sewed. 16s.

CONTENTS.—I. Vajra-chhedikā, the “Kin Kong King,” or Diamond Sūtra. Translated from the Chinese by the Rev. S. Beal, Chaplain, R.N.—II. The Pāramitā-hridaya Sūtra, or, in Chinese, “Mo-ho-pō-ye-po-lo-mih-to-sin-king,” i.e. “The Great Pāramitā Heart Sūtra.” Translated from the Chinese by the Rev. S. Beal, Chaplain, R.N.—III. On the Preservation of National Literature in the East. By Colonel F. J. Goldsmid.—IV. On the Agricultural, Commercial, Financial, and Military Statistics of Ceylon. By E. R. Power, Esq.—V. Contributions to a Knowledge of the Vedic Theogony and Mythology. By J. Muir, D.C.L., LL.D.—VI. A Tabular List of Original Works and Translations, published by the late Dutch Government of Ceylon at their Printing Press at Colombo. Compiled by Mr. Mat. P. J. Ondaatje, of Colombo.—VII. Assyrian and Hebrew Chronology compared, with a view of showing the extent to which the Hebrew Chronology of Ussher must be modified, in conformity with the Assyrian Canon. By J. W. Bosanquet, Esq.—VIII. On the existing Dictionaries of the Malay Language. By Dr. H. N. van der Tuuk.—IX. Bilingual Readings: Cuneiform and Phœnician. Notes on some Tablets in the British Museum, containing Bilingual Legends (Assyrian and Phœnician). By Major-General Sir H. Rawlinson, K.C.B., Director R.A.S.—X. Translations of Three Copper-plate Inscriptions of the Fourth Century A.D., and Notices of the Chālukya and Gurjara Dynasties. By Professor J. Dowson, Staff College, Sandhurst.—XI. Yama and the Doctrine of a Future Life, according to the Rig-Yajur-, and Atharva-Vedas. By J. Muir, Esq., D.C.L., LL.D.—XII. On the Jyotisha Observation of the Place of the Colures, and the Date derivable from it. By William D. Whitney, Esq., Professor of Sanskrit in Yale College, New Haven, U.S.—Note on the preceding Article. By Sir Edward Colebrooke, Bart., M.P., President R.A.S.—XIII. Progress of the Vedic Religion towards Abstract Conceptions of the Deity. By J. Muir, Esq., D.C.L., LL.D.—XIV. Brief Notes on the Age and Authenticity of the Work of Aryabhata, Varāhamihira, Brahmagupta, Bhāttotpala, and Bhāskarāchārya. By Dr. Bhāu Dāji, Honorary Member R.A.S.—XV. Outlines of a Grammar of the Malayasy Language. By H. N. Van der Tuuk.—XVI. On the Identity of Xandrames and Krananda. By Edward Thomas, Esq.

Vol. II. In Two Parts. pp. 522, sewed. 16s.

CONTENTS.—I. Contributions to a Knowledge of Vedic Theogony and Mythology. No. 2. By J. Muir, Esq.—II. Miscellaneous Hymns from the Rig- and Atharva-Vedas. By J. Muir, Esq.—III. Five hundred questions on the Social Condition of the Natives of Bengal. By the Rev. J. Long.—IV. Short account of the Malay Manuscripts belonging to the Royal Asiatic Society. By Dr. H. N. van der Tuuk.—V. Translation of the Amitābha Sūtra from the Chinese. By the Rev. S. Beal, Chaplain Royal Navy.—VI. The initial coinage of Bengal. By Edward Thomas, Esq.—VII. Specimens of an Assyrian Dictionary. By Edwin Norris, Esq.—VIII. On the Relations of the Priests to the other classes of Indian Society in the Vedic age. By J. Muir, Esq.—IX. On the Interpretation of the Veda. By the same.—X. An attempt to Translate from the Chinese a work known as the Confessional Services of the great compassionate Kwan Yin, possessing 1000 hands and 1000 eyes. By the Rev. S. Beal, Chaplain Royal Navy.—XI. The Hymns of the Gaupāyanas and the Legend of King Asamāti. By Professor Max Müller, M.A., Honorary Member Royal Asiatic Society.—XII. Specimen Chapters of an Assyrian Grammar. By the Rev. E. Hincks, D.D., Honorary Member Royal Asiatic Society.

Vol. III. In Two Parts. pp. 516, sewed. With Photograph. 22s.

CONTENTS.—I. Contributions towards a Glossary of the Assyrian Language. By H. F. Talbot.—II. Remarks on the Indo-Chinese Alphabets. By Dr. A. Bastian.—III. The poetry of Mohamed Rabadan, Arragonese. By the Hon. H. E. J. Stanley.—IV. Catalogue of the Oriental Manuscripts in the Library of King's College, Cambridge. By Edward Henry Palmer, B.A., Scholar of St. John's College, Cambridge; Member of the Royal Asiatic Society; Membre de la Société Asiatique de Paris.—V. Description of the Amravati Tope in Guntur. By J. Fergusson,

Esq., F.R.S.—VI. Remarks on Prof. Brockhaus' edition of the *Kathāsarit-sāgara*, Lambaka IX. XVIII. By Dr. H. Kern, Professor of Sanskrit in the University of Leyden.—VII. The source of Colebrooke's Essay "On the Duties of a Faithful Hindu Widow." By Fitzedward Hall, Esq., M.A., D.C.L. Oxon. Supplement: Further detail of proofs that Colebrooke's Essay, "On the Duties of a Faithful Hindu Widow," was not indebted to the *Vivādabhangārṇava*. By Fitzedward Hall, Esq.—VIII. The Sixth Hymn of the First Book of the *Rig Veda*. By Professor Max Müller, M.A., Hon. M.R.A.S.—IX. Sassanian Inscriptions. By E. Thomas, Esq.—X. Account of an Embassy from Morocco to Spain in 1690 and 1691. By the Hon. H. E. J. Stanley.—XI. The Poetry of Mohamed Rabadan, of Arragon. By the Hon. H. E. J. Stanley.—XII. Materials for the History of India for the Six Hundred Years of Mohammadan rule, previous to the Foundation of the British Indian Empire. By Major W. Nassau Lees, LL.D., Ph.D.—XIII. A Few Words concerning the Hill people inhabiting the Forests of the Cochin State. By Captain G. E. Fryer, Madras Staff Corps, M.R.A.S.—XIV. Notes on the Bhojpuri Dialect of Hindi, spoken in Western Behar. By John Beames, Esq., B.C.S., Magistrate of Chumpanun.

Vol. IV. In Two Parts. pp. 521, sewed. 16s.

CONTENTS.—I. Contribution towards a Glossary of the Assyrian Language. By H. F. Talbot. Part II.—II. On Indian Chronology. By J. Fergusson, Esq., F.R.S.—III. The Poetry of Mohamed Rabadan of Arragon. By the Hon. H. E. J. Stanley.—IV. On the Magar Language of Nepal. By John Beames, Esq., B.C.S.—V. Contributions to the Knowledge of Parsee Literature. By Edward Sachau, Ph.D.—VI. Illustrations of the Lamaist System in Tibet, drawn from Chinese Sources. By Wm. Frederick Meyers, Esq., of H.B.M. Consular Service, China.—VII. *Khuddaka Pāṭha*, a Pāli Text, with a Translation and Notes. By R. C. Childers, late of the Ceylon Civil Service.—VIII. An Endeavour to elucidate Rashiduddin's Geographical Notices of India. By Col. H. Yule, C.B.—IX. Sassanian Inscriptions explained by the Pahlavi of the Pārsis. By E. W. West, Esq.—X. Some Account of the Senbyū Pagoda at Mengün, near the Burmese Capital, in a Memorandum by Capt. E. H. Sladan, Political Agent at Mandalé; with Remarks on the Subject by Col. Henry Yule, C.B.—XI. The *Brhat-Saṃhitā*; or, Complete System of Natural Astrology of Varāha-mihira. Translated from Sanskrit into English by Dr. H. Kern.—XII. The Mohammedan Law of Evidence, and its influence on the Administration of Justice in India. By N. B. E. Baillie, Esq.—XIII. The Mohammedan Law of Evidence in connection with the Administration of Justice to Foreigners. By N. B. E. Baillie, Esq.—XIV. A Translation of a Bactrian Pāli Inscription. By Prof. J. Dowson.—XV. Indo-Parthian Coins. By E. Thomas, Esq.

Vol. V. In Two Parts. pp. 463, sewed. 18s. 6d. With 10 full-page and folding Plates.

CONTENTS.—I. Two Jātakas. The original Pāli Text, with an English Translation. By V. Fausböll.—II. On an Ancient Buddhist Inscription at Keu-yung kwan, in North China. By A. Wylie.—III. The *Brhat Saṃhitā*; or, Complete System of Natural Astrology of Varāha-mihira Translated from Sanskrit into English by Dr. H. Kern.—IV. The Pongol Festival in Southern India. By Charles E. Gover.—V. The Poetry of Mohamed Rabadan, of Arragon. By the Right Hon. Lord Stanley of Alderley.—VI. Essay on the Creed and Customs of the Jangams. By Charles P. Brown.—VII. On Malabar, Coromandel, Quilon, etc. By C. P. Brown.—VIII. On the Treatment of the Nexus in the Neo-Aryan Languages of India. By John Beames, B.C.S.—IX. Some Remarks on the Great Tope at Sānchi. By the Rev. S. Beal.—X. Ancient Inscriptions from Mathura. Translated by Professor J. Dowson.—Note to the Mathura Inscriptions. By Major-General A. Cunningham.—XI. Specimen of a Translation of the *Adi Granth*. By Dr. Ernest Trumpp.—XII. Notes on Dhammapada, with Special Reference to the Question of Nirvāna. By R. C. Childers, late of the Ceylon Civil Service.—XIII. The *Brhat-Saṃhitā*; or, Complete System of Natural Astrology of Varāha-mihira. Translated from Sanskrit into English by Dr. H. Kern.—XIV. On the Origin of the Buddhist Arthakathās. By the Mudliar L. Comrilla Vijasinha, Government Interpreter to the Ratnapura Court, Ceylon. With an Introduction by R. C. Childers, late of the Ceylon Civil Service.—XV. The Poetry of Mohamed Rabadan, of Arragon. By the Right Hon. Lord Stanley of Alderley.—XVI. Proverbia Communia Syriaca. By Captain R. F. Burton.—XVII. Notes on an Ancient Indian Vase, with an Account of the Engraving thereupon. By Charles Horne, M.R.A.S., late of the Bengal Civil Service.—XVIII. The Bhar Tribe. By the Rev. M. A. Sherring, LL.D., Benares. Communicated by C. Horne, M.R.A.S., late B.C.S.—XIX. Of *Jihad* in Mohammedan Law, and its application to British India. By N. B. E. Baillie.—XX. Comments on Recent Pehlvi Decipherments. With an Incidental Sketch of the Derivation of Aryan Alphabets. And Contributions to the Early History and Geography of Tabaristān. Illustrated by Coins. By E. Thomas, F.R.S.

Vol. VI., Part I, pp. 212, sewed, with two plates and a map. 8s.

CONTENTS.—The Ishmaelites, and the Arabic Tribes who Conquered their Country. By A. Sprenger.—A Brief Account of Four Arabic Works on the History and Geography of Arabia. By Captain S. B. Miles.—On the Methods of Disposing of the Dead at Llassa, Thibet, etc. By Charles Horne, late B.C.S. The *Brhat-Saṃhitā*; or, Complete System of Natural Astrology of Varāha-mihira, Translated from Sanskrit into English by Dr. H. Kern.—Notes on Hwen Thsang's Account of the Principalities of Tokhāristān, in which some Previous Geographical Identifications are Reconsidered. By Colonel Yule, C.B.—The Campaign of Ælius Gallus in Arabia. By A. Sprenger.—An Account of Jerusalem, Translated for the late Sir H. M. Elliott from the Persian Text of Nāsir ibn Khusrū's *Safanāmāh* by the late Major A. R. Fuller.—The Poetry of Mohamed Rabadan, of Arragon. By the Right Hon. Lord Stanley of Alderley.

Vol. VI., Part II, pp. 213 to 400 and lxxxiv, sewed. Illustrated with a Map, Plates, and Woodcuts. 8s.

CONTENTS.—On Hiouen-Thsang's Journey from Patna to Ballabhi. By James Fergusson, D.C.L., F.R.S.—Northern Buddhism. [Note from Colonel H. Yule, addressed to the Secretary.]—Hwen Thsang's Account of the Principalities of Tokhāristān, etc. By Colonel H. Yule, C.B.—The *Brhat-Saṃhitā*; or, Complete System of Natural Astrology of Varāha-mihira. Translated

from Sanskrit into English by Dr. H. Kern.—The Initial Coinage of Bengal, under the Early Muhammadan Conquerors. Part II. Embracing the preliminary period between A.H. 614-634 (A.D. 1217-1236-7). By Edward Thomas, F.R.S.—The Legend of Dipaṅkara Buddha. Translated from the Chinese (and intended to illustrate Plates xxix. and L., 'Tree and Serpent Worship'). By S. Beal.—Note on Art. IX., *antè* pp. 213-274, on Hiouen-Tsang's Journey from Patna to Ballabhi. By James Fergusson, D.C.L., F.R.S.

Asiatic Society.—TRANSACTIONS OF THE ROYAL ASIATIC SOCIETY OF GREAT BRITAIN AND IRELAND. Complete in 3 vols. 4to., 80 Plates of Facsimiles, etc., cloth. London, 1827 to 1835. Published at £9 5s.; reduced to £3 3s.

The above contains contributions by Professor Wilson, G. C. Haughton, Davis, Morrison, Colebrooke, Humboldt, Dorn, Grotefend, and other eminent Oriental scholars.

Aston.—A SHORT GRAMMAR OF THE JAPANESE SPOKEN LANGUAGE. By W. G. ASTON, M.A., Interpreter and Translator, H. B. M.'s Legation, Yedo, Japan. Third edition. 12mo. cloth, pp. ii. and 92. 12s.

Atharva Veda Prāṭīśākhya.—See under WHITNEY.

Auctores Sanscriti. Edited for the Sanskrit Text Society, under the supervision of THEODOR GOLDSTÜCKER. Vol. I., containing the Jaiminiya-Nyāya-Mālā-Vistara. Parts I. to V., pp. 1 to 400, large 4to. sewed. 10s. each part.

Axon.—THE LITERATURE OF THE LANCASHIRE DIALECT. A Bibliographical Essay. By WILLIAM E. A. AXON, F.R.S.L. Fcap. 8vo. sewed. 1870. 1s.

Baba.—AN ELEMENTARY GRAMMAR OF THE JAPANESE LANGUAGE, with Easy Progressive Exercises. By TATUI BABA. Crown 8vo. cloth, pp. xii. and 92. 5s.

Bachmaier.—PASIGRAPHICAL DICTIONARY AND GRAMMAR. By ANTON BACHMAIER, President of the Central Pasigraphical Society at Munich. 18mo. cloth, pp. viii.; 26; 160. 1870. 3s. 6d.

Bachmaier.—PASIGRAPHISCHES WÖRTERBUCH ZUM GEBRAUCHE FÜR DIE DEUTSCHE SPRACHE. Verfasst von ANTON BACHMAIER, Vorsitzendem des Central-Vereins für Pasigraphie in München. 18mo. cloth, pp. viii.; 32; 128; 120. 1870. 2s. 6d.

Bachmaier.—DICTIONNAIRE PASIGRAPHIQUE, PRÉCÉDÉ DE LA GRAMMAIRE. Rédigé par ANTOINE BACHMAIER, Président de la Société Centrale de Pasigraphie à Munich. 18mo. cloth, pp. vi. 26; 168; 150. 1870. 2s. 6d.

Bālāvatāro (A Translation of the). A Native Grammar of the Pali Language. See under LEE.

Ballad Society's Publications.—Subscriptions—Small paper, one guinea, and large paper, three guineas, per annum.

1868.

1. BALLADS AND POEMS FROM MANUSCRIPTS. Vol. I. Part I. On the Condition of England in the Reigns of Henry VIII. and Edward VI. (including the state of the Clergy, Monks, and Friars), contains (besides a long Introduction) the following poems, etc.: Now a Dayes, ab. 1520 A.D.; Vox Populi Vox Dei, A.D. 1547-8; The Ruyn' of a Ream'; The Image of Ypocresye, A.D. 1533; Against the Blaspheming English Lutherans and the Poisonous Dragon Luther; The Spoiling of the Abbeyes; The Overthrowe of the Abbeyes, a Tale of Robin Hoode; De Monasteriis Dirutis. Edited by F. J. FURNIVALL, M.A. 8vo.
2. BALLADS FROM MANUSCRIPTS. Vol. II. Part I. The Poore Mans Pittance. By RICHARD WILLIAMS. Contayning three severall subjects:—(1.) The firste, the fall and complaynte of Anthonie Babington, whoe, with others, weare executed for highe treason in the feildes nere lyncolns Inne, in the yeare of our lorde—1586. (2.) The seconde contaynes the life and Deathe of Roberte, lorde Deverox, Earle of Essex: whoe was beheaded in the towre of london on ash-wensdaye mornynge, Anno—1601. (3.) The laste, Intituled "acclamatio patrie," contayninge the horrib[l]e treason that weare pretended agaynste your Maiestie, to be donne on the parliament howse

The seconde [third] yeare of your Maiestis Raygne [1605]. Edited by F. J. FURNIVALL, M.A. 8vo. (*The Introductions, by Professor W. R. Morfill, M.A., of Oriel Coll., Oxford, and the Index, will be issued shortly.*)

1869.

3. THE ROXBURGHE BALLADS. Part I. With short Notes by W. CHAPPELL, Esq., F.S.A., author of "Popular Music of the Olden Time," etc., etc., and with copies of the Original Woodcuts, drawn by Mr. RUDOLPH BLIND and Mr. W. H. HOOPER, and engraved by Mr. J. H. RIMBAULT and Mr. HOOPER. 8vo.

1870.

4. THE ROXBURGHE BALLADS. Vol. I. Part II. With short Notes by W. CHAPPELL, Esq., F.S.A., and with copies of the Original Woodcuts, drawn by Mr. RUDOLPH BLIND and Mr. W. H. HOOPER, and engraved by Mr. J. H. RIMBAULT and Mr. HOOPER. 8vo.

1871.

5. THE ROXBURGHE BALLADS. Vol. I. Part III. With an Introduction and short Notes by W. CHAPPELL, Esq., F.S.A., Author of "Popular Music of the Olden Times," etc., etc., and with Copies of the Original Woodcuts drawn by Mr. RUDOLPH BLIND and Mr. W. H. HOOPER, and engraved by Mr. J. H. RIMBAULT and Mr. HOOPER. 8vo.

6. CAPTAIN COX, HIS BALLADS AND BOOKS; or, ROBERT LANEHAM'S Letter: Whearin part of the entertainment untoo the Queenz Majesty at Killingworth Castl, in Warwik Sheer in this Soomerz Progress, 1575, is signified; from a freend Officer attendant in the Court, unto hiz freend, a Citizen and Merchant of London. Re-edited, with accounts of all Captain Cox's accessible Books, and a comparison of them with those in the COMPLAYNT OF SCOTLAND, 1548-9 A.D. By F. J. FURNIVALL, M.A. 8vo.

1872.

7. BALLADS FROM MANUSCRIPTS. Vol. I. Part II. Ballads on Wolsey, Anne Boleyn, Somerset, and Lady Jane Grey; with Wynkyn de Worde's Treatise of a Galaunt (A.B. 1520 A.D.). Edited by FREDERICK J. FURNIVALL, M.A. With Forewords to the Volume, Notes, and an Index. 8vo.

8. THE ROXBURGHE BALLADS. Vol. II. Part I.

1873.

9. THE ROXBURGHE BALLADS. Vol. II. Part II.

Ballantyne.—ELEMENTS OF HINDÍ AND BRAJ BHÁKÁ GRAMMAR. By the late JAMES R. BALLANTYNE, LL.D. Second edition, revised and corrected Crown 8vo., pp. 44, cloth. 5s.

Ballantyne.—FIRST LESSONS IN SANSKRIT GRAMMAR; together with an Introduction to the Hitopadésa. Second edition. Second Impression. By JAMES R. BALLANTYNE, LL.D., Librarian of the India Office. 8vo. pp. viii. and 110, cloth. 1873. 3s. 6d.

Bartlett.—DICTIONARY OF AMERICANISMS: a Glossary of Words and Phrases colloquially used in the United States. By JOHN R. BARTLETT. Second Edition, considerably enlarged and improved. 1 vol. 8vo., pp. xxxii. and 524, cloth. 16s.

Beal.—THE ROMANTIC HISTORY OF SAKYA BUDDHA: translated from the Sanscrit into Chinese by *Dynanakuta* (A.D. 600), and from the Chinese into English by the Rev. SAMUEL BEAL. [*In preparation.*]

Beal.—TRAVELS OF FAH HIAN AND SUNG-YUN, Buddhist Pilgrims from China to India (400 A.D. and 518 A.D.) Translated from the Chinese, by S. BEAL (B.A. Trinity College, Cambridge), a Chaplain in Her Majesty's Fleet, a Member of the Royal Asiatic Society, and Author of a Translation of the Pratimôksha and the Amithâba Sûtra from the Chinese. Crown 8vo. pp. lxxiii. and 210, cloth, ornamental, with a coloured map. 10s. 6d.

