authority that so undoubted a veteran in this great work as Mr. John B. Gough recognizes the value and good sense of a modified pledge for those who are unwilling to take a more stringent one.

Finally, there is unlimited hope in the general progress of Christianity, and its increased power in the hearts of men. Never was the outlook so favorable as at the present time for the rapid coming of the kingdom of God throughout the world. Never was there less reason to doubt the entire sufficiency of biblical methods for hastening the glorious coming.

ARTICLE IV.

RELATIONS OF THE ARYAN AND SEMITIC LANGUAGES.

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WORDS FOR STRETCHING OR EXTENDING.

27. Proto-Aryan antium; Proto-Semitic ϝ to stretch, extend.

The Aryan root antium appears in Skr. antium, antium-omi, to stretch, strain; Zend. antium, to stretch out, spread out; Gr. τείνω for τευ-ω, τι-ταίνω for τι-ταν-ω, to stretch, extend; Lat. ten-do, to stretch, ten-éo, to hold, i.e. to keep on the strain; tempto (properly ten-to, according to Corssen), to try, or, primarily, as Curtius says, to stretch a thing till it fits; Goth. than-yăn; A.S. than-yăn, to extend. It is also found in many noun-stems in these and all the other Indo-European dialects, with kindred or derived meanings, in which the force of the primary idea is variously and vividly represented. This antium is really a nasalized form of ῑα, which appears as the stem before a consonant in Greek and Sanskrit. Thus antium in Skr. has the participle ῑa-ta, to stretch, and τείνω gives the aor. ετά-θνυ, while we also meet with the form τά-ςις, a stretching, and τά-νυ-μας, I stretch myself; cf. the note in Chap. IV. on nasal vowels in connection with the determinative ν.

The Semitic ϝ shows itself most simply in the Heb. ܢ, to
stretch, extend, and its antiquity is attested by the noun-stems  جاءت, extension, and  نجى, a shoestring, in Ethiopic; and especially by the word for large serpent or sea-monster: Heb. and Chald. ים; Arab. نَّبِينَ, which is derived from ים, just as the Lat. regulus is from rego, to stretch. With a predeterminative the idea of extension denoted by the simple root is transferred to time; hence the Arab. نَّبِينَ, to be perpetual, and the obsolete Heb. ים, which is to be presupposed for the noun ים, perpetuity. With the predeterminative the idea of stretching becomes that of giving, or reaching forth. So we have the Heb. ים, to give, which appears also in Chaldee and Samaritan, and of which the Syr. نَّبِينَ is probably a corruption. The Assyr. يـ is the same word with t softened to d, according to a common change. In the Eth.  جاءت, however, the primary notion has apparently been transferred to the mental sphere, and the word means, in conj. vi. 1, to be busily engaged, assiduously occupied, or, as we say, to have the mind on the strain, to be in-tent. The same root, ים, with a vowel postdeterminative, appears in Heb. ים, as well as in several of the Aramaic idioms, with the proper sense of rewarding. As corresponding with the Aryan ta we may possibly have a relic of a Semitic ים or ים in the Arab. reduplicated form نَّبِينَ, to incline downwards.

28. Proto-Aryan nat (nit); Proto-Semitic ים, ים, to stretch forward, incline.

1 This transference of meaning is very common in language. It is manifest in the origin of the words offer and proffer, Lat. praebeo (= prae-habeo, to hold out), and even in the word give which is probably identical with the Lat. habeo, to hold. So also in the Skr. prayacchāmi, I offer, give, from the root yam, properly to stretch.

2 See Dillman, Lex. Aethiop. col. 660, who, however, with apparent impropriety, connects the meaning with the idea of giving, and compares the Lat. expression: se dedere.

3 Cf. the Lat. done from do, or, as a still better illustration, the Germ. dar­reichen, to reach forth, present.
An Indo-European combination is given by Fick (I. 125). From the adducible examples there would seem to have been not only the root nat, but a degenerated form nit. The Skr. nāth means to seek for help. Comparing this with the Goth. nath, nithan (Teutonic nātha), to support, help, and the Lat. nit-or, to strive after, to seek or gain support, it is evident that the primary meaning of the root is, to reach after, or stretch forwards. — On the Semitic side the Arab. لَا، and with a vowel determinative لَا، to stretch out, lengthen, preserves the primary signification of the root; but the corresponding Heb. לֻ, while yielding the same sense, means more generally to stretch or lean forwards, to incline. Again, Eth. סו, with the post-determinative י, means, primarily, to extend, stretch out, as the noun-stem סו, a tent, implies, which is formed from it as Lat. tentorium, L. Lat. tenta, tent, came from tendo. But סו also meant to stretch forward or incline, for its current sense is to flee or to be put to flight. The proof is complete when we refer to the identical root in Syriac, כָּנָא, to incline, used specially of a scale of the balances.

29. Proto-Aryan mad; Proto-Semitic מ, to extend, to measure.

The root ma yields the common Indo-European words for measuring. In its undeveloped form it is found in Skr. ma, to measure; Zend md, to measure, to produce; Gr. μέτρον, a measure; Lat. me-tior, to measure; Eccl. Slav., mé-ra, a measure. The secondary root mad is also Proto-Aryan. It appears in Lat. mod-us measure, and mod-eror, to keep in

1 Pott's attempt (Wurzelwörterbuch, i. 576), to connect nāth with מ, to lead, fails, because it begins at the wrong end of the train of ideas. The Skr. nātha; means, a "leader," only because it first meant a protector, i.e. one who is sought for help or support. As a neuter noun, nātha means help or support.

