§ 58. Another important series of consonant changes in PG was discovered in the late 19th c. by a Danish scholar, Carl Verner. They are known as Verner's Law. Verner's Law explains some correspondences of consonants which seemed to contradict Grimm's Law and were for a long time regarded as exceptions. According to Verner's Law all the early PG voiceless fricatives [f, θ, x] which arose under Grimm's Law, and also [s] inherited from PIE, became voiced between vowels if the preceding vowel was unstressed; in the absence of these conditions they remained voiceless. The voicing occurred in early PG at the time when the stress was not yet fixed on the root-morpheme. The process of voicing can be shown as a step in a succession of consonant changes in prehistorical reconstructed forms; consider, e.g. the changes of the second consonant in the word tather:

Verner's Law accounts for the appearance of voiced fricative or its later modifications [d] in place of the voiceless $[\theta]$ which ought to be expected under Grimm's Law. In late PG, the phonetic conditions that caused the voicing had disappeared: the stress had shifted to the first syllable.

Voicing of Fricatives in Proto-Germanic (Verner's Law)

Change illus- trated		Examples				
PIE p	PG	Non- Germanic L caput	Germanic			
	Early Late		old	modern		
	f > v		Gt haubip, O Icel haufoð, OE hēafod [v]	Sw huvud, G Haupt, NE head		
		L septem	Gt sibun, OE seofon [v]	G sieben, NE sever		
t	0>ð,d	O Ind satam, R сто L pater,	Gt hund, O Icel hundrað, OE hund Gt fadar [ð], O Icel	G Hundert, Sw hundrade, NE hundred G Vater, Sw fader		
		O Ind pita	faðir, OE fæder	NE father		

§ 59. As a result of voicing by Verner's Law there arose an interchange of consonants in the grammatical forms of the word, termed grammatical interchange. Part of the forms retained a voiceless fricative, while other forms—with a different position of stress in Early PG—acquired a voiced fricative. Both consonants could undergo later changes in the OG languages, but the original difference between them goes back to the time of movable word stress and PG voicing. The interchanges can be seen in the principal forms of some OG verbs, though even at that time most of the interchanges were levelled out by analogy.

Table 5
Grammatical Interchanges of Consonants caused by Verner's Law

Interchange		Principal forms of the verbs					
PG	OG languages	Infini- tive	Past Tense				
			sg	pl	Participle II	NE	
f ~ v θ ~ ð	OHG f~b OE θ/ð~d	heffen sēoðan	huob sēað	huobun sudon	gi-haban soden	heave seethe	
x ~ γ	O Icel, $OE \times \sim \gamma$	slá s lē an	sló slōz	slógum slōzon	sleginn slæ3en	slay	
s ~ z	$OE s/z \sim r$	cēosan	cēas	curon	coren	choose	

Note that some Mod E words have retained traces of Verner's Law, e. g. seethe — sodden; death — dead; raise — rear; was — were.