- Beal.**—A CATENA OF BUDDHIST SCRIPTURES FROM THE CHINESE. By S. BEAL, B.A., Trinity College, Cambridge; a Chaplain in Her Majesty's Fleet, etc. 8vo. cloth, pp. xiv. and 436. 1871. 15s.
- Beames.**—OUTLINES OF INDIAN PHILOLOGY. With a Map, showing the Distribution of the Indian Languages. By JOHN BEAMES. Second enlarged and revised edition. Crown 8vo. cloth, pp. viii. and 96. 5s.
- Beames.**—NOTES ON THE BHOJPURÍ DIALECT OF HINDÍ, spoken in Western Behar. By JOHN BEAMES, Esq., B.C.S., Magistrate of Chumparun. 8vo. pp. 26, sewed. 1868. 1s. 6d.
- Beames.**—A COMPARATIVE GRAMMAR OF THE MODERN ARYAN LANGUAGES OF INDIA (to wit), Hindi, Panjabi, Sindhi, Gujarati, Marathi, Uriya, and Bengali. By JOHN BEAMES, Bengal C.S., M.R.A.S., &c.
Vol. I. On Sounds. 8vo. cloth, pp. xvi and 360. 16s.
- Bell.**—ENGLISH VISIBLE SPEECH FOR THE MILLION, for communicating the Exact Pronunciation of the Language to Native or Foreign Learners, and for Teaching Children and illiterate Adults to Read in few Days. By ALEXANDER MELVILLE BELL, F.E.I.S., F.R.S.S.A., Lecturer on Elocution in University College, London. 4to. sewed, pp. 16. 1s.
- Bell.**—VISIBLE SPEECH; the Science of Universal Alphabets, or Self-Interpreting Physiological Letters, for the Writing of all Languages in one Alphabet. Illustrated by Tables, Diagrams, and Examples. By ALEXANDER MELVILLE BELL, F.E.I.S., F.R.S.A., Professor of Vocal Physiology, etc. 4to., pp. 156, cloth. 15s.
- Bellairs.**—A GRAMMAR OF THE MARATHI LANGUAGE. By H. S. K. BELLAIRS, M.A., and LAXMAN Y. ASHKEDKAR, B.A. 12mo. cloth, pp. 90. 5s.
- Bellew.**—A DICTIONARY OF THE PUKKHTO, OR PUKSHTO LANGUAGE, on a New and Improved System. With a reversed Part, or English and Pukkhto, By H. W. BELLEW, Assistant Surgeon, Bengal Army. Super Royal 8vo. pp. xii. and 356, cloth. 42s.
- Bellew.**—A GRAMMAR OF THE PUKKHTO OR PUKSHTO LANGUAGE, on a New and Improved System. Combining Brevity with Utility, and Illustrated by Exercises and Dialogues. By H. W. BELLEW, Assistant Surgeon, Bengal Army. Super-royal 8vo., pp. xii. and 156, cloth. 21s.
- Bellew.**—FROM THE INDUS TO THE TIGRIS: a Narrative of a Journey through the Countries of Balochistan, Afghanistan, Khorassan, and Iran, in 1872; together with a Synoptical Grammar and Vocabulary of the Brahoe Language, and a Record of the Meteorological Observations and Altitudes on the March from the Indus to the Tigris. By H. W. BELLEW, C.S.I., Surgeon Bengal Staff Corps, Author of "A Journal of a Mission to Afghanistan in 1857-58," and "A Grammar and Dictionary of the Pukkhto Language." Demy 8vo. cloth. 14s.
- Bellows.**—THE BONA-FIDE POCKET DICTIONARY OF THE FRENCH AND ENGLISH LANGUAGES, on an entirely New System, showing both divisions on the same page, distinguishing the Genders by different types, giving Tabular Conjugations of all the Irregular Verbs, explaining difficulties of Pronunciation. By JOHN BELLOW, Gloucester. Revised and corrected by Auguste Beljame, B.A., University of Paris; Professor, National College, St. Louis; late of the Royal High School, Edinburgh, etc.: Alexandre Beljame, M.A. and Fellow of the University of Paris; Professor, Nat. Coll., Louis-le-Grand; Official Interpreter to the Paris Tribunals: and John Sibree, M.A., University of London. 32mo. gilt edges, pp. 574, 7s. 6d.; Russia, 10s. 6d. 1873.
- Bellows.**—ENGLISH OUTLINE VOCABULARY, for the use of Students of the Chinese, Japanese, and other Languages. Arranged by JOHN BELLOW. With Notes on the writing of Chinese with Roman Letters. By Professor SUMMERS King's College, London. Crown 8vo., pp. 6 and 368, cloth. 6s.
- Bellows.**—OUTLINE DICTIONARY, FOR THE USE OF MISSIONARIES, Explorers, and Students of Language. By MAX MÜLLER, M.A., Taylorian Professor in the

- University of Oxford. With an Introduction on the proper use of the ordinary English Alphabet in transcribing Foreign Languages. The Vocabulary compiled by JOHN BELLOWES. Crown 8vo. Limp morocco, pp. xxxi. and 368. 7s. 6d.
- Benfey.**—A GRAMMAR OF THE LANGUAGE OF THE VEDAS. By Dr. THEODOR BENFEY. In 1 vol. 8vo., of about 650 pages. [*In preparation.*]
- Benfey.**—A PRACTICAL GRAMMAR OF THE SANSKRIT LANGUAGE, for the use of Early Students. By THEODOR BENFEY, Professor of Sanskrit in the University of Göttingen. Second, revised and enlarged, edition. Royal 8vo. pp. viii. and 296, cloth. 10s. 6d.
- Beurmann.**—VOCABULARY OF THE TIGRÉ LANGUAGE. Written down by MORITZ VON BEURMANN. Published with a Grammatical Sketch. By Dr. A. MERX, of the University of Jena. pp. viii. and 78, cloth. 3s. 6d.
- Bhagavat-Geeta.**—See under WILKINS.
- Bholanauth Chunder.**—THE TRAVELS OF A HINDOO TO VARIOUS PARTS OF BENGAL and Upper India. By BHOLANAUT CHUNDER, Member of the Asiatic Society of Bengal. With an Introduction by J. Talboys Wheeler, Esq., Author of "The History of India." Dedicated, by permission, to His Excellency Sir John Laird Mair Lawrence, G.C.B., G.C.S.I., Viceroy and Governor-General of India, &c. In 2 volumes, crown 8vo., cloth, pp. xxv. and 440, viii. and 410. 21s.
- Bibliotheca Hispano-Americana.** A Catalogue of SPANISH BOOKS printed in Mexico, Guatemala, Honduras, The Antilles, Venezuela, Columbia, Ecuador, Peru, Chili, Uruguay, and the Argentine Republic; and of Portuguese Books printed in Brazil. Followed by a Collection of WORKS ON THE ABORIGINAL LANGUAGES OF AMERICA. On sale at the affixed prices, by Trübner & Co. Fcap. 8vo. pp. 184, sewed. 1870. 1s. 6d.
- Bigandet.**—THE LIFE OR LEGEND OF GAUDAMA, the Buddha of the Burmese, with Annotations. The ways to Neibban, and Notice on the Phongyies, or Burmese Monks. By the Right Reverend P. BIGANDET, Bishop of Ramatha, Vicar Apostolic of Ava and Pegu. 8vo. sewed, pp. xi., 538, and v. 18s.
- Birch.**—FASTI MONASTICI AEVI SAXONICI: or, an Alphabetical List of the Heads of Religious Houses in England, previous to the Norman Conquest, to which is prefixed a Chronological Catalogue of Contemporary Foundations. By W. DE GREY BIRCH. 8vo. cloth, pp. viii. and 114. 5s.
- Bleek.**—A COMPARATIVE GRAMMAR OF SOUTH AFRICAN LANGUAGES. By W. H. I. BLEEK, Ph.D. Volume I. I. Phonology. II. The Concord. Section 1. The Noun. 8vo. pp. xxxvi. and 322, cloth. 16s.
- Bleek.**—REYNARD IN SOUTH AFRICA; or, Hottentot Fables. Translated from the Original Manuscript in Sir George Grey's Library. By Dr. W. H. I. BLEEK, Librarian to the Grey Library, Cape Town, Cape of Good Hope. In one volume, small 8vo., pp. xxxi. and 94, cloth. 3s. 6d.
- Blochmann.**—THE PROSODY OF THE PERSIANS, according to Saifi, Jmi, and other Writers. By H. BLOCHMANN, M.A. Assistant Professor, Calcutta Madrasah. 8vo. sewed, pp. 166. 10s. 6d.
- Blochmann.**—SCHOOL GEOGRAPHY OF INDIA AND BRITISH BURMAH. By H. BLOCHMANN, M.A. 12mo. pp. vi. and 100. 2s. 6d.
- Blochmann.**—A TREATISE ON THE RUBA'I entitled Risalah i Taranah. By AGHA AHMAD 'ALI. With an Introduction and Explanatory Notes, by H. BLOCHMANN, M.A. 8vo. sewed, pp. 11 and 17. 2s. 6d.
- Blochmann.**—THE PERSIAN METRES BY SAIFI, and a Treatise on Persian Rhyme by Jami. Edited in Persian, by H. BLOCHMANN, M.A. 8vo. sewed, pp. 62. 3s. 6d.
- Bombay Sanskrit Series.** Edited under the superintendence of G. BÜHLER, Ph. D., Professor of Oriental Languages, Elphinstone College, and F. KIELHORN, Ph. D., Superintendent of Sanskrit Studies, Deccan College.

Already published.

1. PANCHATANTRA IV. AND V. Edited, with Notes, by G. BÜHLER, Ph. D. Pp. 84, 16. 4s. 6d.

2. NĀGOJĪBHATTA'S PARIBHĀSHENDUŚEKHARA. Edited and explained by F. KIELHORN, Ph. D. Part I., the Sanskrit Text and various readings. pp. 116. 8s. 6d.
 3. PANCHATANTRA II. AND III. Edited, with Notes, by G. BÜHLER, Ph. D. Pp. 86, 14, 2. 5s. 6d.
 4. PANCHATANTRA I. Edited, with Notes, by F. KIELHORN, Ph. D. Pp. 114, 53. 6s. 6d.
 5. KĀLIDĀSA'S RAGHUVAMŚA. With the Commentary of Mallinātha. Edited, with Notes, by SHANKAR P. PAṆḌIT, M.A. Part I. Cantos I.-VI. 9s.
 6. KĀLIDĀSA'S MĀLAVIKĀGNISITRA. Edited, with Notes, by SHANKAR P. PAṆḌIT, M.A. 8s.
 7. NĀGOJĪBHATTA'S PARIBHĀSHENDUŚEKHARA Edited and explained by F. KIELHORN, Ph. D. Part II. Translation and Notes. (Paribhāshās, i.-xxxvii.) pp. 184. 8s.
 8. KĀLIDĀSA'S RAGHUVAMŚA. With the Commentary of Mallinātha. Edited, with Notes, by SHANKAR P. PAṆḌIT, M.A. Part II. Cantos VII.-XIII. 10s. 6d.
- Bottrell.**—TRADITIONS AND HEARTH-SIDE STORIES OF WEST CORNWALL. By WILLIAM BOTTRELL (an old Celt). Demy 12mo. pp. vi. 292, cloth. 1870. 6s.
- Bottrell.**—TRADITIONS AND HEARTH-SIDE STORIES OF WEST CORNWALL. By WILLIAM BOTTRELL. With Illustrations by Mr. JOSEPH BLIGHT. Second Series. Crown 8vo. cloth, pp. iv. and 300. 6s.
- Boyce.**—A GRAMMAR OF THE KAFFIR LANGUAGE.—By WILLIAM B. BOYES, Wesleyan Missionary. Third Edition, augmented and improved, with Exercises, by WILLIAM J. DAVIS, Wesleyan Missionary. 12mo. pp. xii. and 164, cloth. 8s.
- Bowditch.**—SUFFOLK SURNAMES. By N. I. BOWDITCH. Third Edition, 8vo. pp. xxvi. and 758, cloth. 7s. 6d.
- Bretschneider.**—ON THE KNOWLEDGE POSSESSED BY THE ANCIENT CHINESE OF THE ARABS AND ARABIAN COLONIES, and other Western Countries mentioned in Chinese Books. By E. BRETSCHNEIDER, M.D., Physician of the Russian Legation at Peking. 8vo. pp. 28, sewed. 1871. 1s.
- Brhat-Sanhita (The).**—See under Kern.
- Brice.**—A ROMANIZED HINDUSTANI AND ENGLISH DICTIONARY. Designed for the use of Schools and for Vernacular Students of the Language. Compiled by NATHANIEL BRICE. New Edition, Revised and Enlarged. Post 8vo. cloth, pp. vi. and 357. 8s.
- Brigel.**—A GRAMMAR OF THE TULU LANGUAGE. By REV. J. BRIGEL, B.M.S. 8vo. cloth, pp. iv., 139 and iv. 7s. 6d.
- Brockie.**—INDIAN PHILOSOPHY. Introductory Paper. By WILLIAM BROCKIE, Author of "A Day in the Land of Scott," etc., etc. 8vo. pp. 26, sewed. 1872. 6d.
- Brown.**—THE DERVISHES; OR, ORIENTAL SPIRITUALISM. By JOHN P. BROWN, Secretary and Dragoman of the Legation of the United States of America at Constantinople. With twenty-four Illustrations. 8vo. cloth, pp. viii. and 415. 14s.
- Brown.**—CARNATIC CHRONOLOGY. The Hindu and Mahomedan Methods of Reckoning Time explained: with Essays on the Systems; Symbols used for Numerals, a new Titular Method of Memory, Historical Records, and other subjects. By CHARLES PHILIP BROWN, Member of the Royal Asiatic Society; late of the Madras Civil Service; Telugu Translator to Government; Senior Member of the College Board, etc.; Author of the Telugu Dictionaries and Grammar, etc. 4to. sewed, pp. xii. and 90. 10s. 6d.

- Brown.**—SANSKRIT PROSODY AND NUMERICAL SYMBOLS EXPLAINED. By CHARLES PHILIP BROWN, Author of the Telugu Dictionary, Grammar, etc., Professor of Telugu in the University of London. Demy 8vo. pp. 64, cloth. 3s. 6d.
- Buddhaghosha's Parables:** translated from Burmese by Captain H. T. ROGERS, R.E. With an Introduction containing Buddha's Dhammapadam, or, Path of Virtue; translated from Pali by F. MAX MÜLLER. 8vo. pp. 378, cloth. 12s. 6d.
- Burgess.**—SURYA-SIDDHANTA (Translation of the): A Text-book of Hindu Astronomy, with Notes and an Appendix, containing additional Notes and Tables, Calculations of Eclipses, a Stellar Map, and Indexes. By Rev. EBENEZER BURGESS, formerly Missionary of the American Board of Commissioners of Foreign Missions in India; assisted by the Committee of Publication of the American Oriental Society. 8vo. pp. iv. and 354, boards. 15s.
- Burnell.**—CATALOGUE OF A COLLECTION OF SANSKRIT MANUSCRIPTS. By A. C. BURNELL, M.R.A.S., Madras Civil Service. PART I. *Vedic Manuscripts*. Fcap. 8vo. pp. 64, sewed. 1870. 2s.
- Burnell.**—THE SÂMAVIDHÂNABRÂHMAṆA (being the Third Brâhmaṇa) of the Sâma Veda. Edited, together with the Commentary of Sâyana, an English Translation, Introduction, and Index of Words, by A. C. BURNELL. Volume I.—Text and Commentary, with Introduction. 8vo. pp. xxxviii. and 104. 12s. 6d.
- Burnell.**—THE VAMÇABRÂHMAṆA (being the Eighth Brâhmaṇa) of the Sâma Veda. Edited, together with the Commentary of Sâyana, a Preface and Index of Words, by A. C. BURNELL, M.R.A.S., etc. 8vo. sewed, pp. xliii., 12, and xii., with 2 coloured plates. 10s. 6d.
- Burnell.**—THE DEVATÂDHYÂYABRÂHMAṆA (being the Fifth Brâhmaṇa) of the Sama Veda. The Sanskrit Text edited, with the Commentary of Sâyana, an Index of Words, etc., by A. C. BURNELL, M.R.A.S. 8vo. and Trans., pp. 34. 5s.
- Buttmann.**—A GRAMMAR OF THE NEW TESTAMENT GREEK. By A. BUTTMANN. Authorized translation by Prof J. H. Thayer, with numerous additions and corrections by the author. Demy 8vo. cloth, pp. xx. and 474. 1873. 14s.
- Byington.**—GRAMMAR OF THE CHOCTAW LANGUAGE. By the Rev. CYRUS BYINGTON. Edited from the Original MSS. in the Library of the American Philosophical Society, by D. G. BRINTON, A.M., M.D., Member of the American Philosophical Society, the Pennsylvania Historical Society, Corresponding Member of the American Ethnological Society, etc. 8vo. sewed, pp. 56. 12s.
- Calcutta Review.**—THE CALCUTTA REVIEW. Published Quarterly. Price 8s. 6d.
- Caldwell.**—A COMPARATIVE GRAMMAR OF THE DRAVIDIAN, OR SOUTH-INDIAN FAMILY OF LANGUAGES. By the Rev. R. CALDWELL, LL.D. A Second, corrected, and enlarged Edition. [In the Press.]
- Callaway.**—IZINGANEKWANE, NENSUMANSUMANE, NEZINDABA, ZABANTU (Nursery Tales, Traditions, and Histories of the Zulus). In their own words, with a Translation into English, and Notes. By the Rev. HENRY CALLAWAY, M.D. Volume I., 8vo. pp. xiv. and 378, cloth. Natal, 1866 and 1867. 16s.
- Callaway.**—THE RELIGIOUS SYSTEM OF THE AMAZULU.
Part I.—Unkulunkulu; or, the Tradition of Creation as existing among the Amazulu and other Tribes of South Africa, in their own words, with a translation into English, and Notes. By the Rev. Canon CALLAWAY, M.D. 8vo. pp. 128, sewed. 1868. 4s.
Part II.—Amatongo; or, Ancestor Worship, as existing among the Amazulu, in their own words, with a translation into English, and Notes. By the Rev. CANON CALLAWAY, M.D. 8vo. pp. 127, sewed. 1869. 4s.

- Part III.—*Izinyanga Zokubula*; or, Divination, as existing among the Amazulu, in their own words. With a Translation into English, and Notes. By the Rev. Canon CALLAWAY, M.D. 8vo. pp. 150, sewed. 1870. 4s.
- Part IV.—On Medical Magic and Witchcraft. [In preparation.]
- Calligaris.**—*LE COMPAGNON DE TOUS, OU DICTIONNAIRE POLYGLOTTE.* Par le Colonel LOUIS CALLIGARIS, Grand Officier, etc. (French—Latin—Italian—Spanish—Portuguese—German—English—Modern Greek—Arabic—Turkish.) 2 vols. 4to., pp. 1157 and 746. Turin. £4 4s.
- Canones Lexicographici**; or, Rules to be observed in Editing the New English Dictionary of the Philological Society, prepared by a Committee of the Society. 8vo., pp. 12, sewed. 6d.
- Carpenter.**—*THE LAST DAYS IN ENGLAND OF THE RAJAH RAMMOHUN ROY.* By MARY CARPENTER, of Bristol. With Five Illustrations. 8vo. pp. 272, cloth. 7s. 6d.
- Carr.**—అంధ్రప్రదేశ్ కీ చరిత్ర. A COLLECTION OF TELUGU PROVERBS, Translated, Illustrated, and Explained; together with some Sanscrit Proverbs printed in the Devnâgarî and Telugu Characters. By Captain M. W. CARR, Madras Staff Corps. One Vol. and Supplement, royal 8vo. pp. 488 and 148. 31s. 6d.
- Catlin.**—O-KEE-PA. A Religious Ceremony of the Mandans. By GEORGE CATLIN. With 13 Coloured Illustrations. 4to. pp. 60, bound in cloth, gilt edges. 14s.
- Chalmers.**—*THE ORIGIN OF THE CHINESE*; an Attempt to Trace the connection of the Chinese with Western Nations in their Religion, Superstitions, Arts, Language, and Traditions. By JOHN CHALMERS, A.M. Foolsap 8vo. cloth, pp. 78. 2s. 6d.
- Chalmers.**—*THE SPECULATIONS ON METAPHYSICS, POLITY, AND MORALITY OF "THE OLD PHILOSOPHER" LAU TSZE.* Translated from the Chinese, with an Introduction by John Chalmers, M.A. Fcap. 8vo. cloth, xx. and 62. 4s. 6d.
- Chalmers.**—*AN ENGLISH AND CANTONESE POCKET-DICTIONARY*, for the use of those who wish to learn the spoken language of Canton Province. By JOHN CHALMERS, M.A. Third edition. Crown 8vo., pp. iv. and 146. Hong Kong, 1871. 15s.
- Charnock.**—*LUDUS PATRONYMICUS*; or, the Etymology of Curious Surnames. By RICHARD STEPHEN CHARNOCK, Ph.D., F.S.A., F.R.G.S. Crown 8vo., pp. 182, cloth. 7s. 6d.
- Charnock.**—*VERBA NOMINALIA*; or Words derived from Proper Names. By RICHARD STEPHEN CHARNOCK, Ph. Dr. F.S.A., etc. 8vo. pp. 326, cloth. 14s.
- Charnock.**—*THE PEOPLES OF TRANSYLVANIA.* Founded on a Paper read before THE ANTHROPOLOGICAL SOCIETY OF LONDON, on the 4th of May, 1869. By RICHARD STEPHEN CHARNOCK, Ph.D., F.S.A., F.R.G.S. Demy 8vo. pp. 36, sewed. 1870. 2s. 6d.
- Chaucer Society's Publications.** Subscription, two guineas per annum. 1868. *First Series.*

CANTERBURY TALES. Part I.

- I. The Prologue and Knight's Tale, in 6 parallel Texts (from the 6 MSS. named below), together with Tables, showing the Groups of the Tales, and their varying order in 38 MSS. of the Tales, and in the old printed editions, and also Specimens from several MSS. of the "Moveable Prologues" of the Canterbury Tales,—The Shipman's Prologue, and Franklin's Prologue,—when moved from their right places, and of the substitutes for them.
- II. The Prologue and Knight's Tale from the Ellesmere MS.
- III. " " " " " " " Hengwrt " 154.
- IV. " " " " " " " Cambridge " Gg. 4. 27.
- V. " " " " " " " Corpus " Oxford.
- VI. " " " " " " " Petworth "
- VII. " " " " " " " Lansdowne " 851.

Chaucer Society's Publications—continued.

Nos. II. to VII. are separate Texts of the 6-Text edition of the Canterbury Tales, Part I.

1868. *Second Series.*

1. ON EARLY ENGLISH PRONUNCIATION, with especial reference to Shakspeare and Chaucer, containing an investigation of the Correspondence of Writing with Speech in England, from the Anglo-Saxon period to the present day, preceded by a systematic notation of all spoken sounds, by means of the ordinary printing types. Including a re-arrangement of Prof. F. J. Child's *Memoirs on the Language of Chaucer and Gower*, and Reprints of the Rare Tracts by Salesbury on English, 1547, and Welsh, 1567, and by Barclay on French, 1521. By ALEXANDER J. ELLIS, F.R.S., etc., etc. Part I. On the Pronunciation of the xivth, xvth, xviith, and xviiiith centuries.
2. ESSAYS ON CHAUCER; His Words and Works. Part I. 1. Ebert's Review of Sandras's *E'tude sur Chaucer, considéré comme Imitateur des Trouvères*, translated by J. W. Van Rees Hoets, M.A., Trinity Hall, Cambridge, and revised by the Author.—II. A Thirteenth Century Latin Treatise on the *Chilindre*: "For by my *chilindre* it is prime of day" (*Shipmannes Tale*). Edited, with a Translation, by Mr. EDMUND BROCK, and illustrated by a Woodcut of the Instrument from the Ashmole MS. 1522.
3. A TEMPORARY PREFACE to the Six-Text Edition of Chaucer's Canterbury Tales. Part I. Attempting to show the true order of the Tales, and the Days and Stages of the Pilgrimage, etc., etc. By F. J. FURNIVALL, Esq., M.A., Trinity Hall, Cambridge.

1869. *First Series.*

VIII. The Miller's, Reeve's, Cook's, and Gamelyn's Tales: Ellesmere MS.

IX. " " " " " " " Hengwrt "

X. " " " " " " " Cambridge "

XI. " " " " " " " Corpus "

XII. " " " " " " " Petworth "

XIII. " " " " " " " Lansdowne "

These are separate issues of the 6-Text Chaucer's Canterbury Tales, Part II.

1869. *Second Series.*

4. ENGLISH PRONUNCIATION, with especial reference to Shakspeare and Chaucer. By ALEXANDER J. ELLIS, F.R.S. Part II.

1870. *First Series.*

XIV. CANTERBURY TALES. Part II. The Miller's, Reeve's, and Cook's Tales, with an Appendix of the Spurious Tale of Gamelyn, in Six parallel Texts.

1870. *Second Series.*

5. ON EARLY ENGLISH PRONUNCIATION, with especial reference to Shakspeare and Chaucer. By A. J. ELLIS, F.R.S., F.S.A. Part III. Illustrations on the Pronunciation of xivth and xvth Centuries. Chaucer, Gower, Wycliffe, Spenser, Shakspeare, Salesbury, Barclay, Hart, Bullokar, Gill. Pronouncing Vocabulary.

1871. *First Series.*

XV. The Man of Law's, Shipman's, and Prioress's Tales, with Chaucer's own Tale of Sir Thopas, in 6 parallel Texts from the MSS. above named, and 10 coloured drawings of Tellers of Tales, after the originals in the Ellesmere MS.

XVI. The Man of Law's Tale, &c., &c.: Ellesmere MS.

XVII. " " " " " Cambridge "

XVIII. " " " " " Corpus "

XIX. The Shipman's, Prioress's, and Man of Law's Tales, from the Petworth MS.

Chaucer Society's Publications—continued.