2 Just as the Lat. fugio is from the root bhug, to incline, bend, which also yields our English bow. The Arabic لَا, just cited, means also to flee; cf. Heb. לְלָ, 1 Sam. xiv. 7.
measure, mod-ius and Gr. μέθυμως, a bushel measure, and it takes the place of ma entirely in the Teutonic mat (Goth. mitan, Engl. mete). In the figurative sense of considering (cf. Germ. ermessen) we have it in Gr. μεθομα, to think on, μεθομα, to care for; while it is found also in the same sense in Keltic. The sense of measuring, then, is the prevailing notion attaching to these roots. That the primary idea was that of extension can, we think, be pretty clearly shown. In the first place the idea of measuring is not primitive; it is essentially a secondary and complex notion, implying a fictitious comparison with an accepted standard: it must be expressed by the new application of a previously existing term. What, then, is it to measure? It is just to take the length, or rather the extent, of anything. Hence, when we come to examine in various languages the words for measuring whose etymology is accessible, we find that the radical notion is that of extending, in nearly every case.\(^1\) In the second place, we have apparent secondary forms of the root ma which imply the notion of extending. There are in Indo-European apparently three roots, mak, mag, and magh (see Curtius, 5 ed. p. 328, No. 462), which had the sense referred to. These have given rise respectively to such representative words as the Gr. μακός, long; Lat. mag-nus, great, and Skr. mah-ant, great. These are most naturally to be connected with a root ma, having the general sense of extending.\(^2\) In the third place, there is more direct evidence from the usage of the root ma itself. In Zend. it means to make, produce, and a similar sense is given by it in Sanskrit, when it is compounded with the prefix nis. But it is more significant still that the Proto-Aryan word for mother, matar, is from ma, and as it obviously means the producer, it shows how very early this meaning was attached to the root. Now,

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\(^1\) The Arab. لـ is an exception. Like the equivalent Heb. י-וי it primarily meant to hold or contain, and was thus applied to dry and liquid measure. This, of course, belongs to a later order of things.

\(^2\) It is noteworthy that ma is the stem of the Latin comparative ma-jor, and that there is no final consonant in the stem of the Gaelic mbr and Welsh mawr, great, which are undoubtedly homonymous.
we cannot very readily get the idea of producing from that of measuring, but we can very easily associate it, as well as the notion of measuring, with the idea of extending (cf. the Lat. *pro-duco*). — The root נ is preserved in the Arab. נ, נא, to extend, spread out, and though it does not appear in other idioms in verb-stems without consonantal determinatives, it is probable that the Semitic word for hundred (Heb. נוּן) is derived from it. However this may be, there is no doubt that this fundamental expression occurs in many other forms. The most notable is the root נ, which appears as Proto-Semitic, not only in the simple form, but also with various determinatives, as נ, נ, נ, all having the notion of extending. The simple root נ had also, from early Semitic times, the sense of measuring, as appears from the Heb. נ, to lengthen, to measure, as compared with the Arab. פ, the name of a certain dry measure, from the root נ, of like meaning. In the same way, as we have seen, the root mad yields the Lat. *modius* and Gr. μεθυμα, and thus the analogy is completed with the root נ.

30. Proto-Aryan *rak*; Proto-Semitic, נ, to extend.

In the Indo-European sphere the two roots *rak*, *rag* lie side by side; each of them means, properly, to stretch, extend. Whether the form *rag* has been weakened from *rak*, according to the analogy of a multitude of roots in Greek (Curtius, p. 533 ff.), and occasional examples elsewhere, or whether they are equally autonomous, we do not need to attempt to determine. The root *rak*, in the sense of extending, seems to survive in the Zend *raq-ta,* right, straight (as

1 From this root comes the Assyr. *ma’adu*, great, and also, as Schrader has suggested (Keilinschriften u. d. Alte Test. p. 3) the Heb. נ, much, which has nothing to do with נ, to be strong.

2 The נ here corresponds to an original נ, as in Sanskrit, and not to ג, which it represents, in place of an intermediate ז, only before נ and נ. See Schleicher, Compendium, p. 186. The root is therefore נ, and not נ. Pott, who brings it in under נ (Wurzelwörterbuch, iii. 593), admits that the sibilant looks suspicious. Fick (i. 406), combines with Lat. rec-tus (for reg-tus) without hesitation.
our word *right* is from the root *rag*). It also appears in the Skr. *rañ-mi, rañ-aná*, a string, a thong, a measuring line, and probably, in *rdq-i,* a large quantity. A weakened form of the same primitive root is perhaps traceable in the Lat. *por-ric-i-o*, to present, offer to the gods, which would stand to the root *rat* as *por-ric-o* does to *rag;* which also has the sense of Lat. *pro-duco.*—The Semitic *ṯ* appears clearly in the form *ṯūm*, to extend. This is represented by Heb. *ṯūm*, to prolong; also to be long, or to delay; Arab. *ṯūm*, to delay, Syr. *ṯūm*, to be long, delay; and in other Aramaic dialects. The Assyr. *arik*, long, with various other derivatives, presents the same root. *ṯ*, in this sense, seems also to have had another vowel predeterminative; for the Arabic *ṯūm*, means to delay, to linger, while the same root in various Semitic idioms conveys the kindred notion of coming behind. It is most fully represented in Assyrian, where we have *arku, arki, arka*, behind, *arka, arki*, after, *arkatu*, the hinder part of anything. The last-named word is the exact phonetic representation of the Heb. *ṯūm*, which has the same meaning, and which also means the hinder part of the body; cf. Arab. *ṯūm*, *ṯūm*, and Heb. *ṯūm*.