- XX. The Man of Law's Tales, from the Lansdowne MS. (each with woodcuts of fourteen drawings of Tellers of Tales in the Ellesmere MS.)
- XXI. A Parallel-Text edition of Chaucer's Minor Poems, Part I.:—'The Dethe of Blaunche the Duchesse,' from Thynne's ed. of 1532, the Fairfax MS. 16, and Tanner MS. 346; 'the compleynt to Pite,' 'the Parliament of Foules,' and 'the Compleynt of Mars,' each from six MSS.
- XXII. Supplementary Parallel-Texts of Chaucer's Minor Poems, Part I., containing 'The Parliament of Foules,' from three MSS.
- XXIII. Odd Texts of Chaucer's Minor Poems, Part I., containing 1. two MS. fragments of 'The Parliament of Foules;' 2. the two differing versions of 'The Prologue to the Legende of Good Women,' arranged so as to show their differences; 3. an Appendix of Poems attributed to Chaucer, i. 'The Balade of Pitee by Chauciers;' ii. 'The Cronycle made by Chaucer,' both from MSS. written by Shirley, Chaucer's contemporary.
- XXIV. A One-Text Print of Chaucer's Minor Poems, being the best Text from the Parallel-Text Edition, Part I., containing: 1. The Dethe of Blaunche the Duchesse; 2. The Compleynt to Pite; 3. The Parliament of Foules; 4. The Compleynt of Mars; 5. The A B C, with its original from De Guileville's *Pèlerinage de la Vie humaine* (edited from the best Paris MSS. by M. Paul Meyer).

1871. *Second Series.*

6. TRIAL FORE-WORDS to my Parallel-Text edition of Chaucer's Minor Poems for the Chaucer Society (with a try to set Chaucer's Works in their right order of Time). By FREDK. J. FURNIVALL. Part I. (This Part brings out, for the first time, Chaucer's long early but hopeless love.)

1872. *First Series.*

- XXV. Chaucer's Tale of Melibe, the Monk's, Nun's Priest's, Doctor's, Pardoner's, Wife of Bath's, Friar's, and Summoner's Tales, in 6 parallel Texts from the MSS. above named, and with the remaining 13 coloured drawings of Tellers of Tales, after the originals in the Ellesmere MS.
- XXVI. The Wife's, Friar's, and Summoner's Tales, from the Ellesmere MS., with 9 woodcuts of Tale-Tellers. (Part IV.)
- XXVII. The Wife's, Friar's, Summoner's, Monk's, and Nun's Priest's Tales, from the Hengwrt MS., with 23 woodcuts of the Tellers of the Tales. (Part III.)
- XXVIII. The Wife's, Friar's, and Summoner's Tales, from the Cambridge MS., with 9 woodcuts of Tale-Tellers. (Part IV.)
- XXIX. A Treatise on the Astrolabe; otherwise called Bred and Mylk for Children, addressed to his Son Lowys by Geoffrey Chaucer. Edited by the Rev. WALTER W. SKEAT, M.A.

1872. *Second Series.*

7. ORIGINALS AND ANALOGUES of some of Chaucer's Canterbury Tales. Part 1. 1. The original of the Man of Law's Tale of Constance, from the French Chronicle of Nicholas Trivet, Arundel MS. 56, ab. 1340 A.D., collated with the later copy, ab. 1400, in the National Library at Stockholm; copied and edited, with a translation, by Mr. EDMUND BROCK. 2. The Tale of "Merelaus the Emperor," from the Early-English version of the *Gesta Romanorum* in Harl. MS. 7333; and 3. Part of Matthew Paris's *Vita Offæ Primi*, both stories, illustrating incidents in the Man of Law's Tale. 4. Two French Fabliaux like the Reeve's Tale. 5. Two Latin Stories like the Friar's Tale.

1873. *First Series.*

- XXX. The Six-Text Canterbury Tales, Part V., containing the Clerk's and Merchant's Tales.

1873. *Second Series.*

8. Albertano of Brescia's *Liber Consilii et Consolationis*, A.D. 1246 (the Latin source of the French original of Chaucer's *Melibe*), edited from the MSS. by Dr. THOR SUNDBY.

Chaucer Society's Publications—continued.1874. *First Series.*

XXXI. The Six-Text, Part VI., containing the Squire's and Franklin's Tales.

XXXII. to XXXVI. Large Parts of the separate issues of the Six MSS.

1874. *Second Series.*

9. Essays on Chaucer, his Words and Works, Part II.: 3. John of Hoveden's *Practica Chilindri*, edited from the MS. with a translation, by Mr. E. BROCK. 4. Chaucer's use of the final -e, by JOSEPH PAYNE, Esq. 5. Mrs. E. Barrett-Browning on Chaucer: being those parts of her review of the *Book of the Poets*, 1842, which relate to him; here reprinted by leave of Mr. Robert Browning. 6. Professor Bernhard Ten-Brink's critical edition of Chaucer's *Compleynte to Pite*.

1875. *First Series.*

XXXVII. The Six-Text, Part VII., the Second Nun's, Canon's-Yeoman's, and Manciple's Tales, with the Blank-Parson Link.

XXXVIII. to XLIII. Large Parts of the separate issues of the Six MSS. bringing all up to the Parson's Tale.

XLIV. A detailed Comparison of the *Troylus and Cryseyde* with Boccaccio's *Filistrato*, with a Translation of all Passages used by Chaucer, and an Abstract of the Parts not used, by W. MICHAEL ROSSETTI, Esq., and with a print of the *Troylus* from the Harleian MS. 3943. Part I.

XLV. An alphabetical list of Chaucer's rymes in the Canterbury Tales, as shown by the Ellesmere MS. [Ready in 1874.]

1875. *Second Series.*

10. Originals and Analogues of Chaucer's Canterbury Tales, Part II. 6. Alphonsus of Lincoln, a Story like the *Prioress's Tale*. 7. How Reynard caught Chanticleer, the source of the *Nun's-Priest's Tale*. 8. Two Italian Stories, and a Latin one, like the *Pardoner's Tale*. 9. The Tale of the Priest's Bladder, a story like the *Summoner's Tale*, being 'Li dis de le Vescie a Prestre,' par Jakes de Basiw. 10. Petrarch's Latin Tale of Griseldis (with Boccaccio's Story from which it was re-told), the original of the *Olerk's Tale*. 11. Five Versions of a Pear-tree Story like that in the *Merchant's Tale*. 12. Four Versions of The Life of Saint Cecilia, the original of the *Second Nun's Tale*.

Childers.—KHUDDAKA PATHA. A Pāli Text, with a Translation and Notes. By R. C. CHILDERS, late of the Ceylon Civil Service. 8vo. pp. 32, stitched. 1s. 6d.

Childers.—A PĀLI-ENGLISH DICTIONARY, with Sanskrit Equivalents, and with numerous Quotations, Extracts, and References. Compiled by ROBERT CÆSAR CHILDERS, late of the Ceylon Civil Service. First Part, pp. 1-276. Imperial 8vo. Double Columns. 24s.

The first Pāli Dictionary ever published. The Second Part, completing the Work, is in the Press.

Childers.—A PĀLI GRAMMAR FOR BEGINNERS. By ROBERT C. CHILDERS. In 1 vol. 8vo. cloth. [In preparation.]

Childers.—NOTES ON DHAMMAPADA, with special reference to the question of Nirvāna. By R. C. CHILDERS, late of the Ceylon Civil Service. 8vo. pp. 12, sewed. Price 1s.

Childers.—ON THE ORIGIN OF THE BUDDHIST ARTHAKATHÁS. By the Mudliar L. COMRILLA VIJASINHA, Government Interpreter to the Ratnapura Court, Ceylon. With an Introduction by R. C. CHILDERS, late of the Ceylon Civil Service. 8vo. sewed. 1871. 1s.

Childers.—NOTES ON THE SINHALESE LANGUAGE. No. 1. On the Formation of the Plural of Neuter Nouns. By R. C. CHILDERS. Demy 8vo. sd., pp. 16. 1873. 1s.

Christaller.—A DICTIONARY, ENGLISH, TSHI, (ASANTE), AKRA; Tshi (Chwee), comprising as dialects Akán (Asanté, Akém, Akuapém, etc.) and Fánté; Akra (Accra), connected with Adangme; Gold Coast, West Africa.

Enyiresi, Twi né Nkrañ		Enliši, Otšüi ke Gã
nsem - asekyere - nhōma.		wiemoi - ašišitšōmq- wolo.

By the Rev. J. G. CHRISTALLER, Rev. C. W. LOCHER, Rev. J. ZIMMERMANN.
16mo. 6s. [In the press.]

Clarke.—TEN GREAT RELIGIONS: an Essay in Comparative Theology.

By JAMES FREEMAN CLARKE. 8vo. cloth, pp. x. and 528. 1871. 14s.

Clarke.—MEMOIR ON THE COMPARATIVE GRAMMAR OF EGYPTIAN, COPTIC, AND UDE. By HYDE CLARKE, Cor. Member American Oriental Society; Mem. German Oriental Society, etc., etc. Demy 8vo. sd., pp. 32. 2s.

Colebrooke.—THE LIFE AND MISCELLANEOUS ESSAYS OF HENRY THOMAS COLEBROOKE. The Biography by his Son, Sir T. E. COLEBROOKE, Bart., M.P., The Essays edited by Professor Cowell. In 3 vols.

Vol. I. The Life. With Portrait and Map. Demy 8vo. cloth, pp. xii. and 492. 14s.

Vols. II. and III. The Essays. A New Edition, with Notes by E. B. COWELL, Professor of Sanskrit in the University of Cambridge. Demy 8vo. cloth, pp. xvi.-534, and x.-520. 1873. 28s.

Colenso.—FIRST STEPS IN ZULU-KAFIR: An Abridgement of the Elementary Grammar of the Zulu-Kafir Language. By the Right Rev. JOHN W. COLENZO, Bishop of Natal. 8vo. pp. 86, cloth. Ekukanyeni, 1859. 4s. 6d.

Colenso.—ZULU-ENGLISH DICTIONARY. By the Right Rev. JOHN W. COLENZO, Bishop of Natal. 8vo. pp. viii. and 552, sewed. Pietermaritzburg, 1861. £1 1s.

Colenso.—FIRST ZULU-KAFIR READING BOOK, two parts in one. By the Right Rev. JOHN W. COLENZO, Bishop of Natal. 16mo. pp. 44, sewed. Natal. 1s.

Colenso.—SECOND ZULU-KAFIR READING BOOK. By the same. 16mo. pp. 108, sewed. Natal. 3s.

Colenso.—FOURTH ZULU-KAFIR READING BOOK. By the same. 8vo. pp. 160, cloth. Natal, 1859. 7s.

Colenso.—Three Native Accounts of the Visits of the Bishop of Natal in September and October, 1859, to Upmande, King of the Zulus; with Explanatory Notes and a Literal Translation, and a Glossary of all the Zulu Words employed in the same: designed for the use of Students of the Zulu Language. By the Right Rev. JOHN W. COLENZO, Bishop of Natal. 16mo. pp. 160, stiff cover. Natal, Maritzburg, 1860. 4s. 6d.

Coleridge.—A GLOSSARIAL INDEX to the Printed English Literature of the Thirteenth Century. By HERBERT COLERIDGE, Esq. 8vo. cloth. pp. 104, 2s. 6d.

Collecao de Vocabulos e Frases usados na Provincia de S. Pedro, do Rio Grande do Sul, no Brasil. 12mo. pp. 32, sewed. 1s.

Contopoulos.—A LEXICON OF MODERN GREEK-ENGLISH AND ENGLISH MODERN GREEK. By N. CONTOPOULOS.

Part I. Modern Greek-English. 8vo. cloth, pp. 460. 12s.

Part II. English-Modern Greek. 8vo. cloth, pp. 582. 15s.

Cunningham.—THE ANCIENT GEOGRAPHY OF INDIA. I. The Buddhist Period, including the Campaigns of Alexander, and the Travels of Hwen-Thsang. By ALEXANDER CUNNINGHAM, Major-General, Royal Engineers (Bengal Retired). With thirteen Maps. 8vo. pp. xx. 590, cloth. 1870. 28s.

Cunningham.—AN ESSAY ON THE ARIAN ORDER OF ARCHITECTURE, as exhibited in the Temples of Kashmere. By Captain (now Major-General) ALEXANDER CUNNINGHAM. 8vo. pp. 86, cloth. With seventeen large folding Plates. 18s.

- Cunningham.**—THE BHILSA TOPES; or, Buddhist Monuments of Central India: comprising a brief Historical Sketch of the Rise, Progress, and Decline of Buddhism; with an Account of the Opening and Examination of the various Groups of Topes around Bhilsa. By Brev.-Major Alexander Cunningham, Bengal Engineers. Illustrated with thirty-three Plates. 8vo. pp. xxxvi. 370, cloth. 1854. 21s.
- Cunningham.**—ARCHÆOLOGICAL SURVEY OF INDIA. Four Reports, made during the years 1862-63-64-65. By ALEXANDER CUNNINGHAM, C.S.I., Major-General, etc. With Maps and Plates. Two Vols. 8vo. cloth, pp. xliii., 359, and xlix.; v., 459, and liii. £2 8s.
- Dalton.**—DESCRIPTIVE ETHNOLOGY OF BENGAL. By EDWARD TUTTE DALTON, C.S.I., Colonel, Bengal Staff Corps, etc. Illustrated by Lithograph Portraits copied from Photographs. 33 Lithograph Plates. 4to. half-calf, pp. 340. £6 6s.
- D'Alwis.**—BUDDHIST NIRVĀNA; a Review of Max Müller's Dhammapade. By JAMES D'ALWIS, Member of the Royal Asiatic Society. 8vo. sewed, pp. x. and 140. 6s.
- D'Alwis.**—PALI TRANSLATIONS. Part First. By JAMES D'ALWIS, Member of the Royal Asiatic Society. 8vo. sewed, pp. 24. 1s.
- D'Alwis.**—A DESCRIPTIVE CATALOGUE OF SANSKRIT, PALI, AND SINHALESE LITERARY WORKS OF CEYLON. By JAMES D'ALWIS, M.R.A.S., Advocate of the Supreme Court, &c., &c. In Three Volumes. Vol. I., pp. xxxii. and 244, sewed. 1870. 8s. 6d. [Vols. II. and III. in preparation.]
- Delepierre.**—SUPERCHERIES LITTÉRAIRES, PASTICHES SUPPOSITIONS D'AUTEUR, DANS LES LETTRES ET DANS LES ARTS. Par OCTAVE DELEPIERRE. Fcap. 4to. paper cover, pp. 328. 14s.
- Delepierre.**—REVUE ANALYTIQUE DES OUVRAGES ÉCRITS EN CENTONS, depuis les Temps Anciens, jusqu'au xix^{ième} Siècle. Par un Bibliophile Belge. Small 4to. pp. 508, stiff covers. 1868. 30s.
- Delepierre.**—ESSAI HISTORIQUE ET BIBLIOGRAPHIQUE SUR LES RÉBUS. Par Octave Delepierre. 8vo. pp. 24, sewed. With 15 pages of Woodcuts. 1870. 3s. 6d.
- Dennys.**—CHINA AND JAPAN. A complete Guide to the Open Ports of those countries, together with Peking, Yeddo, Hong Kong, and Macao; forming a Guide Book and Vade Mecum for Travellers, Merchants, and Residents in general; with 56 Maps and Plans. By WM. FREDERICK MAYERS, F.R.G.S. H.M.'s Consular Service; N. B. DENNYS, late H.M.'s Consular Service; and CHARLES KING, Lieut. Royal Marine Artillery. Edited by N. B. DENNYS. In one volume. 8vo. pp. 600, cloth. £2 2s.
- Döhne.**—A ZULU-KAFIR DICTIONARY, etymologically explained, with copious Illustrations and examples, preceded by an introduction on the Zulu-Kafir Language. By the Rev. J. L. DÖHNE. Royal 8vo. pp. xlii. and 418, sewed. Cape Town, 1857. 21s.
- Döhne.**—THE FOUR GOSPELS IN ZULU. By the Rev. J. L. DÖHNE, Missionary to the American Board, C.F.M. 8vo. pp. 208, cloth. Pietermaritzburg, 1866. 5s.
- Doolittle.**—A VOCABULARY AND HANDBOOK OF THE CHINESE LANGUAGE. Romanized in the Mandarin Dialect. In Two Volumes comprised in Three Parts. By Rev. JUSTUS DOOLITTLE, Author of "Social Life of the Chinese." Vol. I. 4to. pp. viii. and 548. Vol. II. Parts II. and III., pp. vii. and 695. £1 11s. 6d. each vol.
- Douglas.**—CHINESE-ENGLISH DICTIONARY OF THE VERNACULAR OR SPOKEN LANGUAGE OF AMOY, with the principal variations of the Chang-Chew and Chin-Chew Dialects. By the Rev. CARSTAIRS DOUGLAS, M.A., LL.D., Glasg., Missionary of the Presbyterian Church in England. 1 vol. High quarto, cloth, double columns, pp. 632. 1873. £3 3s.

Dowson.—A GRAMMAR OF THE URDU OR HINDUSTANI LANGUAGE. By JOHN DOWSON, M.R.A.S. 12mo. cloth, pp. xvi. and 264. 10s. 6d.

Dowson.—A HINDUSTANI EXERCISE BOOK. Containing a Series of Passages and Extracts adapted for Translation into Hindustani. By JOHN DOWSON, M.R.A.S., Professor of Hindustani, Staff College. Crown 8vo. pp. 100. Limp cloth, 2s. 6d.

Early English Text Society's Publications. Subscription, one guinea per annum.

1. **EARLY ENGLISH ALLITERATIVE POEMS.** In the West-Midland Dialect of the Fourteenth Century. Edited by R. MORRIS, Esq., from an unique Cottonian MS. 16s.
2. **ARTHUR** (about 1440 A.D.). Edited by F. J. FURNIVALL, Esq., from the Marquis of Bath's unique MS. 4s.
3. **ANE COMPENDIOUS AND BREUE TRACTATE CONCERNING YE OFFICE AND DEWTIE OF KYNGIS**, etc. By WILLIAM LAUDER. (1556 A.D.) Edited by F. HALL, Esq., D.C.L. 4s.
4. **SIR GAWAYNE AND THE GREEN KNIGHT** (about 1320-30 A.D.). Edited by R. MORRIS, Esq., from an unique Cottonian MS. 10s.
5. **OF THE ORTHOGRAPHIE AND CONGRUITIE OF THE BRITAN TONGUE**; a treatise, noe shorter than necessarie, for the Schooles, be ALEXANDER HUME. Edited for the first time from the unique MS. in the British Museum (about 1617 A.D.), by HENRY B. WHEATLEY, Esq. 4s.
6. **LANCELOT OF THE LAIK.** Edited from the unique MS. in the Cambridge University Library (ab. 1500), by the Rev. WALTER W. SKEAT, M.A. 8s.
7. **THE STORY OF GENESIS AND EXODUS**, an Early English Song, of about 1250 A.D. Edited for the first time from the unique MS. in the Library of Corpus Christi College, Cambridge, by R. MORRIS, Esq. 8s.
8. **MORTE ARTHURE**; the Alliterative Version. Edited from ROBERT THORNTON's unique MS. (about 1440 A.D.) at Lincoln, by the Rev. GEORGE PERRY, M.A., Prebendary of Lincoln. 7s.
9. **ANIMADVERSIONS UPON THE ANNOTACIONS AND CORRECTIONS OF SOME IMPERFECTIONS OF IMPRESSIONES OF CHAUCER'S WORKES**, reprinted in 1598; by FRANCIS THYNNE. Edited from the unique MS. in the Bridgewater Library. By G. H. KINGSLEY, Esq., M.D. 4s.
10. **MERLIN, OR THE EARLY HISTORY OF KING ARTHUR.** Edited for the first time from the unique MS. in the Cambridge University Library (about 1450 A.D.), by HENRY B. WHEATLEY, Esq. Part I. 2s. 6d.
11. **THE MONARCHE**, and other Poems of Sir David Lyndesay. Edited from the first edition by JOHNE SKOTT, in 1552, by FITZEDWARD HALL, Esq., D.C.L. Part I. 3s.
12. **THE WRIGHT'S CHASTE WIFE**, a Merry Tale, by Adam of Cobsam (about 1462 A.D.), from the unique Lambeth MS. 306. Edited for the first time by F. J. FURNIVALL, Esq., M.A. 1s.
13. **SEINTE MARHERETE, þe MEIDEN ANT MARTYR.** Three Texts of ab. 1200, 1310, 1330 A.D. First edited in 1862, by the Rev. OSWALD COCKAYNE, M.A., and now re-issued. 2s.
14. **KYNG HORN**, with fragments of Floriz and Blauncheffur, and the Assumption of the Blessed Virgin. Edited from the MSS. in the Library of the University of Cambridge and the British Museum, by the Rev. J. RAWSON LUMBY. 3s. 6d.
15. **POLITICAL, RELIGIOUS, AND LOVE POEMS**, from the Lambeth MS. No. 306, and other sources. Edited by F. J. FURNIVALL, Esq., M.A. 7s. 6d.
16. **A TRETICE IN ENGLISH** breuely drawe out of þ book of Quintis essencijs in Latyn, þ Hermys þ prophete and king of Egipt after þ flood of Noe, fader of Philosophris, hadde by reuelacioun of an aungil of God to him sente. Edited from the Sloane MS. 73, by F. J. FURNIVALL, Esq., M.A. 1s.

Early English Text Society's Publications—continued.

17. **PARALLEL EXTRACTS** from 29 Manuscripts of **PIERS PLOWMAN**, with Comments, and a Proposal for the Society's Three-text edition of this Poem. By the Rev. W. SKEAT, M.A. 1s.
18. **HALI MEIDENHEAD**, about 1200 A.D. Edited for the first time from the MS. (with a translation) by the Rev. OSWALD COCKAYNE, M.A. 1s.
19. **THE MONARCHE**, and other Poems of Sir David Lyndesay. Part II., the Complaynt of the King's Papingo, and other minor Poems. Edited from the First Edition by F. HALL, Esq., D.C.L. 3s. 6d.
20. **SOME TREATISES** BY RICHARD ROLLE DE HAMPOLE. Edited from Robert of Thornton's MS. (ab. 1440 A.D.), by Rev. GEORGE G. PERRY, M.A. 1s.
21. **MERLIN, OR THE EARLY HISTORY OF KING ARTHUR**. Part II. Edited by HENRY B. WHEATLEY, Esq. 4s.
22. **THE ROMANS OF PARTENAY, OR LUSIGNEN**. Edited for the first time from the unique MS. in the Library of Trinity College, Cambridge, by the Rev. W. W. SKEAT, M.A. 6s.
23. **DAN MICHEL'S AYENBITE OF INWYT**, or Remorse of Conscience, in the Kentish dialect, 1340 A.D. Edited from the unique MS. in the British Museum, by RICHARD MORRIS, Esq. 10s. 6d.
24. **HYMNS OF THE VIRGIN AND CHRIST; THE PARLIAMENT OF DEVILS**, and Other Religious Poems. Edited from the Lambeth MS. 853, by F. J. FURNIVALL, M.A. 3s.
25. **THE STACIONS OF ROME**, and the Pilgrim's Sea-Voyage and Sea-Sickness, with Clene Maydenhod. Edited from the Vernon and Porkington MSS., etc., by F. J. FURNIVALL, Esq., M.A. 1s.
26. **RELIGIOUS PIECES IN PROSE AND VERSE**. Containing Dan Jon Gaytrigg's Sermon; The Abbaye of S. Spirit; Sayne Jon, and other pieces in the Northern Dialect. Edited from Robert of Thorntone's MS. (ab. 1460 A.D.), by the Rev. G. PERRY, M.A. 2s.
27. **MANIPULUS VOCABULORUM: a Rhyming Dictionary of the English Language**, by PETER LEVINS (1570). Edited, with an Alphabetical Index, by HENRY B. WHEATLEY. 12s.
28. **THE VISION OF WILLIAM CONCERNING PIERS PLOWMAN**, together with Vita de Dowel, Dobet et Dobest. 1362 A.D., by WILLIAM LANGLAND. The earliest or Vernon Text; Text A. Edited from the Vernon MS., with full Collations, by Rev. W. W. SKEAT, M.A. 7s.
29. **OLD ENGLISH HOMILIES AND HOMILETIC TREATISES**. (Sawles Warde and the Wohunge of Ure Lauerd: Ureisuns of Ure Louerd and of Ure Lefdi, etc.) of the Twelfth and Thirteenth Centuries. Edited from MSS. in the British Museum, Lambeth, and Bodleian Libraries; with Introduction, Translation, and Notes. By RICHARD MORRIS. *First Series*. Part I. 7s.
30. **PIERS, THE PLOUGHMAN'S CREDE** (about 1394). Edited from the MSS. by the Rev. W. W. SKEAT, M.A. 2s.
31. **INSTRUCTIONS FOR PARISH PRIESTS**. By JOHN MYRC. Edited from Cotton MS. Claudius A. II., by EDWARD PEACOCK, Esq., F.S.A., etc., etc. 4s.
32. **THE BABEES BOOK**, Aristotle's A B C, Urbanitatis, Stans Puer ad Mensam, The Lytille Childrenes Lytil Boke. **THE BOKES OF NURTURE** of Hugh Rhodes and John Russell, Wynkyn de Worde's Boke of Kervynge, The Booke of Demeanor, The Boke of Curtasye, Seager's Schoole of Vertue, etc., etc. With some French and Latin Poems on like subjects, and some Forewords on Education in Early England. Edited by F. J. FURNIVALL, M.A., Trin. Hall, Cambridge. 15s.
33. **THE BOOK OF THE KNIGHT DE LA TOUR LANDRY, 1372**. A Father's Book for his Daughters, Edited from the Harleian MS. 1764, by THOMAS WRIGHT, Esq., M.A., and Mr. WILLIAM ROSSITER. 8s.