31. Proto-Aryan *rat*; Proto-Semitic *ṯ*, to dispose, arrange.

For the Indo-European root, see Fick I. 188 f., and cf. Pott III. 216 ff. (Nos. 1024, 1025). It is allowable to compare the Skr. *rañ*, to arrange, compose, set right; Goth. *rañ-yan,*

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1 It is a fancy of the Hindu grammarians that this is erroneously written for *rāśi.* But no root *rāś* or *rañ* yields the proper sense.

2 Cf. Corssen: Ansprache u. s. w. d. lat. Sprache, i. 500 f. He assumes a root *rīk*, which he finds represented in many other words. Most of the combinations seem hazardous. The most plausible is that with O. High Germ. *rīk-an* (cf. Eng. *row*), to place in line.

3 This root in Arabic also means to stand still. For the sense, may we not compare *ṯūm*, to stand, with the root *ṯūm*, already discussed?

4 For a full discussion of the Assyrian words, see Lenormant: Étude sur quelques parties des syllabaires cunéiformes (Paris, 1876), p. 143 ff.

5 This must be carefully distinguished from Eng. *reck-on*, A.S. *ree-nan*, which is from the root *rag*, to extend, direct.
to reckon, determine; Lith. renk-ą, to collect. — The Semitic root, like the preceding, is found with a light predeterminative: Heb. "ן, to set in line, arrange, adjust; Eth. " ג and " ג, to adjust, reconcile. ¹

**Words for Bending or Curving.**

32. Proto-Aryan kap, kup; Proto-Semitic ֶן, to bend, to curve.

*Kap* is represented in the Gr. κάμπ-τω, to bend, κάμπ-ύλος, curved, and probably in Lat. cap-erare, to wrinkle. The Skr. kamp, which is undoubtedly the same root, to tremble, the expression being suggested by the curvature of trembling objects; câp-a, a bow, from the primitive form kap, preserves the earlier notion. The same notion is apparent in *kap-and*; Gr. κάμπ-η, a worm (cited by Fick, i. 39). — The Semitic ֶן has a very wide representation, and in its simplest form it appears in Heb. ס. Syr. ס; Chald. ס, to bend, to be curved; Arab. كف, to turn away or aside; while the Assyrs. has it as a noun-stem in *kap-u,² a hollow place. The apparent derivative ֶן, the palm, or hollow hand, is found throughout the system. With closely related meanings the root is also found with various determinatives in verb and noun stems that are surely Proto-Semitic.

33. Proto-Aryan kmar; Proto-Semitic ֶח, to bend around.

The researches of Pictet³ and of Pott (W. Wb. i. 503) have made highly probable the existence of a primitive root kam, with the sense of bending (comp. also Fick, i. 40). More certain, however, is the occurrence of a root kmar, with three

¹ There can be no doubt that the last two pairs of roots (Nos. 30, 31) were originally the same. The idea of arranging is a secondary one, and, according to a multitude of analogies, it is usually expressed by words that mean extend, etc., to put in line. So with our word ar-range, the Lat. or-do (cf. or-ior), dis-privio, rec-tus, our word right, reck-on, and a great number of homonymous words from the root rąg. Indeed, the root דם (No. 30), has also the sense of fitting, adjusting, in Hebrew, Talmudic, and Arabic.
 ² For examples of this word, see Norris, Assyrian Dictionary, p. 592 f.; cf. 516.
 ³ Les origines indo-européennes (2d ed. 1877), ii. p. 277.
consonants. The Sanskrit has a root *kmar, kmarati,*¹ to be curved, and although the verb-stem does not emerge elsewhere, we find in Zend the noun *kmar-a,* a vault, and a girdle; cf. Gr. *καμάρα,* Lat. *camara,* a vault, and Lat. *camur,* bent inwards (used of horns). It is possible, as Fick suggests, that the same stem appears in O. S. *himil* (Germ. *himmel*) as the vault of heaven.—The Semitic root is developed in precisely the same way. Cf. Eth. *חמר, חמר, a vault, and an orb,* with Chald. *חמר, a girdle,* Syr. *חמר.*²

34. Proto-Aryan *ank* (*ak;* Proto-Semitic *ı̂n,* to bend, curve.

The Indo-European has mostly the nasalized *ank* in stems from this root; but *ak* appears in some forms, and according to what was said on the subject of nasalization in Indo-European roots in Chap. iv., the primary sound may be represented by *ak.* Cf. Skr. *ac, anc,* to bend, *ak-a,* the curved bosom, and a kook; Zend *ak-a,* a clasp; Gr. *ἀκρύας,* a clasp, hook, *ἀκρύας,* the bent arm, *ἀκρύας,* bent, curved; Lat. *uncus,* bent, and a hook; O. Irish *ẹc-ud,* a hook; Engl. *angle* in its two senses. —The Semitic root is not found in its simplest representation; but appears with a variety of determinatives, all of which reveal its primary force. Thus *חמר* (in verb or noun stems in Heb., Chald., Syr., and Arab.), to bend or twist; Eth. *חמר,* and Arab. *חמר,* to bend, restrain, shut up; Syr. *חמר,* Chald. *חמר,* to twist, to turn; *חמר,* to bend, to arch, *חמר and חמר,* to twist, all of which also are Proto-Semitic. Forms with other determinatives are found besides in the separate dialects. Moreover, the ancient roots *חמר* and *חמר* give the idea of restraining, already adduced.