Early English Text Society's Publications—continued.

34. OLD ENGLISH HOMILIES AND HOMILETIC TREATISES. (Sawles Warde, and the Wohunge of Ure Lauerd: Ureisuns of Ure Louerd and of Ure Lefdi, etc.) of the Twelfth and Thirteenth Centuries. Edited from MSS. in the British Museum, Lambeth, and Bodleian Libraries; with Introduction, Translation, and Notes, by RICHARD MORRIS. *First Series. Part 2.* 8s.
35. SIR DAVID LYNDESAY'S WORKS. PART 3. The Historie of ane Nobil and Wailzeand Sqvyer, WILLIAM MELDRUM, umqvhyle Laird of Cleische and Bynnis, compylit be Sir DAVID LYNDESAY of the Mont *alias* Lyoun King of Armes. With the Testament of the said Williame Meldrum, Squyer, compylit alsua be Sir Dauid Lyndesay, etc. Edited by F. HALL, D.C.L. 2s.
36. MERLIN, OR THE EARLY HISTORY OF KING ARTHUR. A Prose Romance (about 1450-1460 A.D.), edited from the unique MS. in the University Library, Cambridge, by HENRY B. WHEATLEY. With an Essay on Arthurian Localities, by J. S. STUART GLENNIE, Esq. Part III. 1869. 12s.
37. SIR DAVID LYNDESAY'S WORKS. Part IV. Ane Satyre of the thrie estaits, in commendation of vertew and vituperation of vyce. Maid be Sir DAVID LYNDESAY, of the Mont, *alias* Lyon King of Armes. At Edinbvrgh. Printed be Robert Charteris, 1602. Cvm privilegio regis. Edited by F. HALL, Esq., D.C.L. 4s.
38. THE VISION OF WILLIAM CONCERNING PIERS THE PLOWMAN, together with Vita de Dowel, Dobet, et Dobest, Secundum-Wit et Resoun, by WILLIAM LANGLAND (1377 A.D.). The "Crowley" Text; or Text B. Edited from MS. Laud Misc. 581, collated with MS. Rawl. Poet. 38, MS. B. 15. 17. in the Library of Trinity College, Cambridge, MS. Dd. 1. 17. in the Cambridge University Library, the MS. in Oriel College, Oxford, MS. Bodley 814, etc. By the Rev. WALTER W. SKEAT, M.A., late Fellow of Christ's College, Cambridge. 10s. 6d.
39. THE "GEST HYSTORIALE" OF THE DESTRUCTION OF TROY. An Alliterative Romance, translated from Guido De Colonna's "Hystoria Troiana." Now first edited from the unique MS. in the Hunterian Museum, University of Glasgow, by the Rev. GEO. A. PANTON and DAVID DONALDSON. Part I. 10s. 6d.
40. ENGLISH GILDS. The Original Ordinances of more than One Hundred Early English Gilds: Together with the olde usages of the cite of Wynchestre; The Ordinances of Worcester; The Office of the Mayor of Bristol; and the Customary of the Manor of Tettenhall-Regis. From Original MSS. of the Fourteenth and Fifteenth Centuries. Edited with Notes by the late TOULMIN SMITH, Esq., F.R.S. of Northern Antiquaries (Copenhagen). With an Introduction and Glossary, etc., by his daughter, LUCY TOULMIN SMITH. And a Preliminary Essay, in Five Parts, ON THE HISTORY AND DEVELOPMENT OF GILDS, by LUJO BRENTANO, Doctor Juris Utriusque et Philosophiæ. 21s.
41. THE MINOR POEMS OF WILLIAM LAUDER, Playwright, Poet, and Minister of the Word of God (mainly on the State of Scotland in and about 1568 A.D., that year of Famine and Plague). Edited from the Unique Originals belonging to S. CHRISTIE-MILLER, Esq., of Britwell, by F. J. FURNIVALL, M.A., Trin. Hall, Camb. 3s.
42. BERNARDUS DE CURA REI FAMULIARIS, with some Early Scotch Prophecies, etc. From a MS., KK 1. 5, in the Cambridge University Library. Edited by J. RAWSON LUMBY, M.A., late Fellow of Magdalen College, Cambridge. 2s.
43. RATIS RAVING, and other Moral and Religious Pieces, in Prose and Verse. Edited from the Cambridge University Library MS. KK 1. 5, by J. RAWSON LUMBY, M.A., late Fellow of Magdalen College, Cambridge. 3s.

Early English Text Society's Publications—continued.

44. **JOSEPH OF ARIMATHIE**: otherwise called the Romance of the Seint Graal, or Holy Grail: an alliterative poem, written about A.D. 1350, and now first printed from the unique copy in the Vernon MS. at Oxford. With an appendix, containing "The Lyfe of Joseph of Armathy," reprinted from the black-letter copy of Wynkyn de Worde; "De sancto Joseph ab Arimathia," first printed by Pynson, A.D. 1516; and "The Lyfe of Joseph of Arimathia," first printed by Pynson, A.D. 1520. Edited, with Notes and Glossarial Indices, by the Rev. WALTER W. SKEAT, M.A. 5s.
45. **KING ALFRED'S WEST-SAXON VERSION OF GREGORY'S PASTORAL CARE**. With an English translation, the Latin Text, Notes, and an Introduction Edited by HENRY SWEET, Esq., of Balliol College, Oxford. Part I. 10s.
46. **LEGENDS OF THE HOLY ROOD; SYMBOLS OF THE PASSION AND CROSS-POEMS**. In Old English of the Eleventh, Fourteenth, and Fifteenth Centuries. Edited from MSS. in the British Museum and Bodleian Libraries; with Introduction, Translations, and Glossarial Index. By RICHARD MORRIS, LL.D. 10s.
47. **SIR DAVID LYNDESAY'S WORKS. PART V. The Minor Poems of Lyndesay**. Edited by J. A. H. MURRAY, Esq. 3s.
48. **THE TIMES' WHISTLE: or, A Newe Daunce of Seven Satires, and other Poems**: Compiled by R. C., Gent. Now first Edited from MS. Y. 8. 3. in the Library of Canterbury Cathedral; with Introduction, Notes, and Glossary, by J. M. COWPER. 6s.
49. **AN OLD ENGLISH MISCELLANY**, containing a Bestiary, Kentish Sermons, Proverbs of Alfred, Religious Poems of the 13th century. Edited from the MSS. by the Rev. R. MORRIS, LL.D. 10s.
50. **KING ALFRED'S WEST-SAXON VERSION OF GREGORY'S PASTORAL CARE**. Edited from 2 MSS., with an English translation. By HENRY SWEET, Esq., Balliol College, Oxford. Part II. 10s.
51. **PE LIPLADE OF ST. JULIANA**, from two old English Manuscripts of 1230 A.D. With renderings into Modern English, by the Rev. O. COCKAYNE and EDMUND BROCK. Edited by the Rev. O. COCKAYNE, M.A. Price 2s.
52. **PALLADIUS ON HUSBONDRIE**, from the unique MS., ab. 1420 A.D., ed. Rev. B. LODGE. Part I. 10s.
53. **OLD ENGLISH HOMILIES, Series II.**, from the unique 13th-century MS. in Trinity Coll. Cambridge, with a photolithograph; three Hymns to the Virgin and God, from a unique 13th-century MS. at Oxford, a photolithograph of the music to two of them, and transcriptions of it in modern notation by Dr. RIMBAULT, and A. J. ELLIS, Esq., F.R.S.; the whole edited by the Rev. RICHARD MORRIS, LL.D. 8s.
54. **THE VISION OF PIERS PLOWMAN, Text C** (completing the three versions of this great poem), with an Autotype; and two unique alliterative poems: Richard the Redeles (by WILLIAM, the author of the *Vision*); and The Crowned King; edited by the Rev. W. W. SKEAT, M.A. 18s.
55. **GENERYDES**, a Romance, edited from the unique MS., ab. 1440 A.D., in Trin. Coll. Cambridge, by W. ALDIS WRIGHT, Esq., M.A., Trin. Coll. Cambr. Part I. 3s.
56. **THE GEST HYSTORIALE OF THE DESTRUCTION OF TROY**, translated from Guido de Colonna, in alliterative verse; edited from the unique MS. in the Hunterian Museum, Glasgow, by D. DONALDSON, Esq., and the late Rev. G. A. Panton. Part II. 10s. 6d.
57. **THE EARLY ENGLISH VERSION OF THE "CURSOR MUNDI"**, in four Texts, from MS. Cotton, Vesp. A. iii. in the British Museum; Fairfax MS. 14. in the Bodleian; the Göttingen MS. Theol. 107; MS. R. 3, 8, in Trinity College, Cambridge. Edited by the Rev. R. MORRIS, LL.D. Part I. with two photo-lithographic facsimiles by Cooke and Fotheringham. 10s. 6d.

Early English Text Society's Publications—continued.

58. **THE BLICKLING HOMILIES**, edited from the Marquis of Lothian's Anglo-Saxon MS. of 971 A.D., by the Rev. R. MORRIS, LL.D. (With a Photolithograph). Part I. 8s.

Extra Series. Subscriptions—Small paper, one guinea; large paper two guineas, per annum.

1. **THE ROMANCE OF WILLIAM OF PALERNE** (otherwise known as the Romance of William and the Werwolf). Translated from the French at the command of Sir Humphrey de Bohun, about A.D. 1350, to which is added a fragment of the Alliterative Romance of Alisaunder, translated from the Latin by the same author, about A.D. 1340; the former re-edited from the unique MS. in the Library of King's College, Cambridge, the latter now first edited from the unique MS. in the Bodleian Library, Oxford. By the Rev. WALTER W. SKEAT, M.A. 8vo. sewed, pp. xlv. and 328. £1 6s.
2. **ON EARLY ENGLISH PRONUNCIATION**, with especial reference to Shakspeare and Chaucer; containing an investigation of the Correspondence of Writing with Speech in England, from the Anglo-Saxon period to the present day, preceded by a systematic Notation of all Spoken Sounds by means of the ordinary Printing Types; including a re-arrangement of Prof. F. J. Child's Memoirs on the Language of Chaucer and Gower, and reprints of the rare Tracts by Salesbury on English, 1547, and Welsh, 1567, and by Barclay on French, 1521. By ALEXANDER J. ELLIS, F.R.S. Part I. On the Pronunciation of the xivth, xvth, xviith, and xviiith centuries. 8vo. sewed, pp. viii. and 416. 10s.
3. **CAXTON'S BOOK OF CURTESYE**, printed at Westminster about 1477-8, A.D., and now reprinted, with two MS. copies of the same treatise, from the Oriel MS. 79, and the Balliol MS. 354. Edited by FREDERICK J. FURNIVALL, M.A. 8vo. sewed, pp. xii. and 58. 5s.
4. **THE LAY OF HAVELOK THE DANE**; composed in the reign of Edward I., about A.D. 1280. Formerly edited by Sir F. MADDEN for the Roxburghe Club, and now re-edited from the unique MS. Laud Misc. 108, in the Bodleian Library, Oxford, by the Rev. WALTER W. SKEAT, M.A. 8vo. sewed, pp. lv. and 160. 10s.
5. **CHAUCER'S TRANSLATION OF BOETHIUS'S "DE CONSOLATIONE PHILOSOPHIE."** Edited from the Additional MS. 10,340 in the British Museum. Collated with the Cambridge Univ. Libr. MS. Ii. 3. 21. By RICHARD MORRIS. 8vo. 12s.
6. **THE ROMANCE OF THE CHEVELERE ASSIGNE**. Re-edited from the unique manuscript in the British Museum, with a Preface, Notes, and Glossarial Index, by HENRY H. GIBBS, Esq., M.A. 8vo. sewed, pp. xviii. and 38. 3s.
7. **ON EARLY ENGLISH PRONUNCIATION**, with especial reference to Shakspeare and Chaucer. By ALEXANDER J. ELLIS, F.R.S., etc., etc. Part II. On the Pronunciation of the xiii th and previous centuries, of Anglo-Saxon, Icelandic, Old Norse and Gothic, with Chronological Tables of the Value of Letters and Expression of Sounds in English Writing. 10s.
8. **QUEENE ELIZABETHES ACHADEMY**, by SIR HUMPHREY GILBERT. A Booke of Precedence, The Ordering of a Funerall, etc. Varying Versions of the Good Wife, The Wise Man, etc., Maxims, Lydgate's Order of Fools, A Poem on Heraldry, Occleve on Lords' Men, etc., Edited by F. J. FURNIVALL, M.A., Trin. Hall, Camb. With Essays on Early Italian and German Books of Courtesy, by W. M. ROSSETTI, Esq., and E. OSWALD, Esq. 8vo. 13s.
9. **THE FRATERNITYE OF VACABONDES**, by JOHN AWDELEY (licensed in 1560-1, imprinted then, and in 1565), from the edition of 1575 in the Bodleian Library. A Caueat or Warening for Commen Cursetors vulgarely

Early English Text Society's Publications—continued.

- called *Vagabones*, by THOMAS HARMAN, ESQUIRE. From the 3rd edition of 1567, belonging to Henry Huth, Esq., collated with the 2nd edition of 1567, in the Bodleian Library, Oxford, and with the reprint of the 4th edition of 1573. A Sermon in Praise of Thieves and Thievery, by PARSON HABEN OR HYBERDYNE, from the Lansdowne MS. 98, and Cotton Vesp. A. 25. Those parts of the *Groundworke of Conny-catching* (ed. 1592), that differ from *Harman's Caueat*. Edited by EDWARD VILES & F. J. FURNIVALL. 8vo. 7s. 6d.
10. THE FYRST BOKE OF THE INTRODUCTION OF KNOWLEDGE, made by Andrew Borde, of Physycke Doctor. A COMPENDYOUS REGYMENT OF A DYETARY OF HELTH made in Mountpyllier, compiled by Andrewe Boorde, of Physycke Doctor. BARNES IN THE DEFENCE OF THE BERDE: a treatyse made, answerynge the treatyse of Doctor Borde upon Berdes. Edited, with a life of Andrew Boorde, and large extracts from his Breuyary, by F. J. FURNIVALL, M.A., Trinity Hall, Camb. 8vo. 18s.
 11. THE BRUCE; or, the Book of the most excellent and noble Prince, Robert de Broyss, King of Scots: compiled by Master John Barbour, Archdeacon of Aberdeen. A.D. 1375. Edited from MS. G 23 in the Library of St. John's College, Cambridge, written A.D. 1487; collated with the MS. in the Advocates' Library at Edinburgh, written A.D. 1489, and with Hart's Edition, printed A.D. 1616; with a Preface, Notes, and Glossarial Index, by the Rev. WALTER W. SKEAT, M.A. Part I. 8vo. 12s.
 12. ENGLAND IN THE REIGN OF KING HENRY THE EIGHTH. A Dialogue between Cardinal Pole and Thomas Lupset, Lecturer in Rhetoric at Oxford. By THOMAS STARKEY, Chaplain to the King. Edited, with Preface, Notes, and Glossary, by J. M. COWPER. And with an Introduction, containing the Life and Letters of Thomas Starkey, by the Rev. J. S. BREWER, M.A. Part II. 12s.
(Part I., *Starkey's Life and Letters*, is in preparation.)
 13. A SUPPLICACYON FOR THE BEGGARS. Written about the year 1529, by SIMON FISH. Now re-edited by FREDERICK J. FURNIVALL. With a Supplycacion to our moste Soueraigne Lorde Kynge Henry the Eyght (1544 A.D.), A Supplication of the Poore Commons (1546 A.D.), The Decaye of England by the great multitude of Shepe (1550-3 A.D.). Edited by J. MEADOWS COWPER. 6s.
 14. ON EARLY ENGLISH PRONUNCIATION, with especial reference to Shakspeare and Chaucer. By A. J. ELLIS, F.R.S., F.S.A. Part III. Illustrations of the Pronunciation of the xivth and xvth Centuries. Chaucer, Gower, Wycliffe, Spenser, Shakspeare, Salesbury, Barclay, Hart, Bullokar, Gill. Pronouncing Vocabulary. 10s.
 15. ROBERT CROWLEY'S THIRTY-ONE EPIGRAMS, Voyce of the Last Trumpet, Way to Wealth, etc., 1550-1 A.D. Edited by J. M. COWPER, Esq. 12s.
 16. A TREATISE ON THE ASTROLABE; addressed to his son Lowys, by Geoffrey Chaucer, A.D. 1391. Edited from the earliest MSS. by the Rev. WALTER W. SKEAT, M.A., late Fellow of Christ's College, Cambridge. 10s.
 17. THE COMPLAYNT OF SCOTLANDE, 1549, A.D., with an Appendix of four Contemporary English Tracts. Edited by J. A. H. MURRAY, Esq. Part I. 10s.
 18. THE COMPLAYNT OF SCOTLANDE, etc. Part II. 8s.
 19. OURE LADYES MYROURE, A.D. 1530, edited by the Rev. J. H. BLUNT, M.A., with four full-page photolithographic facsimiles by Cooke and Fotheringham. 24s.
 20. LONELICH'S HISTORY OF THE HOLY GRAIL (ab. 1450 A.D.), translated from the French Prose of SIRE ROBIERS DE BORRON. Re-edited from the Unique MS. in Corpus Christi College, Cambridge, by F. J. FURNIVALL, Esq., M.A. Part I. 8s.

- Edda Saemundar Hinns Froda**—The Edda of Saemund the Learned. From the Old Norse or Icelandic. Part I. with a Mythological Index. 12mo. pp. 152, cloth, 3s. 6d. Part II. with Index of Persons and Places. By BENJAMIN THORPE. 12mo. pp. viii. and 172, cloth. 1866. 4s.; or in 1 Vol. complete, 7s. 6d.
- Edkins.**—CHINA'S PLACE IN PHILOLOGY. An attempt to show that the Languages of Europe and Asia have a common origin. By the Rev. JOSEPH EDKINS. Crown 8vo., pp. xxiii.—403, cloth. 10s. 6d.
- Edkins.**—A VOCABULARY OF THE SHANGHAI DIALECT. By J. EDKINS. 8vo. half-calf, pp. vi. and 151. Shanghai, 1869. 21s.
- Edkins.**—A GRAMMAR OF COLLOQUIAL CHINESE, as exhibited in the Shanghai Dialect. By J. EDKINS, B.A. Second edition, corrected. 8vo half-calf, pp. viii. and 225. Shanghai, 1868. 21s.
- Edkins.**—A GRAMMAR OF THE CHINESE COLLOQUIAL LANGUAGE, commonly called the Mandarin Dialect. By JOSEPH EDKINS. Second edition. 8vo. half-calf, pp. viii. and 279. Shanghai, 1864. £1 10s.
- Eger and Grime; an Early English Romance.** Edited from Bishop Percy's Folio Manuscript, about 1650 A.D. By JOHN W. HALES, M.A., Fellow and late Assistant Tutor of Christ's College, Cambridge, and FREDERICK J. FURNIVALL, M.A., of Trinity Hall, Cambridge. 1 vol. 4to., pp. 64, (only 100 copies printed), bound in the Roxburghe style. 10s. 6d.
- Eitel.**—HANDBOOK FOR THE STUDENT OF CHINESE BUDDHISM. By the Rev. E. J. EITEL, of the London Missionary Society. Crown 8vo. pp. viii., 224, cl., 18s.
- Eitel.**—SKETCHES FROM LIFE AMONG THE HAKKAS OF SOUTHERN CHINA. By the Rev. E. J. EITEL, Hong-Kong. [In preparation.]
- Eitel.**—FENG-SHUR: or, The Rudiments of Natural Science in China. By Rev. E. J. EITEL, M.A., Ph.D. Demy 8vo. sewed, pp. vi. and 84. 6s.
- Eitel.**—BUDDHISM: its Historical, Theoretical, and Popular Aspects. In Three Lectures. By Rev. E. J. EITEL, M.A. Ph.D. Second Edition. Demy 8vo. sewed, pp. 130. 5s.
- Elliot.**—THE HISTORY OF INDIA, as told by its own Historians. The Muhammadan Period. Edited from the Posthumous Papers of the late Sir H. M. ELLIOT, K.C.B., East India Company's Bengal Civil Service, by Prof. JOHN DOWSON, M.R.A.S., Staff College, Sandhurst.
- Vols. I. and II. With a Portrait of Sir H. M. Elliot. 8vo. pp. xxxii. and 542, x. and 580, cloth. 18s. each.
- Vol. III. 8vo. pp. xii. and 627, cloth. 24s.
- Vol. IV. 8vo. pp. x. and 563 cloth 21s
- Vol. V. 8vo. pp. xii. and 576, cloth. 21s.
- Elliot.**—MEMOIRS ON THE HISTORY, FOLKLORE, AND DISTRIBUTION OF THE RACES OF THE NORTH WESTERN PROVINCES OF INDIA; being an amplified Edition of the original Supplementary Glossary of Indian Terms. By the late Sir HENRY M. ELLIOT, K.C.B., of the Hon. East India Company's Bengal Civil Service. Edited, revised, and re-arranged, by JOHN BEAMES, M.R.A.S., Bengal Civil Service; Member of the German Oriental Society, of the Asiatic Societies of Paris and Bengal, and of the Philological Society of London. In 2 vols. demy 8vo., pp. xx., 370, and 396, cloth. With two Lithographic Plates, one full-page coloured Map, and three large coloured folding Maps. 36s.
- Ellis.**—ON NUMERALS, as Signs of Primeval Unity among Mankind. By ROBERT ELLIS, B.D., Late Fellow of St. John's College, Cambridge. Demy 8vo. cloth, pp. viii. and 94. 3s. 6d.
- Ellis.**—THE ASIATIC AFFINITIES OF THE OLD ITALIANS. By ROBERT ELLIS, B.D., Fellow of St. John's College, Cambridge, and author of "Ancient Routes between Italy and Gaul." Crown 8vo. pp. iv. 156, cloth. 1870. 5s.