¹ This root, though not quotable in the literary language, is attested by the Dhātupātha; see the Petersburg Lexicon, s.v.

² This root is not borrowed from the Greek *καμάρα,* or from any Indo-European source. It is probable, however, that the Heb. *חמר,* an idol-priest, through its Syriac equivalent, was derived from the Persian source above indicated; *kamar* was the girdle of the fire-worshippers.
WORDS EXPRESSIVE OF MOVEMENT.

35. Proto-Aryan sad; Proto-Semitic נון, to go.

The root sad has not a large extant representation in the Indo-European; but is well defined and well established. Cf. Skr. sad, to go; Gr. ὅσ, a way, ὅσ-εὔω, to walk, etc.; Eccl. Slav. šjd, to go, chod-ŭ (χοδŭ), a course, chod-iti, to go, proceed. Other combinations made by Curtius (5 ed. p. 241, No. 381) must be regarded as hazardous; cf. Pott, iv. 712 f. (No. 1788). — The root נון, in its simplest representation, means to go away, to go aside;¹ Arab. כָּנַס, to turn aside; cf. Heb. קֹנֶס, a side. With indeterminative נ, Heb. כֹּס and Arab. כָּנַס means to go up or go down, but also to proceed or march.² With internal vowel expansion we have נ, meaning to go after, to pursue; the Proto-Semitic word for hunting, found in all the dialects except the Ethiopic. The sense of lying in wait, ascribed by Gesenius to this root as its primary meaning, is naturally secondary. It seems also probable that through the postdeterminative נ, the root כָּנַס, the ancient and universal term for righteousness, meant primarily, to go straight, or right on.

36. Proto-Aryan sar; Proto-Semitic נ, to go, to move quickly.

The root sar is found in Skr. sar, to go, to flow; Zend har, to go; Gr. ἀλ-ομαῖ, to spring, ἀλ-ν, springing, etc., ὁπ-μή, impulse; Lat. salio, to leap, and many other Indo-European forms. נ is seen in Arab. רב, Med. Ye, to go, to walk, to journey; רב, Med. Waw, to go up, to leap upon; Heb. רב, to travel, to go around; Chald. רב, Syr. רב, to leap upon or forward. These forms arise from internal

¹ That the verb is not a denominative from מ, a side, is proved from the fact that the latter is only Hebrew, while the former is Proto-Semitic. The Syr. מ, with, among, is, of course, not connected with מ.

² Cf. the uses of Latin scando, and its compounds; also the Proto-Aryan skand (Fick, i. 232), in which all the above meanings are exemplified.
vowel expansion. The simplest form is apparently preserved in Eth. 업체, to leap, to rush upon (in the Amharic dialect the same root means to be carried along); while with the determinative we find Arab. ٌخ, to go swiftly; Syr. ٌخ, to slip down. The agreement between the Aryan and Semitic roots in both general and special meanings should be well noted.

37. Proto-Aryan ragh; Proto-Semitic _TERM, to move quickly.

For the various representations of the root ragh Fick, i. p. 190, may be compared with Curtius, p. 192 (No. 168). We shall cite a few cases in which it undoubtedly appears: Skr. ranjh (= rah = ragh) and rangh (= ragh), to run, to hasten; langh, to spring up or over; rangh-as, ranjh-as, rah-as, swiftness, haste; lagh-u and ragh-u, quick, small; Gr. ξαλαξίς, small; Lat. lev-is, light, for legv-is; Eccl. lig-uku, light; Goth. leih-tas = Eng. light; O. Irish, ling-im, I leap, and the common Teutonic root lang-an, to go forward, hasten. — The root TERM appears in Arab. ٌخ, to move quickly, to tremble; Syr. ٌخ, to long after, to desire = Chald. ٌخ. 1

With a postdeterminative ٌخ, we have ٌخ (Heb., Aram., and Arabic), combining the notions of trembling and being angry. With postdeterminative ٌخ, the root, in the form ٌخ, means to run, to go about: cf. Heb. לִשׂ, to move about; Syr. ٌخ, to lead, ٌخ, a torrent; thence also a Proto-Semitic word for foot (found in Heb., Syr., Chald., Arabic, and some minor dialects), Heb. ٌخ. 2

38. Proto-Aryan di (da); Proto-Semitic ٌخ ( TERM), to move swiftly, to fly.

The root di shows itself in Skr. di and dri, to hasten, to fly; Gr. δί, to flee, to hasten, δι-εμα, to speed away, δι-νός, a

1 For the connection of ideas, cf. Lat. cupio, which is homonymous with Skr. kupa, to move quickly, to be angry; see Pott, W.Wb. v. 91. Our word to long for and the Germ. er-lang-en, are from the root under discussion.

2 So our word foot, representing the Proto-Aryan term, is from the root pad, to go.

whirling, δρ-νω, etc., to whirl; O. Irish dt-an, swift. That there was another, perhaps earlier, form da, as Fick (iv. 106) suggests, seems probable enough from the Gr. ὁ-νεω, to shake, to drive about. — The root ἁττ is seen in Heb. ἁττ, to fly swiftly (see especially Deut. xxviii. 49; Ps. xviii. 11); cf. Arab. ٢٥٥٣, to run swiftly, also to roll about. Hence, or from a cognate Dragging, we have the Heb. ٢٥٥٣; Chald. ٢٥٥٣; Syr. ٢٥٥٣, the name of a bird of prey, so called from its swift flight.

39. Proto-Aryan tal; Proto-Semitic ٢٥٥٣, to raise, to weigh.

The root tal has a very wide distribution. For a very satisfactory discussion of the history and mode of its development, see Curtius, p. 220 f. (No. 236); cf. Fick, i. 94; Pott, ii. 304–314 (No. 442). In Greek the fundamental form has been retained, though it also appears as tel and tol. Thus we have, with other forms, ταλ-άω, for ταλ-άω, to bear, ταλ-ας, enduring, wretched, ταλ-αντον, a balance, weight, ταλ-λω, to rise, and also to raise upon (cf. ἀνατέλλω and ἐπιτέλλω), ταλ-μα, endurance, daring. In Sanskrit the degenerated form ταλ alone appears: ταλ, to lift up, weigh, ταλ-ά, balance. In Latin the ground-form is tol, from which tal comes by weakening: toll-o, τολ-ι, tolarare. In Teutonic the root comes out as thul; Goth. thul-a, I endure (cf. Germ. dul-den; Scottish thole; Eng. thole-pins): In Eccl. Slavonic we find μό ταλίς a quiver; and in Irish tal-laim, I take away. The occurrence of this root throughout the Indo-European system is one of the strongest evidences of the existence of a Proto-Aryan l. Cf. our remarks on that point under the subject of comparative phonology. — The Semitic ٢٥٥٣ agrees with tal not only in the primary, but also in most of the secondary meanings. In the simplest inflective form the Heb. ٢٥٥٣ means to raise, also to heap up; cf. Chald. ٢٥٥٣, elevated; Assyrian ٢٥٥٣, exaltation; Arab. ٢٥٥٣, erect. From this root we have the word for mound or heap: Heb. and Chald. ٢٥٥٣; Syriac ٢٥٥٣; Arab. ٢٥٥٣; Assyrian ٢٥٥٣. The same root has the sense of
suspended, hanging up; hence in Heb. רעש, the pendulous leaves of the palm. A like meaning is found in רוש, which is the same root with a post-determinative vowel, and appears in Heb., Chald., and Syriac, though the primary sense of lifting up comes out also in Syriac. In Arabic and Ethiopic the associated idea of adhering to is expressed by this form. The vitality of the root is further seen in the Arab. تعل, to rise up, become prominent, طلع, to ascend, to rise (used of the sun and stars); conj. נ, to raise up. The Assy. א選び derives its meaning of weighing from the same root with predeterminative נ.

Words indicating Position.

40. Proto-Aryan sad; Proto-Semitic סד, to sit, to be situated.

For the familiar root sad cf. the Skr. sad, to sit; Lat. sed-eo; Teutonic sat (Goth. sit-an; Engl. sit; cf. Goth. causative sat-yan; Engl. set), and corresponding terms in Slavonic and Celtic. The Gr. ἑδ, for σεδ, is transitive; cf. εκ, for ε-σεδ-κα, I set, έκομαι, for σεδ-κομαι, I sit = Germ. ich setze mich. The causative form sad-aya is also Proto-Aryan, and a large number of primary noun-stems in all the dialects preserve the ancient root. The force of the causative verbs throughout shows that the word meant first not to sit, but to be situated or placed. — The Semitic סד appears mostly as causative or transitive with the predeterminate ס; so Heb. יסד, to place, to lay a foundation, to set in order = Chald. יסד; Arab. ُسد, with a specialized meaning, to set a pillow; Assyr. isid, a foundation; cf. Heb. יסד, etc. That

1 So in Greek ῥάς-ἀπός, a basket, and τῆς-ἀμφή, a supporting strap, from the root ταλ. These as well as the words for weighing, above cited, have their meaning from the sense of suspending.

2 Cf. the Germ. an-hängen, to cling, adhere.

3 It should be mentioned that in Hebrew, Chaldee, and Syriac the same root means to raise, and to be heavy; the additional meaning in Assyrian well illustrates the Greek and Sanskrit usage.

4 See Norris, Assy. Dict. (ii.), p. 495, for sufficient examples.
the root *ṣā* was primarily intransitive is clear from the Arab. *ṣan*, to be placed, to be in the way, to obstruct; cf. Heb. *ṣā*
Chald. *ṣanā*; Syr. *ṣā*, a block; while the Heb. īṣā, an assembly (cf. Lat. consessus) has as its most probable etymon an obsolete verb ḫār or ḫār, meaning to sit. With a post-determinative *n* we find īṣā (Heb., Chald., and Syriac), meaning to set in order, like the Heb. īṣā in one of its applications.

41. Proto-Aryan *as*, *ās*; Proto-Semitic *ṣā*, to sit, to remain.

Cf. No. 58. For discussion of the root *ās* see Pott, W. Wb. ii. 2. 299–302 (No. 683); Curtius, p. 379 f. (No. 568). The following forms clearly represent it: Skr. *ās*, to sit, dwell, remain; Zend *āh*, to sit, to remain; Gr. ἡμα, for ἡμα, I sit. Very probable derivations are, Lat. *ā-nus*, for *as-nus*, the fundament, and Lith. *as-lā*, floor, ground. — The Semitic *ṣā* does not seem to be retained as a verb-stem, except in denominatives, but its existence in the sense indicated is shown in many noun-stems. Cf. Arab. *ṣā* and *ās*, a foundation, also anything that remains or abides; *ṣā*, the foundation of a house = Assyr. *asas-u*, *uss-u*, foundation; Heb. *ṣā*. Hence Arab. *ṣā*, Assyr. *asas-u*, to lay a foundation. The root also comes out in *ṣā* with similar meanings in Heb. and Arabic. From these instances it is clear that, as in the Proto-Aryan *ās*, the root *ṣā* meant originally to be placed, to remain.