- English and Welsh Languages.**—THE INFLUENCE OF THE ENGLISH AND Welsh Languages upon each other, exhibited in the Vocabularies of the two Tongues. Intended to suggest the importance to Philologists, Antiquaries, Ethnographers, and others, of giving due attention to the Celtic Branch of the Indo-Germanic Family of Languages. Square, pp. 30, sewed. 1869. 1s.
- Etherington.**—THE STUDENT'S GRAMMAR OF THE HINDÍ LANGUAGE. By the Rev. W. ETHERINGTON, Missionary, Benares. Second edition. Crown 8vo. pp. xiv., 255, and xiii., cloth. 1873. 12s.
- Ethnological Society of London (The Journal of the).** Edited by Professor HUXLEY, F.R.S., President of the Society; GEORGE BUSK, Esq., F.R.S.; Sir JOHN LUBBOCK, Bart., F.R.S.; Colonel A. LANE FOX, Hon. Sec.; THOMAS WRIGHT, Esq., Hon. Sec.; HYDE CLARKE, Esq.; Sub-Editor; and Assistant Secretary, J. H. LAMPREY, Esq. Published Quarterly.
- Vol. I., No. 1. April, 1869. 8vo. pp. 88, sewed. 3s.
 Vol. I., No. 2. July, 1869. 8vo. pp. 117, sewed. 3s.
 Vol. I., No. 3. October, 1869. pp. 137, sewed. 3s.
 Vol. I., No. 4. January, 1870. 8vo. pp. 98, sewed. 3s.
 Vol. II., No. 1. April, 1870. 8vo. pp. 96, sewed. 3s.
 Vol. II., No. 2. July, 1870. 8vo. pp. 95, sewed. 3s.
 Vol. II., No. 3. October, 1870. 8vo. pp. 176, sewed. 3s.
 Vol. II., No. 4. January, 1871. 8vo. pp. 524, sewed. With a Coloured folded Map, and Seven full-page Illustrations. 3s.
- Faber.**—QUELLEN ZU CONFUCIUS UND DEM CONFUCIANISMUS als Einleitung zum Lehrbegriff des Confucius. Von ERNST FABER. 8vo. pp. 27. 2s. 6d.
- Facsimiles of Two Papyri found in a Tomb at Thebes.** With a Translation by SAMUEL BIRCH, LL.D., F.S.A., Corresponding Member of the Institute of France, Academies of Berlin, Herculaneum, etc., and an Account of their Discovery. By A. HENRY RHIND, Esq., F.S.A., etc. In large folio, pp. 30 of text, and 16 plates coloured, bound in cloth. 21s.
- Fausböll.**—THE DASARATHA-JÁTAKA, being the Buddhist Story of King Ráma. The original Páli Text, with a Translation and Notes by V. FAUSBÖLL. 8vo. sewed, pp. iv. and 48. 2s. 6d.
- Fausböll.**—TWO JÁTAKAS. The Original Páli Text, with an English Translation and Critical Notes. By V. FAUSBÖLL. 8vo. pp. 14, sewed. 1s.
- Fausböll.**—FIVE JÁTAKAS, containing a Fairy Tale, a Comical Story, and Three Fables. In the original Páli Text, accompanied with a Translation and Notes. By V. FAUSBÖLL. 8vo. sewed, pp. viii. and 72. 6s.
- Fausböll.**—TEN JÁTAKAS. The Original Páli Text, with a Translation and Notes. By V. FAUSBÖLL. 8vo. sewed, pp. xiii. and 128. 7s. 6d.
- Fiske.**—MYTHS AND MYTH-MAKERS: Old Tales and Superstitions interpreted by Comparative Mythology. By JOHN FISKE, M.A., Assistant Librarian, and late Lecturer on Philosophy at Harvard University. Crown 8vo. cloth, pp. viii. and 252. 10s. 6d.
- Foss.**—NORWEGIAN GRAMMAR, with Exercises in the Norwegian and English Languages, and a List of Irregular Verbs. By FRITHJOF FOSS, Graduate of the University of Norway. Crown 8vo., pp. 50, cloth limp. 2s.
- Foster.**—PRE-HISTORIC RACES OF THE UNITED STATES OF AMERICA. By J. W. FOSTER, LL.D., Author of the "Physical Geography of the Mississippi Valley," etc. With 72 Illustrations. 8vo. cloth, pp. xvi. and 416. 14s.
- Furnivall.**—EDUCATION IN EARLY ENGLAND. Some Notes used as Forewords to a Collection of Treatises on "Manners and Meals in the Olden Time," for the Early English Text Society. By FREDERICK J. FURNIVALL, M.A., Trinity Hall, Cambridge, Member of Council of the Philological and Early English Text Societies. 8vo. sewed, pp. 74. 1s.
- Garrett.**—A CLASSICAL DICTIONARY OF INDIA, illustrative of the Mythology, Philosophy, Literature, Antiquities, Arts, Manners, Customs, etc., of the Hindus. By JOHN GARRETT. 8vo. pp. x. and 798. cloth. 28s.

Garrett.—SUPPLEMENT TO THE ABOVE CLASSICAL DICTIONARY OF INDIA.
By JOHN GARRETT, Director of Public Instruction at Mysore. 8vo. cloth, pp. 160. 7s. 6d.

Gesenius' Hebrew Grammar. Translated from the 17th Edition. By Dr. T. J. CONANT. With grammatical Exercises and a Chrestomathy by the Translator. 8vo. pp. xvi. and 364, cloth. 20s.

Gesenius' Hebrew and English Lexicon of the Old Testament, including the Biblical Chaldee, from the Latin. By EDWARD ROBINSON. Fifth Edition. 8vo. pp. xii. and 1160, cloth. 36s.

God.—BOOK OF GOD. By ☉. 8vo. cloth. Vol. I.: The Apocalypse. pp. 647. 12s. 6d.—Vol. II. An Introduction to the Apocalypse, pp. 752. 14s.—Vol. III. A Commentary on the Apocalypse, pp. 854. 16s.

God.—THE NAME OF GOD IN 405 LANGUAGES. Ἀγνώστῳ Θεῷ. 32mo. pp. 64, sewed. 2d.

Goldstücker.—A DICTIONARY, SANSKRIT AND ENGLISH, extended and improved from the Second Edition of the Dictionary of Professor H. H. WILSON, with his sanction and concurrence. Together with a Supplement, Grammatical Appendices, and an Index, serving as a Sanskrit-English Vocabulary. By THEODOR GOLDSTÜCKER. Parts I. to VI. 4to. pp. 400. 1856-1863. 6s. each.

Goldstücker.—PANINI: His Place in Sanskrit Literature. An Investigation of some Literary and Chronological Questions which may be settled by a study of his Work. A separate impression of the Preface to the Facsimile of MS. No. 17 in the Library of Her Majesty's Home Government for India, which contains a portion of the MANAVA-KALPA-SUTRA, with the Commentary of KUMARILA-SWAMIN. By THEODOR GOLDSTÜCKER. Imperial 8vo. pp. 268, cloth. 21s.

Goldstücker.—ON THE DEFICIENCIES IN THE PRESENT ADMINISTRATION OF HINDU LAW; being a paper read at the Meeting of the East India Association on the 8th June, 1870. By THEODOR GOLDSTÜCKER, Professor of Sanskrit in University College, London, &c. Demy 8vo. pp. 56, sewed. 1s. 6d.

Gough.—THE VAISESHIKA APHORISMS OF KAṆĀDA. With Comments from the Upaskāra of Sankara Misra and the Vivṛitti of Jaya Nārāyaṇa Tarkapanchāyana. Translated by ARCHIBALD EDWARD GOUGH, B.A. 8vo. cloth, pp. iii. and 310. 14s.

Gover.—THE FOLK-SONGS OF SOUTHERN INDIA. By CHARLES E. GOVER. 8vo. pp. xxiii. and 299, cloth. 10s. 6d.

Grammatography.—A MANUAL OF REFERENCE to the Alphabets of Ancient and Modern Languages. Based on the German Compilation of F. BALLHORN. Royal 8vo. pp. 80, cloth. 7s. 6d.

The "Grammatography" is offered to the public as a compendious introduction to the reading of the most important ancient and modern languages. Simple in its design, it will be consulted with advantage by the philological student, the amateur linguist, the bookseller, the corrector of the press, and the diligent compositor.

ALPHABETICAL INDEX.

Afghan (or Pushto).	Czechian (or Bohemian).	Hebrew (current hand).	Polish.
Amharic.	Danish.	Hebrew (Judæo-Ger-)	Pushto (or Afghan).
Anglo-Saxon.	Demotic.	Hungarian.	[man]. Romaic (Modern Greek)
Arabic.	Estrangelo.	Illyrian.	Russian.
Arabic Ligatures.	Ethiopic.	Irish.	Runes.
Aramaic.	Etruscan.	Italian (Old).	Samaritan.
Archaic Characters.	Georgian.	Japanese.	Sanskrit.
Armenian.	German.	Javanese.	Servian.
Assyrian Cuneiform.	Glagolitic.	Lettish.	Slavonic (Old).
Bengali.	Gothic.	Mantshu.	Sorbian (or Wendish).
Bohemian (Czechian).	Greek.	Median Cuneiform.	Swedish.
Búgfs.	Greek Ligatures.	Modern Greek (Romaic)	Syriac.
Burmese.	Greek (Archaic).	Mongolian.	Tamil.
Canarese (or Carnâtaca).	Gujerati (or Guzzerate).	Numidian.	Telugu.
Chinese.	Hieratic.	Old Slavonic (or Cyrillic).	Tibetan.
Coptic.	Hieroglyphics.	Palmyrenian.	Turkish.
Croato-Glagolitic.	Hebrew.	Persian.	Wallachian.
Cufic.	Hebrew (Archaic).	Persian Cuneiform.	Wendish (or Sorbian).
Cyrillic (or Old Slavonic).	Hebrew (Rabbinical).	Phœnician.	Zend.

- Grassmann.**—WÖRTERBUCH ZUM RIG-VEDA. VON HERMANN GRASSMANN, Professor am Marienstifts-Gymnasium zu Stettin. Part I. 8vo. pp. viii. and 297. 5s. This important work will be completed in 6 Parts.
- Green.**—SHAKESPEARE AND THE EMBLEM-WRITERS: an Exposition of their Similarities of Thought and Expression. Preceded by a View of the Emblem-Book Literature down to A.D. 1616. By HENRY GREEN, M.A. In one volume, pp. xvi. 572, profusely illustrated with Woodcuts and Photolith. Plates, elegantly bound in cloth gilt, large medium 8vo. £1 11s. 6d; large imperial 8vo. 1870. £2 12s. 6d.
- Grey.**—HANDBOOK OF AFRICAN, AUSTRALIAN, AND POLYNESIAN PHILOLOGY, as represented in the Library of His Excellency Sir George Grey, K.C.B., Her Majesty's High Commissioner of the Cape Colony. Classed, Annotated, and Edited by Sir GEORGE GREY and Dr. H. I. BLEEK.
- Vol. I. Part 1.—South Africa. 8vo. pp. 186. 7s. 6d.
 Vol. I. Part 2.—Africa (North of the Tropic of Capricorn). 8vo. pp. 70. 2s.
 Vol. I. Part 3.—Madagascar. 8vo. pp. 24. 1s.
 Vol. II. Part 1.—Australia. 8vo. pp. iv. and 44. 1s. 6d.
 Vol. II. Part 2.—Papuan Languages of the Loyalty Islands and New Hebrides, comprising those of the Islands of Nengone, Lifu, Aneitum, Tana, and others. 8vo. p. 12. 6d.
 Vol. II. Part 3.—Fiji Islands and Rotuma (with Supplement to Part II., Papuan Languages, and Part I., Australia). 8vo. pp. 34. 1s.
 Vol. II. Part 4.—New Zealand, the Chatham Islands, and Auckland Islands. 8vo. pp. 76. 3s. 6d.
 Vol. II. Part 4 (continuation).—Polynesia and Borneo. 8vo. pp. 77-154. 3s. 6d.
 Vol. III. Part 1.—Manuscripts and Incunables. 8vo. pp. viii. and 24. 2s.
 Vol. IV. Part 1.—Early Printed Books. England. 8vo. pp. vi. and 266.
- Grey.**—MAORI MEMENTOS: being a Series of Addresses presented by the Native People to His Excellency Sir George Grey, K.C.B., F.R.S. With Introductory Remarks and Explanatory Notes; to which is added a small Collection of Laments, etc. By CH. OLIVER B. DAVIS. 8vo. pp. iv. and 228, cloth. 12s.
- Griffin.**—THE RAJAS OF THE PUNJAB. Being the History of the Principal States in the Punjab, and their Political Relations with the British Government. By LEPEL H. GRIFFIN, Bengal Civil Service; Under Secretary to the Government of the Punjab, Author of "The Punjab Chiefs," etc. Second edition. Royal 8vo., pp. xiv. and 630. 21s.
- Griffith.**—SCENES FROM THE RAMAYANA, MEGHADUTA, ETC. Translated by RALPH T. H. GRIFFITH, M.A., Principal of the Benares College. Second Edition. Crown 8vo. pp. xviii., 244, cloth. 6s.
- CONTENTS.—Preface—Ayodhya—Ravan Doomed—The Birth of Rama—The Heir apparent—Manthara's Guile—Dasaratha's Oath—The Step-mother—Mother and Son—The Triumph of Love—Farewell!—The Hermit's Son—The Trial of Truth—The Forest—The Rape of Sita—Rama's Despair—The Messenger Cloud—Khumbakarna—The Suppliant Dove—True Glory—Feed the Poor—The Wise Scholar.
- Griffith.**—THE RĀMĀYAN OF VĀLMĪKI. Translated into English verse. By RALPH T. H. GRIFFITH, M.A., Principal of the Benares College. Vol. I., containing Books I. and II. Demy 8vo pp. xxxii. 440, cloth. 1870. 18s.
- Vol. II., containing Book II., with additional Notes and Index of Names. pp. 504 cloth. 18s.
- Vol. III. pp. v. and 371, cloth. 1872. 15s.
- Vol. IV. pp. viii. and 432. 1873. 18s.
- Grout.**—THE ISIZULU: a Grammar of the Zulu Language; accompanied with an Historical Introduction, also with an Appendix. By Rev. LEWIS GROUT. 8vo. pp. lii. and 432, cloth. 21s.
- Gubernatis.**—ZOOLOGICAL MYTHOLOGY; or, the Legends of Animals. By ANGELO DE GUBERNATIS, Professor of Sanskrit and Comparative Literature in the Instituto di Studii Superiori e di Perfezionamento at Florence, etc. In 2 vols. 8vo. pp. xxvi. and 432, vii. and 442. 28s.
- Gundert.**—A MALAYALAM AND ENGLISH DICTIONARY. By Rev. H. GUNDELT, D. Ph. Royal 8vo. pp. viii. and 1116. £2 10s.

- Haldeman.**—PENNSYLVANIA DUTCH: a Dialect of South Germany with an Infusion of English. By S. S. HALDEMAN, A.M., Professor of Comparative Philology in the University of Pennsylvania, Philadelphia. 8vo. pp. viii. and 70, cloth. 1872. 3s. 6d.
- Hans Breitmann Ballads.**—See under LELAND.
- Hassoun.**—THE DIWAN OF HATIM TAI. An Old Arabic Poet of the Sixth Century of the Christian Era. Edited by R. HASSOUN. With Illustrations. 4to. pp. 43. 3s. 6d.
- Haug.**—THE BOOK OF ARDA VIRAF. The Pahlavi text prepared by Destur Hoshangji Jamaspji Asa. Revised and collated with further MSS., with an English translation and Introduction, and an Appendix containing the Texts and Translations of the Gosht-i Fryano and Hadokht Nask. By MARTIN HAUG, Ph.D., Professor of Sanskrit and Comparative Philology at the University of Munich. Assisted by E. W. WEST, Ph.D. Published by order of the Bombay Government. 8vo. sewed, pp. lxxx., v., and 316. £1 5s.
- Haug.**—ESSAYS ON THE SACRED LANGUAGE, WRITINGS, AND RELIGION OF THE PARSEES. By MARTIN HAUG, Dr. Phil. Superintendent of Sanskrit Studies in the Poona College. 8vo. pp. 278, cloth. £2 2s.
- Haug.**—A LECTURE ON AN ORIGINAL SPEECH OF ZOROASTER (Yasna 45), with remarks on his age. By MARTIN HAUG, Ph.D. 8vo. pp. 28, sewed. Bombay, 1865. 2s.
- Haug.**—OUTLINE OF A GRAMMAR OF THE ZEND LANGUAGE. By MARTIN HAUG, Dr. Phil. 8vo. pp. 82, sewed. 14s.
- Haug.**—THE AITAREYA BRAHMANAM OF THE RIG VEDA: containing the Earliest Speculations of the Brahmans on the meaning of the Sacrificial Prayers, and on the Origin, Performance, and Sense of the Rites of the Vedic Religion. Edited, Translated, and Explained by MARTIN HAUG, Ph.D., Superintendent of Sanskrit Studies in the Poona College, etc., etc. In 2 Vols. Crown 8vo. Vol. I. Contents, Sanskrit Text, with Preface, Introductory Essay, and a Map of the Sacrificial Compound at the Soma Sacrifice, pp. 312. Vol. II. Translation with Notes, pp. 544. £2 2s.
- Haug.**—AN OLD ZAND-PAHLAVI GLOSSARY. Edited in the Original Characters, with a Transliteration in Roman Letters, an English Translation, and an Alphabetical Index. By DESTUR HOSHANGJI JAMASPJI, High-priest of the Parsis in Malwa, India. Revised with Notes and Introduction by MARTIN HAUG, Ph.D., late Superintendent of Sanskrit Studies in the Poona College, Foreign Member of the Royal Bavarian Academy. Published by order of the Government of Bombay. 8vo. sewed, pp. lvi. and 132. 15s.
- Haug.**—AN OLD PAHLAVI-PAZAND GLOSSARY. Edited, with an Alphabetical Index, by DESTUR HOSHANGJI JAMASPJI ASA, High Priest of the Parsis in Malwa, India. Revised and Enlarged, with an Introductory Essay on the Pahlavi Language, by MARTIN HAUG, Ph.D. Published by order of the Government of Bombay. 8vo. pp. xvi. 152, 268, sewed. 1870. 28s.
- Haug.**—ESSAY ON THE PAHLAVI LANGUAGE. By MARTIN HAUG, Ph.D., Professor of Sanskrit and Comparative Philology at the University of Munich, Member of the Royal Bavarian Academy of Sciences, etc. (From the PAHLAVI-PAZAND GLOSSARY, edited by DESTUR HOSHANGJI and M. HAUG.) 8vo. pp. 152, sewed. 1870. 3s. 6d.
- Haug.**—THE RELIGION OF THE ZOROASTRIANS, as contained in their Sacred Writings. With a History of the Zend and Pehlevi Literature, and a Grammar of the Zend and Pehlevi Languages. By MARTIN HAUG, Ph.D., late Superintendent of Sanskrit Studies in the Poona College. 2 vols. 8vo. [In preparation.]
- Heaviside.**—AMERICAN ANTIQUITIES; or, the New World the Old, and the Old World the New. By JOHN T. C. HEAVISIDE. 8vo. pp. 46, sewed. 1s. 6d.
- Hepburn.**—A JAPANESE AND ENGLISH DICTIONARY. With an English and Japanese Index. By J. C. HEPBURN, M.D., LL.D. Second edition. Imperial 8vo. cloth, pp. xxxii., 632 and 201. 8s. 8s.

- Hepburn.**—JAPANESE-ENGLISH AND ENGLISH-JAPANESE DICTIONARY. By J. C. HEPBURN, M.D., LL.D. Abridged by the Author from his larger work. Small 4to. cloth, pp. vi. and 206. 1873. 12s. 6d.
- Hernisz.**—A GUIDE TO CONVERSATION IN THE ENGLISH AND CHINESE LANGUAGES, for the use of Americans and Chinese in California and elsewhere. By STANISLAS HERNISZ. Square 8vo. pp. 274, sewed. 10s. 6d.
The Chinese characters contained in this work are from the collections of Chinese groups, engraved on steel, and cast into moveable types, by Mr. Marcellin Legrand, engraver of the Imperial Printing Office at Paris. They are used by most of the missions to China.
- Hincks.**—SPECIMEN CHAPTERS OF AN ASSYRIAN GRAMMAR. By the late Rev. E. HINCKS, D.D., Hon. M.R.A.S. 8vo., pp. 44, sewed. 1s.
- History of the Sect of Maharajahs; or, VALLABHACHARYAS IN WESTERN INDIA.** With a Steel Plate. 8vo. pp. 384, cloth. 12s.
- Hoffmann.**—SHOPPING DIALOGUES, in Japanese, Dutch, and English. By Professor J. HOFFMANN. Oblong 8vo. pp. xiii. and 44, sewed. 3s.
- Hoffmann.**—A JAPANESE GRAMMAR. By J. J. HOFFMANN, Ph. Doc., Member of the Royal Academy of Sciences, etc., etc. Published by command of His Majesty's Minister for Colonial Affairs. Imp. 8vo. pp. viii. 352, sewed. 12s. 6d.
- Historia y fundacion de la Ciudad de Tlaxcala, y sus cuatro cavernas.** Sacada por Francisco de Loaiza de lengua Castellana à esta Mexicana. Año de 1718. Con una Traducccion Castellana, publicado por S. Leon Reinisch. In one volume folio, with 25 Photographic Plates. [In preparation.]
- Howse.**—A GRAMMAR OF THE CREE LANGUAGE. With which is combined an analysis of the Chippeway Dialect. By JOSEPH HOWSE, Esq., F.R.G.S. 8vo. pp. xx. and 324, cloth. 7s. 6d.
- Hunter.**—A COMPARATIVE DICTIONARY OF THE LANGUAGES OF INDIA AND HIGH ASIA, with a Dissertation, based on The Hodgson Lists, Official Records, and Manuscripts. By W. W. HUNTER, B.A., M.R.A.S., Honorary Fellow, Ethnological Society, of Her Majesty's Bengal Civil Service. Folio, pp. vi. and 224, cloth. £2 2s.
- Hunter.**—STATISTICAL ACCOUNT OF THE PROVINCES OF BENGAL. By W. W. HUNTER, LL.D., Director-General of Statistics to the Government of India, etc., Author of 'The Annals of Rural Bengal,' etc. In 6 vols. Demy 8vo. [Shortly.]
- Ikhwānu-s Safā.**—IHKWĀNU-S SAFĀ; or, BROTHERS OF PURITY. Describing the Contention between Men and Beasts as to the Superiority of the Human Race. Translated from the Hindustānī by Professor J. Dowson, Staff College, Sandhurst. Crown 8vo. pp. viii. and 156, cloth. 7s.
- Indian Antiquary (The).**—A Journal of Oriental Research in Archaeology, History, Literature, Languages, Philosophy, Religion, Folklore, etc. Edited by JAMES BURGESS, M.R.A.S., F.R.G.S. 4to. Published 12 numbers per annum. Subscription £2.
- Inman.**—ANCIENT PAGAN AND MODERN CHRISTIAN SYMBOLISM EXPOSED AND EXPLAINED. By THOMAS INMAN, M.D. (London), Physician to the Royal Infirmary, Liverpool. 8vo. pp. xvi. 68, stiff covers, with numerous illustrations. 1870. 5s.
- Inman.**—ANCIENT FAITHS EMBODIED IN ANCIENT NAMES. By THOMAS INMAN, M.D. Vol. I. Second edition. With 4 plates and numerous woodcuts. Royal 8vo. cloth, pp. xlv. and 792. 1872. £1 10s.
Vol. II. Second Edition. With 9 plates and numerous woodcuts. Royal 8vo. cloth, pp. xvi. and 1028. 1873. £1 10s. [Vol. III. in preparation.]
- Jaeschke.**—A SHORT PRACTICAL GRAMMAR OF THE TIBETAN LANGUAGE, with special Reference to the Spoken Dialects. By H. A. JAESCHKE, Moravian Missionary. 8vo sewed, pp. ii. and 56. 7s. 6d.
- Jaeschke.**—ROMANIZED TIBETAN AND ENGLISH DICTIONARY, each word being re-produced in the Tibetan as well as in the Roman character. By H. A. JAESCHKE, Moravian Missionary. 8vo. pp. ii. and 158, sewed. 21s.