42. Proto-Aryan *man*; Proto-Semitic *ṃ*, to stay, to be fixed.

For a full exhibition of the words that spring from the root *man* see Pott, W. Wb. ii. 2, 118 ff. (No. 607). The discussion of Curtius, p. 311 ff. (No. 429), is complicated by the identification of this root with *man*, to think. This combination, which is maintained by leading Indo-European etymologists, is of no significance for our present business, inasmuch as *man*, to remain, is an independent Proto-Aryan
We cite Zend and Old Persian man, to remain; Mod. Persian mān, to remain, also abiding, eternal; Gr. μέν-ο, 1. to stand fast, to endure; 2. transitively, await, expect; μεν-ο, to remain, await; Lat. man-eo, to remain, also to wait for. Such noun-stems as Gr. μονή and Lat. man-sio show well the inherent notion of the root. Precisely the same primary sense appears in the various representations of the Semitic 𐤄. With the lightest predeterminate ṭ the root 𐤄, widely represented in verb and noun stems in all the dialects, means to be fixed, firm, enduring, and in causative uses and forms, to make firm, establish. The figurative sense of enduring, abiding, comes out in all the dialects as clearly and fully as it appears in the root man. Thus the simplest abstract expression of the root is Heb. יִשָּׂ, for יִשָּׂ. Assyr. amat-u; Arab. ܐܵܡ̇ ṫ u; Eth. ἁθῆ, truth, fidelity, religion, i.e. what is fixed and abiding. This figurative use is almost the exclusive one in some of the dialects; but the primary physical notion is exhibited in all. With the predeterminative ṭ the Arab. ـ ـ means to stand still, to remain in a place. This last form, though not certainly Proto-Semitic, shows the presence and force of the ancient root, with its meaning as above given.

Words for Shutting or Enclosing.

43. Proto-Aryan klū; Proto-Semitic  ucwords, to shut, enclose.

The Indo-European root is not found in the Indo-Iranian division, but it appears in every other branch of the family, and must have a Proto-Aryan origin. For its manifestations see Pott, W. Wb. 1. 684 ff. (No. 227); Curtius, p. 149 f. (No. 227). The identity of these two roots is nothing more than a brilliant hypothesis. No apt analogy for the etymological association of the ideas is at hand. Something more is needed than a mere plausible connection of the notions expressed. And the association is nothing more than plausible. The intermediary idea is given by Pott, for example, as that of expecting or waiting in meditation. But it will be found that in all the cases where the root shows the two meanings of expecting and remaining, the latter is primary, the former secondary. So with manere, μένει, μένει. In any case man, to remain, and man, to think, should be treated as separate roots.

59); Fick, i. 541. The most significant representations are found in Gr. κλεις, κλείς, for κλέος, a key, κλειω, for κλέος, to shut, κλαυ-ός, a collar, κλει-θροῦ, a bolt or bar; Lat. clāv-is, a key, clāv-us, a nail (as a fastener), clau-do, to shut; O. Irish clō-i, nails; Lith. kliūv-ą, to fasten on, attach. Whether the Old High Germ. sliu-zan, for sliu-z-an, to shut (whence Germ. schliessen, schloss, etc.; cf. Engl. sluice, slat, slot), belongs here is doubtful; but its affinity would not prove, as Curtius imagines, that the root was primarily sklu. See our remarks on the prothetic s in the discussion of the morphology of Aryan roots. — The Semitic مَلَحُ is represented by Heb. מַלְחָ, to shut, enclose; מַלְחָ, a prison; Chald. مَلَحُ; Syr. مَلَحُ, to shut, مَلَحُ, a bolt; Eth. مَلَحُ, to shut out, prohibit; Arab. مَلَحُ, to guard, watch; Assy. مَلَحُ,1 to hold back, to refuse. The root has also the secondary sense of shutting out, separating,2 as appears from the Heb. מַלְחָ, different species, with homonymous words in Ethiopic and Arabic. A great number of Semitic forms point to a simpler root, מַלְחָ, represented in all the dialects, with the general sense of including, holding, containing. It should also be observed that the Aryan root klü has not the physiognomy of an ultimate root.

WORDS FOR GUARDING AGAINST OR FEARING.

44. Proto-Aryan var; Proto-Semitic מַלְחָ, to guard against, to fear.

The root var may be traced through its various manifestations in its treatment by Pott, W. Wb. n. 1. 552–597 (No. 512); Fick, i. 211; Curtius, p. 846 f. (No. 501), and p. 550 (No. 660). We shall cite only a few of the many cases in which the root appears, according to the judgment of these and other leading etymologists. These instances will be found to be the most truly representative: Skr. var, to cover, protect, ward off; vár-a, var-ātha, defence; Zend apa-var, to