Jaiminiya-Nyâya-Mâlâ-Vistara.—See under **AUCTORES SANSCRITI.**

Jenkins's Vest-Pocket Lexicon.—AN ENGLISH DICTIONARY of all except Familiar Words; including the principal Scientific and Technical Terms, and Foreign Moneys, Weights and Measures. By JABEZ JENKINS. 64mo., pp. 564, cloth. 1s. 6d.

Johnson.—ORIENTAL RELIGIONS, AND THEIR RELATION TO UNIVERSAL RELIGION. By SAMUEL JOHNSON. Large 8vo., pp. vi. and 802, handsomely bound in cloth. 24s.

Julien.—SYNTAXE NOUVELLE DE LA LANGUE CHINOISE.

Vol. I.—Fondée sur la position des mots, suivie de deux traités sur les particules et les principaux termes de grammaire, d'une table des idiotismes, de fables, de légendes et d'apologues traduits mot à mot. 8vo. sewed. 1869. 20s.

Vol. II.—Fondée sur la position des mots confirmée par l'analyse d'un texte ancien, suivie d'un petit Dictionnaire du Roman des DEUX COUSINES, et de Dialogues dramatiques traduits mot à mot, par M. STANISLAS JULIEN, de l'Institut. 8vo. pp. 436, sewed. 1870. 20s.

Justi.—HANDBUCH DER ZENDSPRACHE, VON FERDINAND JUSTI. Altbac-trisches Woerterbuch. Grammatik Chrestomathie. Four parts, 4to. sewed, pp. xxii. and 424. Leipzig, 1864. 24s.

Kachchayano's Grammar (The Pali Text of), with ENGLISH GRAMMAR. See under **MASON.**

Kafir Essays, and other Pieces; with an English Translation. Edited by the Right Rev. the BISHOP OF GRAHAMSTOWN. 32mo. pp. 84, sewed. 2s 6d.

Kalidasa.—RAGHUVANSA. By KALIDASA. No. 1. (Cantos 1-3.) With Notes and Grammatical Explanations, by Rev. K. M. BANERJEA, Second Professor of Bishop's College, Calcutta; Member of the Board of Examiners, Fort-William; Honorary Member of the Royal Asiatic Society, London. 8vo. sewed, pp. 70. 4s. 6d.

Kern.—THE BRHAT-SANHITĀ; or, Complete System of Natural Astrology of Varâha-Mihira. Translated from Sanskrit into English by Dr. H. KERN, Professor of Sanskrit at the University of Leyden. Part I. 8vo. pp. 50, stitched. Parts 2 and 3 pp. 51-154. Part 4 pp. 155-210. Part 5 pp. 211-266. Price 2s. each part. [Will be completed in Nine Parts.]

Khirad-Afroz (The Illuminator of the Understanding). By Maulavî Hafizud-dîn. A new edition of the Hindûstânî Text, carefully revised, with Notes, Critical and Explanatory. By EDWARD B. EASTWICK, M.P., F.R.S., F.S.A., M.R.A.S., Professor of Hindûstânî at the late East India Company's College at Haileybury. 8vo. cloth, pp. xiv. and 321. 18s.

Khuddaka Patha.—See under **CHILDERS.**

Kidd.—CATALOGUE OF THE CHINESE LIBRARY OF THE ROYAL ASIATIC SOCIETY. By the Rev. S. KIDD. 8vo. pp. 58, sewed. 1s.

Kielhorn.—A GRAMMAR OF THE SANSKRIT LANGUAGE. By F. KIELHORN, Ph.D., Superintendent of Sanskrit Studies in Deccan College. Registered under Act xxv. of 1867. Demy 8vo. pp. xvi. 260. cloth. 1870. 10s. 6d.

Kilgour.—THE HEBREW OR IBERIAN RACE, including the Pelasgians, the Phenicians, the Jews, the British, and others. By HENRY KILGOUR. 8vo. sewed, pp. 76. 1872. 2s. 6d.

Kistner.—BUDDHA AND HIS DOCTRINES. A Bibliographical Essay. By OTTO KISTNER. Imperial 8vo., pp. iv. and 32, sewed. 2s. 6d.

Koran (The). Arabic text, lithographed in Oudh, A.H. 1284 (1867). 16mo. pp. 942, bound in red goatskin, Oriental style, silver tooling. 7s. 6d.

The printing, as well as the outer appearance of the book, is extremely tasteful, and the characters, although small, read very easily. As a cheap edition for reference this is preferable to any other, and its price puts it within the reach of every Oriental scholar. It is now first imported from India.

Kroeger.—THE MINNESINGER OF GERMANY. By A. E. KROEGER. 12mo. cloth, pp. vi. and 284. 7s.

CONTENTS.—Chapter I. The Minnesinger and the Minnesong.—II. The Minnelay.—III. The Divine Minnesong.—IV. Walther von der Vogelweide.—V. Ulrich von Lichtenstein.—VI. The Metrical Romances of the Minnesinger and Gottfried von Strassburg's "Tristan and Isolde."

Laghu Kaumudī. A Sanskrit Grammar. By Varadarāja. With an English Version, Commentary, and References. By JAMES R. BALLANTYNE, LL.D., Principal of the Sanskrit College, Benares. 8vo. pp. xxxvi. and 424, cloth. £1 11s. 6d.

Lee.—A TRANSLATION OF THE BĀLĀVATĀRO : a Native Grammar of the Pali Language. With the Romanized Text, the Nagari Text, and Copious Explanatory Notes. By LIONEL F. LEE. In one vol. 8vo. (*In preparation*).

Legge.—THE CHINESE CLASSICS. With a Translation, Critical and Exegetical Notes, Prolegomena, and Copious Indexes. By JAMES LEGGE, D.D., of the London Missionary Society. In seven vols.

Vol. I. containing Confucian Analects, the Great Learning, and the Doctrine of the Mean. 8vo. pp. 526, cloth. £2 2s.

Vol. II., containing the Works of Mencius. 8vo. pp. 634, cloth. £2 2s.

Vol. III. Part I. containing the First Part of the Shoo-King, or the Books of Tang, the Books of Yu, the Books of Hea, the Books of Shang, and the Prolegomena. Royal 8vo. pp. viii. and 280, cloth. £2 2s.

Vol. III. Part II. containing the Fifth Part of the Shoo-King, or the Books of Chow, and the Indexes. Royal 8vo. pp. 281—736, cloth. £2 2s.

Vol. IV. Part I. containing the First Part of the She-King, or the Lessons from the States; and the Prolegomena. Royal 8vo. cloth, pp. 182—244. £2 2s.

Vol. IV. Part II. containing the First Part of the She-King, or the Minor Odes of the Kingdom, the Greater Odes of the Kingdom, the Sacrificial Odes and Praise-Songs, and the Indexes. Royal 8vo. cloth, pp. 540. £2 2s.

Vol. V. Part I. containing Dukes Yin, Hwan, Chwang, Min, He, Wan, Seuen, and Ch'ing; and the Prolegomena. Royal 8vo. cloth, pp. xii., 148 and 410. £2 2s.

Vol. V. Part II. Contents:—Dukes Seang, Ch'aon, Ting, and Gal, with Tso's Appendix, and the Indexes. Royal 8vo. cloth, pp. 526. £2 2s.

Legge.—THE LIFE AND TEACHINGS OF CONFUCIUS, with Explanatory Notes. By JAMES LEGGE, D.D. Reproduced for General Readers from the Author's work, "The Chinese Classics," with the original Text. Second edition. Crown 8vo. cloth, pp. vi. and 338. 10s. 6d.

Legge.—THE LIFE AND WORKS OF MENCIOUS. By JAMES LEGGE, D.D. [*Nearly ready.*]

Leigh.—THE RELIGION OF THE WORLD. By H. STONE LEIGH. 12mo. pp. xii. 66, cloth. 1869. 2s. 6d.

Leitner.—THE RACES AND LANGUAGES OF DARDISTAN. By G. W. LEITNER, M.A., Ph.D., Honorary Fellow of King's College London, etc.; late on Special Duty in Kashmir. Parts 1 and 2.—5s. each. Part 3.—10s. 6d.

Leland.—THE ENGLISH GIPSIES AND THEIR LANGUAGE. By CHARLES G. LELAND. Second Edition. Crown 8vo. cloth, pp. 276. 1874. 7s. 6d.

Leland.—THE BREITMANN BALLADS. THE ONLY AUTHORIZED EDITION. Complete in 1 vol., including Nineteen Ballads illustrating his Travels in Europe (never before printed), with Comments by Fritz Schwackenhammer. By CHARLES G. LELAND. Crown 8vo. handsomely bound in cloth, pp. xxviii. and 292. 6s.

HANS BREITMANN'S PARTY. With other Ballads. By CHARLES G. LELAND. Tenth Edition. Square, pp. xvi. and 74, sewed. 1s.

HANS BREITMANN'S CHRISTMAS. With other Ballads. By CHARLES G. LELAND. Second edition. Square, pp. 80, sewed. 1s.

HANS BREITMANN AS A POLITICIAN. By CHARLES G. LELAND. Second edition. Square, pp. 72, sewed. 1s.

HANS BREITMANN IN CHURCH. With other Ballads. By CHARLES G. Leland. With an Introduction and Glossary. Second edition. Square, pp. 80, sewed. 1870. 1s.

HANS BREITMANN AS AN UHLAN. Six New Ballads, with a Glossary. Square, pp. 72, sewed. 1s.

The first four Parts may be had in one Volume:—

BREITMANN BALLADS. *Four Series complete.* CONTENTS:—Hans Breitmann's Party. Hans Breitmann's Christmas. Hans Breitmann as a Politician. Hans Breitmann in Church. With other Ballads. By CHARLES G. LELAND. With Introductions and Glossaries. Square, pp. 300, cloth. 1870. 4s. 6d.

Leonowens.—THE ROMANCE OF SIAMESE HAREM LIFE. By MRS. ANNA H. LEONOWENS, Author of "The English Governess at the Siamese Court." With 17 Illustrations, principally from Photographs, by the permission of J. Thomson, Esq. Crown 8vo. cloth, pp. viii. and 278. 14s.

Lesley.—MAN'S ORIGIN AND DESTINY, Sketched from the Platform of the Sciences, in a Course of Lectures delivered before the Lowell Institute, in Boston, in the Winter of 1865-6. By J. P. LESLEY, Member of the National Academy of the United States, Secretary of the American Philosophical Society. Numerous Woodcuts. Crown 8vo. pp. 392, cloth. 10s. 6d.

Liherien hag Avielen; or, the Catholic Epistles and Gospels for the Day up to Ascension. Translated for the first time into the BREHONEC of Brittany. Also in three other parallel columns a New Version of the same into BREIZOUNEC (commonly called Breton and Armorican); a Version into WELSH, mostly new, and closely resembling the Breton; and a Version GAELIC or MANX or CERNAWEG; with Illustrative Articles by CHRISTOLL TERRIEN and CHARLES WARING SAXTON, D.D. Ch. Ch., Oxford. The Penitential Psalms are also added. Oblong 4to. pp. 156, sewed. 5s.

Lobscheid.—ENGLISH AND CHINESE DICTIONARY, with the Punti and Mandarin Pronunciation. By the Rev. W. LOBSCHIED, Knight of Francis Joseph, C.M.I.R.G.S.A., N.Z.B.S.V., etc. Folio, pp. viii. and 2016. In Four Parts. £8 8s.

Lobscheid.—CHINESE AND ENGLISH DICTIONARY, Arranged according to the Radicals. By the Rev. W. LOBSCHIED, Knight of Francis Joseph, C.M.I.R.G.S.A., N.Z.B.S.V., &c. 1 vol. imp. 8vo. double columns, pp. 600, bound. £2 8s.

Ludewig (Hermann E.)—THE LITERATURE OF AMERICAN ABORIGINAL LANGUAGES. With Additions and Corrections by Professor WM. W. TURNER. Edited by NICOLAS TRÜBNER. 8vo. fly and general Title, 2 leaves; Dr. Ludewig's Preface, pp. v.—viii.; Editor's Preface, pp. iv.—xii.; Biographical Memoir of Dr. Ludewig, pp. xiii.—xiv.; and Introductory Biographical Notices, pp. xiv.—xxiv., followed by List of Contents. Then follow Dr. Ludewig's Bibliotheca Glottica, alphabetically arranged, with Additions by the Editor, pp. 1—209; Professor Turner's Additions, with those of the Editor to the same, also alphabetically arranged, pp. 210—246; Index, pp. 247—256; and List of Errata, pp. 257, 258. Handsomely bound in cloth. 10s. 6d.

Macgowan.—A MANUAL OF THE AMOY COLLOQUIAL. By Rev. J. MACGOWAN, of the London Missionary Society. 8vo. sewed, pp. xvii. and 200. Amoy, 1871. £1 1s.

MacLay and Baldwin.—AN ALPHABETIC DICTIONARY OF THE CHINESE LANGUAGE IN THE FOOCHEW DIALECT. By Rev. R. S. MACLAY, D.D., of the Methodist Episcopal Mission, and Rev. C. C. BALDWIN, A.M., of the American Board of Mission. 8vo. half-bound, pp. 1132. Foochow, 1871. £4 4s.

Maha-Vira-Charita; or, the Adventures of the Great Hero Rama. An Indian Drama in Seven Acts. Translated into English Prose from the Sanskrit of Bhavabhūti. By JOHN PICKFORD, M.A. Crown 8vo. cloth. 5s.

Maino-i-Khard (The Book of the).—The Pazand and Sanskrit Texts (in Roman characters) as arranged by Neriosengh Dhaval, in the fifteenth century. With an English translation, a Glossary of the Pazand texts, containing the Sanskrit, Rosian, and Pahlavi equivalents, a sketch of Pazand Grammar, and an Introduction. By E. W. WEST. 8vo. sewed, pp. 484. 1871. 16s.

- Manava-Kalpa-Sutra**; being a portion of this ancient Work on Vaidik Rites, together with the Commentary of KUMARILA-SWAMIN. A Facsimile of the MS. No. 17, in the Library of Her Majesty's Home Government for India. With a Preface by THEODOR GOLDSTÜCKER. Oblong folio, pp. 268 of letter-press and 121 leaves of facsimiles. Cloth. £4 4s.
- Manipulus Vocabulorum**; A Rhyming Dictionary of the English Language. By Peter Levens (1570) Edited, with an Alphabetical Index, by HENRY B. WHEATLEY. 8vo. pp. xvi. and 370, cloth. 14s.
- Manning**.—AN INQUIRY INTO THE CHARACTER AND ORIGIN OF THE POSSESSIVE AUGMENT in English and in Cognate Dialects. By the late JAMES MANNING, Q.A.S., Recorder of Oxford. 8vo. pp. iv. and 90. 2s.
- Markham**.—QUICHUA GRAMMAR and DICTIONARY. Contributions towards a Grammar and Dictionary of Quichua, the Language of the Yncas of Peru; collected by CLEMENTS R. MARKHAM, F.S.A., Corr. Mem. of the University of Chile. Author of "Cuzco and Lima," and "Travels in Peru and India." In one vol. crown 8vo., pp. 223, cloth. £1. 1s.
- Markham**.—OLLANTA: A DRAMA IN THE QUICHUA LANGUAGE. Text, Translation, and Introduction, By CLEMENTS R. MARKHAM, F.R.G.S. Crown 8vo., pp. 128, cloth. 7s. 6d.
- Marsden**.—NUMISMATA ORIENTALIA ILLUSTRATA. The Plates of the Oriental Coins, Ancient and Modern, of the Collection of the late William Marsden, F.R.S., etc.; etc., engraved from drawings made under his direction. 4to. pp. iv. (explanatory advertisement). cloth, gilt top. £1 11s. 6d.
- Mason**.—BURMAH: its People and Natural Productions; or Notes on the Nations, Fauna, Flora, and Minerals of Tenasserim, Pegu, and Burmah. By Rev. F. MASON, D.D., M.R.A.S., Corresponding Member of the American Oriental Society, of the Boston Society of Natural History, and of the Lyceum of Natural History, New York. 8vo. pp. xviii. and 914, cloth. Rangoon, 1860. 30s.
- Mason**.—THE PALI TEXT OF KACHCHAYANO'S GRAMMAR, WITH ENGLISH ANNOTATIONS. By FRANCIS MASON, D.D. I. The Text Aphorisms, 1 to 673. II. The English Annotations, including the various Readings of six independent Burmese Manuscripts, the Singalese Text on Verbs, and the Cambodian Text on Syntax. To which is added a Concordance of the Aphorisms. In Two Parts. 8vo. sewed, pp. 208, 75, and 28. Toongoo, 1871. £1 11s. 6d.
- Mathews**.—ABRAHAM BEN EZRA'S UNEDITED COMMENTARY ON THE CAN-TICLES, the Hebrew Text after two MS., with English Translation by H. J. MATHEWS, B.A., Exeter College, Oxford. Cr. 8vo. cloth limp, pp. x., 34, 24. 2s. 6d.
- Mathuráprasáda Misra**.—A TRILINGUAL DICTIONARY, being a comprehensive Lexicon in English, Urdú, and Hindí, exhibiting the Syllabication, Pronunciation, and Etymology of English Words, with their Explanation in English, and in Urdú and Hindí in the Roman Character. By MATHURÁ-PRASÁDA MISRA, Second Master, Queen's College, Benares. 8vo. pp. xv. and 1330, cloth. Benares, 1865. £2 2s.
- Mayers**.—ILLUSTRATIONS OF THE LAMAIST SYSTEM IN TIBET, drawn from Chinese Sources. By WILLIAM FREDERICK MAYERS, Esq., of Her Britannic Majesty's Consular Service, China. 8vo. pp. 24, sewed. 1869. 1s. 6d.
- Medhurst**.—CHINESE DIALOGUES, QUESTIONS, and FAMILIAR SENTENCES, literally translated into English, with a view to promote commercial intercourse and assist beginners in the Language. By the late W. H. MEDHURST, D.D. A new and enlarged Edition. 8vo. pp. 226. 18s.
- Megha-Duta (The)**. (Cloud-Messenger.) By Kālidāsa. Translated from the Sanskrit into English verse, with Notes and Illustrations. By the late H. H. WILSON, M.A., F.R.S., Boden Professor of Sanskrit in the University of Oxford, etc., etc. The Vocabulary by FRANCIS JOHNSON, sometime Professor of Oriental Languages at the College of the Honourable the East India Company, Haileybury. New Edition. 4to. cloth, pp. xi. and 180. 10s. 6d.

Memoirs read before the ANTHROPOLOGICAL SOCIETY OF LONDON, 1863
1864. 8vo., pp. 542, cloth. 21s.

Memoirs read before the ANTHROPOLOGICAL SOCIETY OF LONDON, 1865-6.
Vol. II. 8vo., pp. x. 464, cloth. 21s.

Moffat.—THE STANDARD ALPHABET PROBLEM; or the Preliminary Subject of a General Phonic System, considered on the basis of some important facts in the Sechwana Language of South Africa, and in reference to the views of Professors Lepsius, Max Müller, and others. A contribution to Phonetic Philology. By ROBERT MOFFAT, junr., Surveyor, Fellow of the Royal Geographical Society. 8vo. pp. xxviii. and 174, cloth. 7s. 6d.

Molesworth.—A DICTIONARY, MARATHI and ENGLISH. Compiled by J. T. MOLESWORTH, assisted by GEORGE and THOMAS CANDY. Second Edition, revised and enlarged. By J. T. MOLESWORTH. Royal 4to. pp. xxx and 922, boards. Bombay, 1857. £3 3s.

Molesworth.—A COMPENDIUM OF MOLESWORTH'S MARATHI AND ENGLISH DICTIONARY. By BABA PADMANJI. Small 4to., pp. xii. and 482, cloth. 16s.

Morfill.—THE SLAVES: their Ethnology, early History, and popular Traditions, with some account of Slavonic Literature. Being the substance of a course of Lectures delivered at Oxford. By W. R. MORFILL, M.A.

[In preparation.]

Morley.—A DESCRIPTIVE CATALOGUE of the HISTORICAL MANUSCRIPTS in the ARABIC and PERSIAN LANGUAGES preserved in the Library of the Royal Asiatic Society of Great Britain and Ireland. By WILLIAM H. MORLEY, M.R.A.S. 8vo. pp. viii. and 160, sewed. London, 1854. 2s. 6d.

Morrison.—A DICTIONARY OF THE CHINESE LANGUAGE. By the Rev. R. MORRISON, D.D. Two vols. Vol. I. pp. x. and 762; Vol. II. pp. 828, cloth. Shanghai, 1865. £6 6s.

Muhammed.—THE LIFE OF MUHAMMED. Based on Muhammed Ibn Ishak. By Abd El Malik Ibn Hisham. Edited by Dr. FERDINAND WÜSTENFELD. One volume containing the Arabic Text. 8vo. pp. 1026, sewed. Price 21s. Another volume, containing Introduction, Notes, and Index in German. 8vo. pp. lxxii. and 266, sewed. 7s. 6d. Each part sold separately

The test based on the Manuscripts of the Berlin, Leipsic, Gotha and Leyden Libraries, has been carefully revised by the learned editor, and printed with the utmost exactness.

Muir.—ORIGINAL SANSKRIT TEXTS, on the Origin and History of the People of India, their Religion and Institutions. Collected, Translated, and Illustrated by JOHN MUIR, Esq., D.C.L., LL.D., Ph.D.

Vol. I. Mythical and Legendary Accounts of the Origin of Caste, with an Inquiry into its existence in the Vedic Age. Second Edition, re-written and greatly enlarged. 8vo. pp. xx. 532, cloth. 1868. 21s.

Vol. II. The Trans-Himalayan Origin of the Hindus, and their Affinity with the Western Branches of the Aryan Race. Second Edition, revised, with Additions. 8vo. pp. xxxii. and 512, cloth. 1871. 21s.

Vol. III. The Vedas: Opinions of their Authors, and of later Indian Writers, on their Origin, Inspiration, and Authority. Second Edition, revised and enlarged. 8vo. pp. xxxii. 312, cloth. 1868. 16s.

Vol. IV. Comparison of the Vedic with the later representations of the principal Indian Deities. Second Edition Revised. 8vo. pp. xvi. and 524, cloth. 1873. 21s.

Vol. V. Contributions to a Knowledge of the Cosmogony, Mythology, Religious Ideas, Life and Manners of the Indians in the Vedic Age. 8vo. pp. xvi. 492, cloth, 1870. 21s.

Müller.—THE SACRED HYMNS OF THE BRAHMINS, as preserved to us in the oldest collection of religious poetry, the Rig-Veda-Sanhita, translated and explained. By F. MAX MÜLLER, M.A., Fellow of All Souls' College; Professor of Comparative Philology at Oxford; Foreign Member of the Institute of France, etc., etc. Volume I. 8vo. pp. clii. and 264. 12s. 6d.

Müller.—THE HYMNS OF THE RIG-VEDA, in Samhitá and Pada Texts, without the Commentary of Sâyana. Edited by Prof. MAX MÜLLER. In 2 vols. 8vo. pp. 1704, paper. £3 3s.

Müller.—LECTURE ON BUDDHIST NIHILISM. By F. MAX MÜLLER, M.A., Professor of Comparative Philology in the University of Oxford; Member of the French Institute, etc. Delivered before the General Meeting of the Association of German Philologists, at Kiel, 28th September, 1869. (Translated from the German.) Sewed. 1869. 1s.

Nagananda; OR THE JOY OF THE SNAKE-WORLD. A Buddhist Drama in Five Acts. Translated into English Prose, with Explanatory Notes, from the Sanskrit of Sri-Harsha-Deva. By PALMER BOYD, B.A., Sanskrit Scholar of Trinity College, Cambridge. With an Introduction by Professor COWELL. Crown 8vo., pp. xvi. and 100, cloth. 4s. 6d.