1 E.g. ik-lu-u, Inscr. of Khorsabad (ed. Oppert), lines 28, 69, 113, and ik-la-a, lines 79, 122.

2 Cf. ex-cludo, di-cludo, and bar-kašon.
ward off, hold back, var-atha, defence; Gr. ὑπο-μαυ, for ὀπο-μαὐ, to keep watch, ὄπ-ως, a sentinel, ὄφω-πά, for προ-ὄπ-α, a guard, ὄφ-α, care, apprehension, ὄφ-άω, to see; Lat. ver-eur to fear, ver-écundus, modest, i.e. diffident, apprehensive Goth. var-ian, to keep off, var-as, careful; O. High Germ. wár-a, care, regard (cf. Engl. war-y, ware, ward, a-ware). — The Semitic root unites in the most signal manner the two meanings of guarding and fearing, indicated by the Aryan var. We first call attention to the Arab. یُهُرْ, to repel, hinder. Comparing this with the Eth.  פו ג, an apron, from the corresponding obsolete root  פו ג, it is clear that the primary meaning was to keep off, to guard against. Now the same root in Hebrew is כור, meaning to fear, which completes the parallel. If further assurance is needed, we may cite the Arab.  א, which is the same root כור with post-determinative כ, and means to be afraid of, to keep away from, א, pious, God-fearing (cf. Lat. re-ver- ens). Its equivalent, the Heb. כור, means to tremble, i.e. to quake with fear (Isa. xv. 4). No two related words in different branches of the Indo-European family show more striking correspondences in meaning than do the root var and כור.

**Words for Binding Together.**

45. Proto-Aryan sar; Proto-Semitic  י,  יי, to bind together.

For the root sar see especially Curtius, p. 853 f. (No. 518), and the references to Kuhn's Zeitschrift there given. We cite the following forms: Skr. sar-āt, a thread; Gr. ὑψ-μος, for ὑψ-μος, a collar, necklace, ὑψ-μαθός, a string, or chain, ὑψ-ω, to tie, to bind, ὑψ-μός, a fastening, ὑψ-ἐπος, bondage; Lat. serv-ō, to string, to tie, serv-a, a bolt (fastener), serv-ies, a

1 See the Petersburg Dictionary, s.v. The word is not cited there from current literature, but from a native lexicon.
series, ser-tum, a garland; O. Norse sér-vi, a collar; Lith. ser-is, a thread.—The Semitic ser has properly the sense of holding together firmly. With predeterminative it yields the Heb. ṣer; Syr. ṣer; Arab. ʿser, and wṣer, to bind, with many homotypical noun-stems; for the Assyrian we may compare 'isir-u, a band. With another predeterminative, the Heb. ṣer, to punish, chasten, obviously meant at first to bind. The root ṣer, with a like primary force, appears in Heb. ṣer; Arab. ʿṣer; Syr. ʿṣer, Chald. ʿṣer, all meaning to bind together. The same root, ṣer, reveals the same meaning in many developed forms; the examples just given will, however, suffice for our purpose.

**Words for Pressing and Crushing.**

46. Proto-Aryan mak; Proto-Semitic ṣer, to press, to crush.

Certain of the ideas expressed by this pair of roots agree with some conveyed by the group meaning to rub, to bruise (Nos. 21-26), though the fundamental notions are different. For the root mak, cf. Skr. mac, with the bye-form mane, to crush; Gr. root μαρι, for μακιν, in μασσω (μαρι-ω), a kneader, μαρι-εφι, a baker, μαρι-μα, etc., dough, bread; Lat. mac-er, lean, meagre (i.e. pressed out), mac-erare, to macerate, maceria, a clay wall (as kneaded or pressed together); Lith. mink-au, I knead; Eccl. Slav. mak-a, flour. Curtius, in his discussion of the Greek root (p. 356: No. 455), cites with approval the conjecture that the Lat. maxilla, jawbone, or crusher, belongs here also.—The Proto-Semitic ṣer is shown in Heb. ṣer, to sink (to be pressed down); and while the Chald. ṣer preserves the transitive meaning to press down, part. ṣer, humbled, afflicted, the developed form ṣer exhibits the intransitive sense, answering to Heb. ṣer. The Arab. ʿṣer, again, has figurative applications: to diminish,

1 The cuneiform sign indicated by ṣ stands often for ṣ as well as for ṣ.
2 Cf. the Indo-European dam, to subdue, as developed from da, to bind; Lat. stringo in Virgil, Aen. 9. 294; Germ. bandigen
3 Attested by Hindu lexicographers; see the Petersburg Dictionary.
to consume, and in conj. v. to oppress a debtor. With in-
determinative the Heb. הָלַק means to press and to crush (cf.
1 Sam. xxvi. 7 and Ezek. xxv. 3 with Lev. xxii. 24); and
Arab. ]אָלָכ means to rub and, as the derivations show, to
crush small. The Chald. הָלַק has a meaning similar to that
of the Hebrew; and as the root פּוֹ, with the secondary הָלַק,
race a perfectly parallel course through Hebrew, Aramaic,
and Arabic, they are plainly Proto-Semitic in the sense
indicated.

WORDS FOR CARVING OR GRAVING.