Naphegyi.—THE ALBUM OF LANGUAGE, illustrated by the Lord's Prayer in one hundred languages, with historical descriptions of the principal languages, interlinear translation and pronunciation of each prayer, a dissertation on the languages of the world, and tables exhibiting all known languages, dead and living. By G. NAPHEGYI, M.D., A.M., Member of the "Sociedad Geográfica y Estadística" of Mexico, and "Mejoras Materiales" of Texoco, of the Numismatic and Antiquarian Society of Philadelphia, etc. In one splendid folio volume of 322 pages, illuminated frontispiece and title-page, elegantly bound in cloth, gilt top. £2 10s.

Nayler.—COMMONSENSE OBSERVATIONS ON THE EXISTENCE OF RULES (not yet reduced to System in any work extant) regarding THE ENGLISH LANGUAGE; on the pernicious effects of yielding blind obedience to so-called authorities, whether DICTIONARY-COMPILERS, GRAMMAR-MAKERS, or SPELLING-BOOK MANUFACTURERS, instead of examining and judging for ourselves on all questions that are open to investigation; followed by a Treatise, entitled PRONUNCIATION MADE EASY; also an ESSAY ON THE PRONUNCIATION OF PROPER NAMES. By B. S. NAYLER, accredited Elocutionist to the most celebrated Literary Societies in London. 8vo. pp. iv. 148, boards. 1869. 5s.

Newman.—A DICTIONARY OF MODERN ARABIC — 1. Anglo-Arabic Dictionary. 2. Anglo-Arabic Vocabulary. 3. Arabo-English Dictionary. By F. W. NEWMAN, Emeritus Professor of University College, London. In 2 vols. crown 8vo., pp. xvi. and 376—464, cloth. £1 1s.

Newman.—A HANDBOOK OF MODERN ARABIC, consisting of a Practical Grammar, with numerous Examples, Dialogues, and Newspaper Extracts, in a European Type. By F. W. NEWMAN, Emeritus Professor of University College, London; formerly Fellow of Balliol College, Oxford. Post 8vo. pp. xx. and 192, cloth. London, 1866. 6s.

Newman.—THE TEXT OF THE IGUVINE INSCRIPTIONS, with interlinear Latin Translation and Notes. By FRANCIS W. NEWMAN, late Professor of Latin at University College, London. 8vo. pp. xvi. and 54, sewed. 2s.

Newman.—ORTHOËPY: or, a simple mode of Accenting English, for the advantage of Foreigners and of all Learners. By FRANCIS W. NEWMAN, Emeritus Professor of University College, London. 8vo. pp. 28, sewed. 1869. 1s.

Nodal.—ELEMENTOS DE GRAMÁTICA QUICHUA Ó IDIOMA DE LOS YNCAS. Bajo los Auspicios de la Redentora, Sociedad de Filántropos para mejorar la suerte de los Aborígenes Peruanos. Por el Dr. JOSE FERNÁNDEZ NODAL, Abogado de los Tribunales de Justicia de la República del Perú. Royal 8vo. cloth, pp. xvi. and 441. Appendix, pp. 9. £1 5s.

Notley.—A COMPARATIVE GRAMMAR OF THE FRENCH, ITALIAN, SPANISH, AND PORTUGUESE LANGUAGES. By EDWIN A. NOTLEY. Crown oblong 8vo. cloth, pp. xv. and 396. 7s. 6d.

Ollanta: A DRAMA IN THE QUICHUA LANGUAGE. See under MARKHAM.

Oriental Text Society.—(*The Publications of the Oriental Text Society.*)

1. THEOPHANIA; or, Divine Manifestations of our Lord and Saviour. By EUSEBIUS, Bishop of Cæsarea. Syriac. Edited by Prof. S. LEE. 8vo. 1842. 15s.
2. ATHANASIUS'S FESTAL LETTERS, discovered in an ancient Syriac Version. Edited by the Rev. W. CURETON. 8vo. 1848. 15s.
3. SHAHRASTANI: Book of Religious and Philosophical Sects, in Arabic. Two Parts. 8vo. 1842. 30s.
4. UMDAT AKIDAT AHL AL SUNNAT WA AL TAMAAT; Pillar of the Creed of the Sunnites. Edited in Arabic by the Rev. W. CURETON. 8vo. 1843. 5s.
5. HISTORY OF THE ALMOHADES. Edited in Arabic by Dr. R. P. A. DOZY. 8vo. 1847. 10s. 6d.
6. SAMA VEDA. Edited in Sanskrit by Rev. G. STEVENSON. 8vo. 1843. 12s.
7. DASA KUMARA CHARITA. Edited in Sanskrit by Professor H. H. WILSON. 8vo. 1846. £1 4s.
8. MAHA VIRA CHARITA, or a History of Rama. A Sanskrit Play. Edited by F. H. TRITHEN. 8vo. 1848. 15s.
9. MAZHAN UL ASRAR: The Treasury of Secrets. By NIZAMI. Edited in Persian by N. BLAND. 4to. 1844. 10s. 6d.
10. SALAMAN-U-UBSAL; A Romance of Jami (Dshami). Edited in Persian by F. FALCONER. 4to. 1843. 10s.
11. MIRKHOND'S HISTORY OF THE ATABEKS. Edited in Persian by W. H. MORLEY. 8vo. 1850. 12s.
12. TUHFAT-UL-AHRAR; the Gift of the Noble. A Poem. By Jami (Dshami). Edited in Persian by F. FALCONER. 4to. 1843. 10s.

Osburn.—THE MONUMENTAL HISTORY of EGYPT, as recorded on the Ruins of her Temples, Palaces, and Tombs. By WILLIAM OSBURN. Illustrated with Maps, Plates, etc. 2 vols. 8vo. pp. xii. and 461; vii. and 643, cloth. £2 2s.
Vol. I.—From the Colonization of the Valley to the Visit of the Patriarch Abram.
Vol. II.—From the Visit of Abram to the Exodus.

Palmer.—EGYPTIAN CHRONICLES, with a harmony of Sacred and Egyptian Chronology, and an Appendix on Babylonian and Assyrian Antiquities. By WILLIAM PALMER, M.A., and late Fellow of Magdalen College, Oxford. 2 vols., 8vo. cloth, pp. lxxiv. and 428, and viii. and 636. 1861. 12s.

Pand-Námah.—THE PAND-NÁMAH; or, Books of Counsels. By ÁDARBÁD MÁRÁSPAND. Translated from Pehlevi into Gujarathi, by Harbad Sheriarjee Dadabhoy. And from Gujarathi into English by the Rev. Shapurji Edalji. Fcap. 8vo. sewed. 1870. 6d.

Pandit's (A) Remarks on Professor Max Müller's Translation of the "RIG-VEDA." Sanskrit and English. Fcap. 8vo. sewed. 1870. 6d.

Paspati.—ÉTUDES SUR LES TCHINGHIANÉS (GYPSIES) OU BOHÉMIENS DE L'EMPIRE OTTOMAN. Par ALEXANDRE G. PASPATI, M.D. Large 8vo. sewed, pp. xii. and 652. Constantinople, 1871. 28s.

Patell.—COWASJEE PATELL'S CHRONOLOGY, containing corresponding Dates of the different Eras used by Christians, Jews, Greeks, Hindús, Mohamedans, Parsees, Chinese, Japanese, etc. By COWASJEE SORABJEE PATELL. 4to. pp. viii. and 184, cloth. 50s.

Pauthier.—LE LIVRE DE MARCO POLO, Citoyen de Vénise, Conseiller Privé et Commissaire Impérial de Khoubilai-Khaán. Rédigé en français sous sa dictée en 1298 par Rusticien de Pise; Publié pour la première fois d'après trois manuscrits inédits de la Bibliothèque Impériale de Paris, présentant la rédaction primitive du Livre, revue par Marco Polo lui-même et donné par lui, en 1307, à Thiébault de Cépoy, accompagnée des Variantes, de l'Explication des mots hors d'usage, et de commentaires géographiques et historiques, tirés des écrivains orientaux, principalement Chinois, avec une Carte générale de l'Asie par M. G. PAUTHIER. Two vols. roy. 8vo. pp. clvi. 832. With Map and View of Marco Polo's House at Venice. £1 8s.

- Percy.**—BISHOP PERCY'S FOLIO MANUSCRIPTS—BALLADS AND ROMANCES. Edited by John W. Hales, M.A., Fellow and late Assistant Tutor of Christ's College, Cambridge; and Frederick J. Furnivall, M.A., of Trinity Hall, Cambridge; assisted by Professor Child, of Harvard University, Cambridge, U.S.A., W. Chappell, Esq., etc. In 3 volumes. Vol. I., pp. 610; Vol. 2, pp. 681; Vol. 3, pp. 640. Demy 8vo. half-bound, £4 4s. Extra demy 8vo. half-bound, on Whatman's ribbed paper, £6 6s. Extra royal 8vo., paper covers, on Whatman's best ribbed paper, £10 10s. Large 4to., paper covers, on Whatman's best ribbed paper, £12.
- Perny.**—DICTIONNAIRE FRANÇAIS-LATIN-CHINOIS DE LA LANGUE MANDARINE PARLÉE. Par PAUL PERNY, M.A., de la Congrégation des Missions Etrangères. 4to. pp. viii. 459, sewed. £2 2s.
- Perny.**—APPENDICE DU DICTIONNAIRE FRANÇAIS-LATIN-CHINOIS. Par PAUL PERNY, M.A. 4to. pp. iv. and 270, iv. and 173. £3.
- Perny.**—GRAMMAIRE PRATIQUE DE LA LANGUE MANDARINE PARLÉE. Par PAUL PERNY, M.A., de la Congrégation des Missions Etrangères. [In the Press.]
- Perny.**—PROVERBES CHINOIS, RECUEILLIS ET MIS EN ORDRE. Par PAUL PERNY, M.A., de la Congrégation des Missions Etrangères. 12mo. pp. iv. 135. 3s.
- Perrin.**—ENGLISH-ZULU DICTIONARY. New Edition, revised by J. A. BRICKHILL, Interpreter to the Supreme Court of Natal. 12mo. pp. 226, cloth, Pietermaritzburg, 1865. 5s.
- Philological Society.**—PROPOSALS for the Publication of a NEW ENGLISH DICTIONARY. 8vo. pp. 32, sewed. 6d.
- Pickings from Old Indian Books.** 12mo. cloth, pp. 300. 12s. 6d.
- Pierce the Ploughman's Crede** (about 1394 Anno Domini). Transcribed and Edited from the MS. of Trinity College, Cambridge, R. 3, 15. Collated with the MS. Bibl. Reg. 18. B. xvii. in the British Museum, and with the old Printed Text of 1553, to which is appended "God spede the Plough" (about 1500 Anno Domini), from the Lansdowne MS. 762. By the Rev. WALTER W. SKEAT, M.A., late Fellow of Christ's College, Cambridge. pp. xx. and 75, cloth. 1867. 2s. 6d.
- Prakrita-Prakasa**; or, The Prakrit Grammar of Vararuchi, with the Commentary (Manorama) of Bhamaha. The first complete edition of the Original Text with Various Readings from a Collation of Six Manuscripts in the Bodleian Library at Oxford, and the Libraries of the Royal Asiatic Society and the East India House; with copious Notes, an English Translation, and Index of Prakrit words, to which is prefixed an easy Introduction to Prakrit Grammar. By EDWARD BYLES COWELL, of Magdalen Hall, Oxford, Professor of Sanskrit at Cambridge. Second issue, with new Preface, and corrections. 8vo. pp. xxxii. and 204. 14s.
- Priaulx.**—QUÆSTIONES MOSAICÆ; or, the first part of the Book of Genesis compared with the remains of ancient religions. By OSMOND DE BEAUVOIR PRIAULX. 8vo. pp. viii. and 548, cloth. 12s.
- Raghuvansa.**—No. 1. (Cantos 1-3.) See under KALIDASA.
- Raja-Niti.**—A COLLECTION OF HINDU APOLOGUES, in the Braj Bhāshā Language. Revised edition. With a Preface, Notes, and Supplementary Glossary. By FITZEDWARD HALL, Esq. 8vo. cloth, pp. 204. 21s.
- Rāmāyan of Vālmiki.**—Vols. I. and II. See under GRIFFITH.
- Ram Jasan.**—A SANSKRIT AND ENGLISH DICTIONARY. Being an Abridgment of Professor Wilson's Dictionary. With an Appendix explaining the use of Affixes in Sanskrit. By Pandit RAM JASAN, Queen's College, Benares. Published under the Patronage of the Government, N.W.P. Royal 8vo. cloth, pp. ii. and 707. 28s.

- Ram Raz.**—ESSAY ON THE ARCHITECTURE OF THE HINDUS. By RAM RAZ, Native Judge and Magistrate of Bangalore, Corresponding Member of the R.A.S. of Great Britain and Ireland. With 48 plates. 4to. pp. xiv. and 64, sewed. London, 1834. Original selling price, £1 11s. 6d., reduced (for a short time) to 12s.
- Rask.**—A GRAMMAR OF THE ANGLO-SAXON TONGUE. From the Danish of Erasmus Rask, Professor of Literary History in, and Librarian to, the University of Copenhagen, etc. By BENJAMIN THORPE, Member of the Munich Royal Academy of Sciences, and of the Society of Netherlandish Literature, Leyden. Second edition, corrected and improved. 18mo. pp. 200, cloth. 5s. 6d.
- Rawlinson.**—A COMMENTARY ON THE CUNEIFORM INSCRIPTIONS OF BABYLONIA AND ASSYRIA, including Readings of the Inscription on the Nimrud Obelisk, and Brief Notice of the Ancient Kings of Nineveh and Babylon, Read before the Royal Asiatic Society, by Major H. C. RAWLINSON. 8vo., pp. 84, sewed. London, 1850. 2s. 6d.
- Rawlinson.**—OUTLINES OF ASSYRIAN HISTORY, from the Inscriptions of Nineveh. By Lieut. Col. RAWLINSON, C.B., followed by some Remarks by A. H. LAYARD, Esq., D.C.L. 8vo., pp. xliv., sewed. London, 1852. 1s.
- Renan.**—AN ESSAY ON THE AGE AND ANTIQUITY OF THE BOOK OF NABATHEAN AGRICULTURE. To which is added an Inaugural Lecture on the Position of the Shemitic Nations in the History of Civilization. By M. ERNEST RENAN, Membre del'Institut. Crown 8vo., pp. xvi. and 148, cloth. 3s. 6d.
- Revue Celtique.**—THE REVUE CELTIQUE, a Quarterly Magazine for Celtic Philology, Literature, and History. Edited with the assistance of the Chief Celtic Scholars of the British Islands and of the Continent, and Conducted by H. GAIDOUZ. 8vo. Subscription, £1 per Volume.
- Ridley.**—KAMILAROI, DIPPIL, AND TURRUBUL. Languages Spoken by Australian Aborigines. By Rev. WM. RIDLEY, M.A., of the University of Sydney; Minister of the Presbyterian Church of New South Wales. Printed by authority. Small 4to. cloth, pp. vi. and 90. 30s.
- Rig-Veda.**—THE HYMNS OF THE RIG-VEDA IN THE SAMHITĀ AND PADA TEXT, without the Commentary of the Sâyana. Edited by Prof. MAX MÜLLER. In 2 vols. 8vo. paper, pp. 1704. £3 3s.
- Rig-Veda-Sanhita:** THE SACRED HYMNS OF THE BRAHMANS. Translated and explained by F. MAX MÜLLER, M.A., LL.D., Fellow of All Souls' College, Professor of Comparative Philology at Oxford, Foreign Member of the Institute of France, etc., etc. Vol. I. HYMNS TO THE MARUTS, OR THE STORM-GODS. 8vo. pp. clii. and 264. cloth. 1869. 12s. 6d.
- Rig-Veda Sanhita.**—A COLLECTION OF ANCIENT HINDU HYMNS. Constituting the First Ashtaka, or Book of the Rig-veda; the oldest authority for the religious and social institutions of the Hindus. Translated from the Original Sanskrit. By the late H. H. WILSON, M.A., F.R.S., etc. etc. etc. Second Edition, with a Postscript by Dr. FITZEDWARD HALL. Vol. I. 8vo. cloth, pp. lii. and 348, price 21s.
- Rig-veda Sanhita.**—A Collection of Ancient Hindu Hymns, constituting the Fifth to Eighth Ashtakas, or books of the Rig-Veda, the oldest Authority for the Religious and Social Institutions of the Hindus. Translated from the Original Sanskrit by the late HORACE HAYMAN WILSON, M.A., F.R.S., etc. Edited by E. B. COWELL, M.A., Principal of the Calcutta Sanskrit College. Vol. IV., 8vo., pp. 214, cloth. 14s.
A few copies of Vols. II. and III. still left. [Vols. V. and VI. in the Press.]
- Roe and Fryer.**—TRAVELS IN INDIA IN THE SEVENTEENTH CENTURY. By Sir THOMAS ROE and Dr. JOHN FRYER. Reprinted from the "Calcutta Weekly Englishman." 8vo. cloth, pp. 474. 7s. 6d.
- Sâma-Vidhâna-Brâhmana.** With the Commentary of Sâyana. Edited, with Notes, Translation, and Index, by A. C. BURNELL, M.R.A.S., Madras Civil Service. In 1 vol. 8vo. *[In preparation.]*

- Sanskrit Works.**—A CATALOGUE OF SANSKRIT WORKS PRINTED IN INDIA, offered for Sale at the affixed nett prices by TRÜBNER & Co. 16mo. pp. 52. 1s.
- Sayce.**—AN ASSYRIAN GRAMMAR FOR COMPARATIVE PURPOSES. By A. H. SAYCE, M.A. 12mo. cloth, pp. xvi. and 188. 7s. 6d.
- Schele de Vere.**—STUDIES IN ENGLISH; or, Glimpses of the Inner Life of our Language. By M. SCHELE DE VERE, LL.D., Professor of Modern Languages in the University of Virginia. 8vo. cloth, pp. vi. and 365. 10s. 6d.
- Schele de Vere.**—AMERICANISMS: THE ENGLISH OF THE NEW WORLD. By M. SCHELE DE VERE, LL.D., Professor of Modern Languages in the University of Virginia. 8vo. pp. 685, cloth. 12s.
- Scheler.**—DICTIONNAIRE D'ETYMOLOGIE FRANÇAISE D'APRES LES RÉSULTATS DE LA SCIENCE MODERNE. Par AUGUSTE SCHELER, Docteur en Philosophie et Lettres, etc. Nouvelle édition. Royal 8vo. pp. xii. and 466. Double columns. Sewed 14s.; cloth 15s.
- Schleicher.**—COMPENDIUM OF THE COMPARATIVE GRAMMAR OF THE INDO-GERMANIC LANGUAGES. By AUGUST SCHLEICHER. Translated from the Third German Edition by HERBERT BENDALL, B.A., Chr. Coll. Camb. [Shortly.]
- Schemeil.**—EL MUFTAKER; or, First Born. (In Arabic, printed at Beyrout). Containing Five Comedies, called Comedies of Fiction, on Hopes and Judgments, in Twenty-six Poems of 1092 Verses, showing the Seven Stages of Life, from man's conception unto his death and burial. By EMIN IBRAHIM SCHEMEIL. In one volume, 4to. pp. 166, sewed. 1870. 5s.
- Schlagintweit.**—BUDDHISM IN TIBET. Illustrated by Literary Documents and Objects of Religious Worship. With an Account of the Buddhist Systems preceding it in India. By EMIL SCHLAGINTWEIT, LL.D. With a Folio Atlas of 20 Plates, and 20 Tables of Native Prints in the Text. Royal 8vo., pp. xxiv. and 404. £2 2s.
- Schlagintweit.**—GLOSSARY OF GEOGRAPHICAL TERMS FROM INDIA AND TIBET, with Native Transcription and Transliteration. By HERMANN DE SCHLAGINTWEIT. Forming, with a "Route Book of the Western Himalaya, Tibet, and Turkistan," the Third Volume of H., A., and R. DE SCHLAGINTWEIT'S "Results of a Scientific Mission to India and High Asia." With an Atlas in imperial folio, of Maps, Panoramas, and Views. Royal 4to., pp. xxiv. and 293. £4.
- Schlottmann.**—THE MONUMENT OF A VICTORY OF MESHA, King of the Moabites. A Contribution to Hebrew Archæology by Dr. KONSTANTIN SCHLOTTMANN, Professor of Theology at the University of Halle. Translated from the German. [In the Press.]
- Shápurjī Edaljí.**—A GRAMMAR OF THE GUJARÁTÍ LANGUAGE. By SHÁPURJÍ EDALJÍ. Cloth, pp. 127. 10s. 6d.
- Shápurjī Edaljí.**—A DICTIONARY, GUJRATI AND ENGLISH. By SHÁPURJÍ EDALJÍ. Second Edition. Crown 8vo. cloth, pp. xxiv. and 874. 21s.
- Sherring.**—THE SACRED CITY OF THE HINDUS, An Account of Benares in Ancient and Modern Times. By the Rev. M. A. SHERRING, M.A., LL.D.; and Prefaced with an Introduction by FITZEDWARD HALL, Esq., D.C.L. 8vo. cloth, pp. xxxvi. and 388, with numerous full-page illustrations. 21s.
- Sherring.**—HINDU TRIBES AND CASTES, as represented in Benares. By the Rev. M. A. SHERRING, M.A., LL.B., London, Author of "The Sacred City of the Hindus," etc. With Illustrations. 4to. cloth, pp. xxiii. and 405. £4 4s.
- Singh.**—SAKHEE BOOK; or, The Description of Gooroo Gobind Singh's Religion and Doctrines, translated from Gooroo Mukhi into Hindi, and afterwards into English. By SIRDAR ATTAR SINGH, Chief of Bhadour. With the author's photograph. 8vo. pp. xviii. and 205. 15s.
- Smith.**—A VOCABULARY OF PROPER NAMES IN CHINESE AND ENGLISH, of Places, Persons, Tribes, and Sects, in China, Japan, Corea, Assam, Siam, Burmah, The Straits, and adjacent Countries. By F. China. 4to. half-bound, pp. vi., 72, and x. 1870. 10s. 6d.

- Smith.**—CONTRIBUTIONS TOWARDS THE MATERIA MEDICA AND NATURAL HISTORY OF CHINA. For the use of Medical Missionaries and Native Medical Students. By F. PORTER SMITH, M.B. London, Medical Missionary in Central China. Imp. 4to. cloth, pp. viii. and 240. 1870. £1 1s.
- Sophocles.**—A GLOSSARY OF LATER AND BYZANTINE GREEK. By E. A. SOPHOCLES. 4to., pp. iv. and 624, cloth. £2 2s.
- Sophocles.**—ROMAIC OR MODERN GREEK GRAMMAR. By E. A. SOPHOCLES. 8vo. pp. xxviii. and 196. 7s. 6d.
- Sophocles.**—GREEK LEXICON OF THE ROMAN AND BYZANTINE PERIODS (from B.C. 146 to A.D. 1100). By E. A. SOPHOCLES. Imp. 8vo. pp. xvi. 1188, cloth. 1870. £2 8s.
- Steele.**—AN EASTERN LOVE STORY. KUSA JĀTAKAYA: a Buddhistic Legendary Poem, with other Stories. By THOMAS STEELE, Ceylon Civil Service. Crown 8vo. cloth, pp. xii. and 260. 1871. 6s.
- Stent.**—THE JADE CHAPLET, in Twenty-four Beads. A Collection of Songs, Ballads, etc. (from the Chinese). By GEORGE CARTER STENT, M.N.C.B.R.A.S., Author of "Chinese and English Vocabulary," "Chinese and English Pocket Dictionary," "Chinese Lyrics," "Chinese Legends," etc. Cr. 8vo. cloth, pp. 176. 5s.
- Stokes.**—BEUNANS MERIASEK. The Life of Saint Meriasek, Bishop and Confessor. A Cornish Drama. Edited, with a Translation and Notes, by WHITLEY STOKES. Medium 8vo. cloth, pp. xvi., 280, and Facsimile. 1872. 15s.
- Stokes.**—GOIDELICA—Old and Early-Middle Irish Glosses: Prose and Verse. Edited by WHITLEY STOKES. Second edition. Medium 8vo. cloth, pp. 192. 18s.
- Stratmann.**—A DICTIONARY OF THE OLD ENGLISH LANGUAGE. Compiled from the writings of the XIIIth, XIVth, and XVth centuries. By FRANCIS HENRY STRATMANN. Second Edition. 4to., pp. xii. and 594. 1873. In wrapper, £1 11s. 6d.; cloth, £1 14s.
- Stratmann.**—AN OLD ENGLISH POEM OF THE OWL AND THE NIGHTINGALE. Edited by FRANCIS HENRY STRATMANN. 8vo. cloth, pp. 60. 3s.
- Strong.**—SELECTIONS FROM THE BOSTAN OF SADI, translated into English Verse. By DAWSONNE MELANCTHON STRONG, Captain H.M. 10th Bengal Lancers. 12mo. cloth, pp. ii. and 56. 2s. 6d.
- Surya-Siddhanta (Translation of the).**—A TEXT BOOK OF HINDU ASTRONOMY, with Notes and Appendix, &c. By Rev. EBENEZER BURGESS. 8vo. pp. iv. and 354, boards. 15s.
- Swamy.**—THE DĀTH' ĀVANSO; or, The History of the Tooth Relic of Gotama Buddha, translated from the Pāli by MUTU COOMĀRA SWĀMY, MUDELIĀR, Barrister-at-Law, Lincoln's Inn, Member of the Legislative Council, Ceylon. In 1 vol. demy 8vo. [Shortly.]
- Syed Ahmad.**—A SERIES OF ESSAYS ON THE LIFE OF MOHAMMED, and Subjects subsidiary thereto. By SYED AHMAD KHAN BAHADOR, C.S.I., Author of the "Mohammedan Commentary on the Holy Bible," Honorary Member of the Royal Asiatic Society, and Life Honorary Secretary to the Allypore Scientific Society. 8vo. pp. 532, with 4 Genealogical Tables, 2 Maps, and a Coloured Plate, handsomely bound in cloth. 30s.
- Tabari.**—CHRONIQUE DE ABOU-DJAFAR-MOHAMMED-BEN-DJARIR-BEN-YEZID. Traduite par Monsieur HERMANN ZOTENBERG. Vol. I. 8vo. pp. 608. Vol. II, 8vo. pp. ii. and 252. Vol. III. 8vo. pp. 752, sewed. 7s. 6d. each. (To be completed in Four Volumes.)
- Tāittirīya-Pratīcakhya.**—See under WHITNEY.
- Tarkavachaspati.**—VACHASPATYA, a Comprehensive Dictionary, in Ten Parts. Compiled by TARANATHA TARKAVACHASPATI, Professor of Grammar

and Philosophy in the Government Sanskrit College of Calcutta. An Alphabetically Arranged Dictionary, with a Grammatical Introduction and Copious Citations from the Grammarians and Scholiasts, from the Vedas, etc. Part I. 4to. pp. 2 and 238. 1873. 18s.

Technological Dictionary.—POCKET DICTIONARY OF TECHNICAL TERMS USED IN ARTS AND SCIENCES. English-German-French. [Based on the larger Work by KARMARSCHE. 3 vols. imp. 16mo. 8s. sewed. 10s. 6d. boards.

The Boke of Nurture. By JOHN RUSSELL, about 1460–1470 Anno Domini. The Boke of Keruyng. By WYNKYN DE WORDE, Anno Domini 1513. The Boke of Nurture. By HUGH RHODES, Anno Domini 1577. Edited from the Originals in the British Museum Library, by FREDERICK J. FURNIVALL, M.A., Trinity Hall, Cambridge, Member of Council of the Philological and Early English Text Societies. 4to. half-morocco, gilt top, pp. xix. and 146, 28, xxviii. and 56. 1867. 17. 11s. 6d.

The Vision of William concerning Piers Plowman, together with Vita de Dowel, Dobet et Dobest, secundum wit et resoun. By WILLIAM LANGLAND (about 1362–1380 anno domini). Edited from numerous Manuscripts, with Prefaces, Notes, and a Glossary. By the Rev. WALTER W. SKEAT, M.A. pp. xlv. and 158, cloth. 1867. Vernon A. Text; Text 7s. 6d.

Thomas.—EARLY SASSANIAN INSCRIPTIONS, SEALS AND COINS, illustrating the Early History of the Sassanian Dynasty, containing Proclamations of Ardeshir Babek, Sapor I., and his Successors. With a Critical Examination and Explanation of the Celebrated Inscription in the Hâjîâbad Cave, demonstrating that Sapor, the Conqueror of Valerian, was a Professing Christian. By EDWARD THOMAS, F.R.S. Illustrated. 8vo. cloth, pp. 148. 7s. 6d.

Thomas.—THE CHRONICLES OF THE PATHÂN KINGS OF DEHLI. Illustrated by Coins, Inscriptions, and other Antiquarian Remains. By EDWARD THOMAS, F.R.S., late of the East India Company's Bengal Civil Service. With numerous Copperplates and Woodcuts. Demy 8vo. cloth, pp. xxiv. and 467. 1871. 28s.

Thomas.—THE REVENUE RESOURCES OF THE MUGHAL EMPIRE IN INDIA, from A.D. 1593 to A.D. 1707. A Supplement to "The Chronicles of the Pathân Kings of Delhi." By EDWARD THOMAS, F.R.S., late of the East India Company's Bengal Civil Service. Demy 8vo., pp. 60, cloth. 3s. 6d.

Thomas.—COMMENTS ON RECENT PEHLVI DECIPHERMENTS. With an Incidental Sketch of the Derivation of Aryan Alphabets, and contributions to the Early History and Geography of Tabaristân. Illustrated by Coins. By EDWARD THOMAS, F.R.S. 8vo. pp. 56, and 2 plates, cloth, sewed. 3s. 6d.

Thomas.—ESSAYS ON INDIAN ANTIQUITIES: following up the Discoveries of James Prinsep, with specimens of his Engravings, and selections from his Useful Tables, and embodying the most recent investigations into the History, Palæography, and Numismatics of Ancient India. By EDWARD THOMAS, F.R.S., late of the East India Company's Bengal Civil Service. In 2 vols. 8vo., profusely illustrated. [In preparation.]

Thomas.—SASSANIAN COINS. Communicated to the Numismatic Society of London. By E. THOMAS, F.R.S. Two parts. With 3 Plates and a Woodcut. 12mo. sewed, pp. 43. 5s.

Thomas.—NUMISMATIC AND OTHER ANTIQUARIAN ILLUSTRATIONS ON THE RULE OF THE SASSANIANS IN PERSIA; A.D. 226 to 652. By EDWARD THOMAS, F.R.S., Correspondant de l'Institut de France. Demy 8vo. cloth, pp. iv. and 96, with 7 plates and other illustrations. [Nearly ready.]

Thomas.—THE THEORY AND PRACTICE OF CREOLE GRAMMAR. By J. J. THOMAS. Port of Spain (Trinidad), 1869. 1 vol. 8vo. bds. pp. viii. and 135. 12s.

Thonissen.—ÉTUDES SUR L'HISTOIRE DU DROIT CRIMINEL DES PEUPLES ANCIENS (Inde Brahmanique, Égypte, Judée), par J. J. THONISSEN, Professeur à l'Université Catholique de Louvain, Membre de l'Académie Royale de Belgique. 2 vols. 8vo. pp. xvi. 248, 320, sewed. 1869. 12s.

Thorpe.—DIPLOMATARIUM ANGLICUM ÆVI SAXONICI. A Collection of English Charters, from the reign of King Æthelberht of Kent, A.D., DCV., to

- that of William the Conqueror. Containing: I. Miscellaneous Charters. II. Wills. III. Guilds. IV. Manumissions and Acquittances. With a Translation of the Anglo-Saxon. By the late BENJAMIN THORPE, Member of the Royal Academy of Sciences at Munich, and of the Society of Netherlandish Literature at Leyden. 8vo. pp. xlii. and 682, cloth. 1865. £1 1s.
- Tindall.**—A GRAMMAR AND VOCABULARY OF THE NAMAQUA-HOTTENTOT LANGUAGE. By HENRY TINDALL, Wesleyan Missionary. 8vo. pp. 124, sewed. 6s.
- Trumpp.**—GRAMMAR OF THE PAŠTO, or Language of the Afghans, compared with the Irānian and North-Indian Idioms. By Dr. ERNEST TRUMPP. 8vo. sewed, pp. xvi. and 412. 21s.
- Trumpp.**—GRAMMAR OF THE SINDHI LANGUAGE. Compared with the Sanskrit-Prakrit and the Cognate Indian Vernaculars. By Dr. ERNEST TRUMPP. Printed by order of Her Majesty's Government for India. Demy 8vo. sewed, pp. xvi. and 590. 15s.
- Van der Tuuk.**—OUTLINES OF A GRAMMAR OF THE MALAGASY LANGUAGE By H. N. VAN DER TUUK. 8vo., pp. 28, sewed. 1s.
- Van der Tuuk.**—SHORT ACCOUNT OF THE MALAY MANUSCRIPTS BELONGING TO THE ROYAL ASIATIC SOCIETY. By H. N. VAN DER TUUK. 8vo., pp. 52. 2s. 6d.
- Vishnu-Purana (The)**; a System of Hindu Mythology and Tradition. Translated from the original Sanskrit, and Illustrated by Notes derived chiefly from other Purānas. By the late H. H. WILSON, M.A., F.R.S., Boden Professor of Sanskrit in the University of Oxford, etc., etc. Edited by FITZEDWARD HALL. In 6 vols. 8vo. Vol. I. pp. cxi. and 200; Vol. II. pp. 343; Vol. III. pp. 348; Vol. IV. pp. 346, cloth; Vol. V. pp. 392, cloth. 10s. 6d. each.
- Vullers.**—A GRAMMAR OF THE PERSIAN LANGUAGE. By J. A. VULLERS, Prof. of Oriental Languages at the University of Giessen. 8vo. [*In the Press.*]
- Wade.**—YÜ-YEN TZŪ-ERH CHI. A progressive course designed to assist the Student of Colloquial Chinese, as spoken in the Capital and the Metropolitan Department. In eight parts, with Key, Syllabary, and Writing Exercises. By THOMAS FRANCIS WADE, C.B., Secretary to Her Britannic Majesty's Legation, Peking. 3 vols. 4to. Progressive Course, pp. xx. 296 and 16; Syllabary, pp. 126 and 36; Writing Exercises, pp. 48; Key, pp. 174 and 140, sewed. £4.
- Wade.**—WĒN-CHIEN TZŪ-ERH CHI. A series of papers selected as specimens of documentary Chinese, designed to assist Students of the language, as written by the officials of China. In sixteen parts, with Key. Vol. I. By THOMAS FRANCIS WADE, C.B., Secretary to Her Britannic Majesty's Legation at Peking. 4to., half-cloth, pp. xii. and 455; and iv., 72, and 52. £1 16s.
- Wake.**—CHAPTERS ON MAN. With the Outlines of a Science of comparative Psychology. By C. STANILAND WAKE, Fellow of the Anthropological Society of London. Crown 8vo. pp. viii. and 344, cloth. 7s. 6d.
- Watson.**—INDEX TO THE NATIVE AND SCIENTIFIC NAMES OF INDIAN AND OTHER EASTERN ECONOMIC PLANTS AND PRODUCTS, originally prepared under the authority of the Secretary of State for India in Council. By JOHN FORBES WATSON, M.A., M.D., F.L.S., F.R.A.S., etc., Reporter on the Products of India. Imperial 8vo., cloth, pp. 650. £1 11s. 6d.
- Watts.**—ESSAYS ON LANGUAGE AND LITERATURE. By THOMAS WATTS, late of the British Museum. Reprinted, with Alterations and Additions, from the Transactions of the Philological Society, and elsewhere. In 1 vol. 8vo. [*In preparation.*]
- Weber.**—ON THE RÂMÂYANA. By Dr. ALBRECHT WEBER, Berlin. Translated from the German by the Rev. D. C. Boyd, M.A. Reprinted from "The Indian Antiquary." Fcap. 8vo. sewed, pp. 130. 5s.
- Webster.**—AN INTRODUCTORY ESSAY TO THE SCIENCE OF COMPARATIVE THEOLOGY; with a Tabular Synopsis of Scientific Religion. By EDWARD WEBSTER, of Ealing, Middlesex. Read in an abbreviated form as a Lecture to a public audience at Ealing, on the 3rd of January, 1870, and to an evening congregation at South Place Chapel, Finsbury Square, London, on the 27th of February, 1870. 8vo. pp. 28, sewed. 1870. 1s.

Wedgwood.—A DICTIONARY OF THE ENGLISH LANGUAGE. By HENSLEIGH WEDGWOOD, M.A. late Fellow of Christ's College, Cambridge. Vol. I. (A to D) 8vo., pp. xxiv. 508, cloth, 14s.; Vol. II. (E to P) 8vo. pp. 578, cloth, 14s.; Vol. III., Part I. (Q to Sy), 8vo. pp. 366, 10s. 6d.; Vol. III. Part II. (T to W) 8vo. pp. 200, 5s. 6d. completing the Work. Price of the complete work, £2 4s.

"Dictionaries are a class of books not usually esteemed light reading; but no intelligent man were to be pitied who should find himself shut up on a rainy day in a lonely house in the dreariest part of Salisbury Plain, with no other means of recreation than that which Mr. Wedgwood's Dictionary of Etymology could afford him. He would read it through from cover to cover at a sitting, and only regret that he had not the second volume to begin upon forthwith. It is a very able book, of great research, full of delightful surprises, a repertory of the fairy tales of linguistic science."—*Spectator*.

Wedgwood.—A DICTIONARY OF ENGLISH ETYMOLOGY. By HENSLEIGH WEDGWOOD. Second Edition, thoroughly revised and corrected by the Author, and extended to the Classical Roots of the Language. With an Introduction on the Formation of Language. Imperial 8vo., about 800 pages, double column. In Five Monthly Parts, of 160 pages. Price 5s. each; or complete in one volume, cl., price 26s.

Wedgwood.—ON THE ORIGIN OF LANGUAGE. By HENSLEIGH WEDGWOOD, late Fellow of Christ's College, Cambridge. Fcap. 8vo. pp. 172, cloth. 3s. 6d.

Wékey.—A GRAMMAR OF THE HUNGARIAN LANGUAGE, with appropriate Exercises, a Copious Vocabulary, and Specimens of Hungarian Poetry. By SIGISMUND WÉKEY, late Aide-de-Camp to Kossuth. 12mo., pp. xii. and 150, sewed. 4s. 6d.

West and Bühler.—DIGEST OF HINDU LAW, from the Replies of the Shastris in the several Courts of the Bombay Presidency. With an Introduction, Notes, and Appendix. Edited by Raymond West and Johann Georg Bühler. Vol. I. 8vo. cloth. £3 3s. Vol. II. 8vo. pp. v. 118, cloth. 12s.

Wheeler.—THE HISTORY OF INDIA FROM THE EARLIEST AGES. By J. TALBOYS WHEELER, Assistant Secretary to the Government of India in the Foreign Department, Secretary to the Indian Record Commission, author of "The Geography of Herodotus," etc. etc.

Vol. I. The Vedic Period and the Maha Bharata. Demy 8vo. cl., pp. lxxv. and 576. 18s.

Vol. II., The Ramayana and the Brahmanic Period. Demy 8vo. cloth, pp. lxxxviii. and 680, with two Maps. 21s.

Vol. III. Hindu, Buddhist, Brahmanical Revival. Demy 8vo., pp. 484, with two maps, cloth. 18s.

Vol. IV.

[In preparation.]

Wheeler.—JOURNAL OF A VOYAGE UP THE IRRAWADDY TO MANDALAY AND BHAMO. By J. TALBOYS WHEELER. 8vo. pp. 104, sewed. 1871. 3s. 6d.

Whitney.—ORIENTAL AND LINGUISTIC STUDIES. The Veda; the Avesta; the Science of Language. By WILLIAM DWIGHT WHITNEY, Professor of Sanskrit and Comparative Philology in Yale College. Cr. 8vo. cl., pp. x. and 418. 12s.

CONTENTS.—The Vedas.—The Vedic Doctrine of a Future Life.—Müller's History of Vedic Literature.—The Translation of the Veda.—Müller's Rig-Veda Translation.—The Avesta.—Indo-European Philology and Ethnology.—Müller's Lectures on Language.—Present State of the Question as to the Origin of Language.—Bleek and the Simious Theory of Language.—Schleicher and the Physical Theory of Language.—Steinthal and the Psychological Theory of Language.—Language and Education.—Index.

Whitney.—ĀTHARVA VEDA PRĀTIŚĀKHYA; or, Čāunakīyā Caturādhyāyikā (The). Text, Translation, and Notes. By WILLIAM D. WHITNEY, Professor of Sanskrit in Yale College. 8vo. pp. 286, boards. 12s.

Whitney.—LANGUAGE AND THE STUDY OF LANGUAGE: Twelve Lectures on the Principles of Linguistic Science. By WILLIAM DWIGHT WHITNEY, Professor of Sanskrit, etc., in Yale College. Third Edition, augmented by an Analysis. Crown 8vo. cloth, pp. xii. and 504. 10s. 6d.

Whitney.—TĀITIRĪYA-PRĀTIŚĀKHYA, with its Commentary, the Tribhāshyaratna: Text, Translation, and Notes. By W. D. WHITNEY, Prof. of Sanskrit in Yale College, New Haven. 8vo. pp. 469. 1871. 25s.

Wilkins.—THE BHAGAVAT-GEETA; or, Dialogues of Kreeshna and Arjoon. Translated by CHAS. WILKINS. A faithful reprint of the now very scarce Original London Edition of 1785, made at the Bradstreet Press, New

- York. In one vol. 8vo. Beautifully printed with old face type on laid paper. 261 copies were produced of this edition, of which only a few now remain. 12s.
- Williams.**—**FIRST LESSONS IN THE MAORI LANGUAGE**, with a Short Vocabulary. By W. L. WILLIAMS, B.A. Square 8vo., pp. 80, cloth, London, 1862. 10s. 6d.
- Williams.**—**LEXICON CORNU-BRITANNICUM**. A Dictionary of the Ancient Celtic Language of Cornwall, in which the words are elucidated by copious examples from the Cornish works now remaining, with translations in English. The synonyms are also given in the cognate dialects of Welsh, Armorican, Irish, Gaelic, and Manx, showing at one view the connexion between them. By the Rev. ROBERT WILLIAMS, M.A., Christ Church, Oxford, Parish Curate of Llangadwaladr and Rhydycroesan, Denbighshire. Sewed. 3 parts, pp. 400. £2 5s.
- Williams.**—**A DICTIONARY, ENGLISH AND SANSKRIT**. By MONIER WILLIAMS, M.A. Published under the Patronage of the Honourable East India Company. 4to. pp. xii. 862, cloth. London, 1855. £3 3s.
- Wilson.**—**WORKS OF THE late HORACE HAYMAN WILSON, M.A., F.R.S.**, Member of the Royal Asiatic Societies of Calcutta and Paris, and of the Oriental Soc. of Germany, etc., and Boden Prof. of Sanskrit in the University of Oxford. Vols. I. and II. **ESSAYS AND LECTURES** chiefly on the Religion of the Hindus, by the late H. H. WILSON, M.A., F.R.S., etc. Collected and edited by Dr. REINHOLD ROST. 2 vols. cloth, pp. xiii. and 399, vi. and 416. 21s.
- Vols. III, IV. and V. **ESSAYS ANALYTICAL, CRITICAL, AND PHILOLOGICAL, ON SUBJECTS CONNECTED WITH SANSKRIT LITERATURE**. Collected and Edited by Dr. REINHOLD ROST. 3 vols. 8vo. pp. 408, 406, and 390, cloth. Price 36s.
- Vols. VI, VII, VIII, IX. and X. **VISHNU PURĀNĀ, A SYSTEM OF HINDU MYTHOLOGY AND TRADITION**. Translated from the original Sanskrit, and Illustrated by Notes derived chiefly from other Purāṇās. By the late H. H. WILSON, Boden Professor of Sanskrit in the University of Oxford, etc., etc. Edited by FITZEDWARD HALL, M.A., D.C.L., Oxon. Vols. I. to V. 8vo., pp. cxl. and 260; 344; 344; 346, cloth. 2l. 12s. 6d.
- Vols. XI. and XII. **SELECT SPECIMENS OF THE THEATRE OF THE HINDUS**. Translated from the Original Sanskrit. By the late HORACE HAYMAN WILSON, M.A., F.R.S. 3rd corrected Ed. 2 vols. 8vo. pp. lxi. and 384; and iv. and 418, cl. 21s.
- Wilson.**—**SELECT SPECIMENS OF THE THEATRE OF THE HINDUS**. Translated from the Original Sanskrit. By the late HORACE HAYMAN WILSON, M.A., F.R.S. Third corrected edition. 2 vols. 8vo., pp. lxi. and 384; iv. and 418, cloth. 21s.
- CONTENTS.
- Vol. I.**—Preface—Treatise on the Dramatic System of the Hindus—Dramas translated from the Original Sanskrit—The Mricchakati, or the Toy Cart—Vikram and Urvashi, or the Hero and the Nymph—Uttara Rāma Charitra, or continuation of the History of Rāma.
- Vol. II.**—Dramas translated from the Original Sanskrit—Malātī and Mādhava, or the Stolen Marriage—Mudrā Rakshasa, or the Signet of the Minister—Ratnāvalī, or the Necklace—Appendix, containing short accounts of different Dramas.
- Wilson.**—**THE PRESENT STATE OF THE CULTIVATION OF ORIENTAL LITERATURE**. A Lecture delivered at the Meeting of the Royal Asiatic Society. By the Director, Professor H. H. WILSON. 8vo., pp. 26, sewed. London, 1852. 6d.
- Wise.**—**COMMENTARY ON THE HINDU SYSTEM OF MEDICINE**. By T. A. WISE, M.D., Bengal Medical Service. 8vo., pp. xx. and 432, cloth. 7s. 6d.
- Words: their History and Derivation**. ALPHABETICALLY ARRANGED. A—B. With Postscripts, Principles of Scientific Etymology, and Index of compared Words, in Eighty Languages and Dialects. By Dr. F. EBENER and E. M. GREENWAY, jun. High 4to. pp. 288, double columns, cloth, price 28s.
- Wylie.**—**NOTES ON CHINESE LITERATURE**; with introductory Remarks on the Progressive Advancement of the Art; and a list of translations from the Chinese, into various European Languages. By A. WYLIE, Agent of the British and Foreign Bible Society in China. 4to. pp. 296, cloth. Price, 1l. 16s.
- Yates.**—**A BENGALÍ GRAMMAR**. By the late Rev. W. YATES, D.D. Reprinted, with improvements, from his Introduction to the Bengálí Language, Edited by I. WENGER. Fcap. 8vo., pp. iv. and 150, bds. Calcutta, 1864. 3s. 6d.

3
111

3.,
rai
rd
lus,
Dr.

, on
by
31a
Mr.
lue-
son,
d by
and

rate
M.A.,
21a
Pills-
1898,
4; 17.

rom the
, or the
story of
Stolen
or the

ENTAL
Asiatic
sewed.

T. A.
6d.

NGED.
dex of
:a and
ce 28a.
marks
om the
of the
11. 18a.
D.D.
agnage,
3a. 6d.