47. Proto-Aryan grap, glup; Proto-Semitic בּּא, to carve,
to grave.

For these Aryan roots cf. Curtius, p. 178, 180 (Nos. 134,
138), with Fick, i. 574. The root grap is seen in the Gr.
γράφω, for γράμω, to cut into (as in Iliad 17, 599), to
write; 1 A. S. ceorf-an; Swed. karf-va; Engl. carve. The
root glup appears in Gr. γλύφω, for γλύπω, to grave, γλύφ
avos, a graving tool, γλυφή, carved work, γλυπτής, a sculpt-
tor; A. S. cleof-an, to hew; Engl. cleave. The f in the
primary eutonic forms shows that the final letter was origi-
nally p. The A. S. graf-an; Engl. grave, may possibly be
from the root grap, with g exceptionally retained; but this
is by no means certain. We cannot agree with Curtius in
comparing the Lat. glub-o, to peel off, with γλύφω. These
are probably related, but not identical. The use of grap and
glup, with their train of allied words in the widely separated
Greek and Teutonic, is very strong evidence that they are
Proto-Aryan.—The Semitic בּּא is represented in Chald. בּּא,
frequent in the Targums; Syr. בּּא, Eth. בּּא, to carve,
to grave, which is common in verb and noun stems relating
to sculpture. The Arab. בּּא means to cut off, and es-
specially to peel off (cf. the use of glubô just mentioned). In

1 So terms for writing are made generally from such words; cf. Engl. write,
with Germ. riten; and the Lat. scribo is from a root allied to grap with prothetic
s and just as sculpe is related to glup.
regard to the roots here combined it should be observed that neither of them is secondary in its origina; the evidence of their primary identity is strengthened from the consideration that to all appearance they are ultimate roots.

WORDS FOR PIERCING, INFIXING.

48. ? Proto-Aryan *smar*; Proto-Semitic *звон*, to pierce, infix.

All leading etymologists hold to the originality of the *s* in the root *smar*. For the forms cf. Pott, W. Wb. v. 713 ff. (No. 550); Fick, i. 254; Curtius, p. 330 (No. 466). The following forms will show that the current Indo-European sense of the root is to hold in mind; Skr. *smar*, to remember, keep in mind; Zend *mar*, of like meaning; Lat. *me-mor*, mindful, etc.; Gr. μέμων, anxiety, μέμορος, memorable, μάρτυς, a witness, etc. The idea of remembering or keeping in mind is, of course, secondary. It remains to be seen what the primary notion was. This cannot be learned from the form of the root *smar* itself; but perhaps it is legitimate to try to get it from other sources. Let us look at the secondary root *smard*, formed through the determinative *d*. This is seen in A. S. *smeart-an*, to feel stinging pain; Engl. *smart*; cf. Germ. *schmerz*; Gr. σμηραδίας, σμηραδιος, terrible, frightful; Zend *a-hmars-ta*, for *a-smard-ta*, not bitten or gnawed

1 (cited by Pott, W. Wb. v. 540). This last form is the key to the meaning of the other words: *smard* meant (1) to pierce, and (2) to pierce or sting the soul, just as Lat. *pungo* means (1) to pierce, and (2) to vex or grieve. The primary *smar* would then mean (1) to pierce, (2) to pierce or infix in the mind, to remember. This is in accordance with the analogy of many similar terms in other languages. Thus the familiar Semitic root *звон* meant (1) to pierce, (2) to pierce or infix in the mind, to remember. The Heb. *יָדַע*, as we shall presently show, means (1) to pierce, (2) to keep in mind, to watch. Cf. also Arab. قَالَ، to cut, to pierce,
to commit to memory; ːٛ, to cut, conj. v. to keep in memory. The root smar, then, according to the best lights, meant first to pierce. — That ين and ين mean to pierce, to infix, is apparent from the following examples: Heb. ين; Chald. ين, Arab. ين, a nail; Chald. ين; Arab. ين, conj. ی, to fasten with nails. Now the Heb. ين means a thorn, and Arab. ين, thorns, especially “spina Egyptiaca”; Heb. ين and Assyr. semir-u, also meaning a diamond. The Heb. ين and Chald. ين mean to keep in mind, to watch, i.e. obviously, to pierce, or fix in the mind. The analogy is thus completed with the root smar.

Words for Wetting or Pouring out.

49. Proto-Aryan sak (sik); Proto-Semitic ps, to moisten, pour out.

For the Indo-European forms see Pott, W. Wb. v. 331–334 (No. 1069); Curtius, p. 137 (No. 24 b); Fick, i. 229. The following forms from sik are representative: Skr. sic, to moisten, sprinkle, pour out, sek-a, sec-ana, a sprinkling, etc.; Gr. ix-μας, moisture, ix-μος, moist, etc., also ix-ωρ, divine blood; O. High Germ. sth-an (cf. Germ. seih-en), to strain, filter, seich, wine; Eccl. Slav. sic-ati, to make water. Fick (cf. iv. 56) calls attention to Lith. sunk-iu, to filter; Eccl. Slav. sok-ù, juice; Lat. sang-vis, blood, as indicating the existence of an earlier root sak, from which sik arose through weakening. — For Semitic forms cf. Arab. ييٛ, to moisten, water, pour out water; Eth. ييٛ, to water. In Hebrew, Aram., and Assyrian the corresponding verbs mean to be moist, to drink in, and in the causal forms, to water, give to drink. The notion of drinking is, of course, secondary. It is not found at all in Ethiopic, and is subordinate in Arabic, as it does not appear in any of the sixteen derivative nouns.

WORDS DENOTING COLD.

50. Proto-Aryan kar; Proto-Semitic ṭp, to be cold, to freeze.

The root kar is established by Fick, i. 57. Cf. Skr. ā-ār-a, cold (as noun and adjective); Zend ār-eta, cold; Lith. szal-u, to freeze, szal-nā, hoar-frost, also szar-mā. The A. S. and Icelandic hrīm; Engl. rime, probably contains the same root.—For the root ṭp cf. Arāb. ʿḏ, to be cold; Eth. ḍez, to be cold; Syr. ʿḏ, to become cool (cf. Chald. ʿḏ, to cool oneself). It appears also in many noun-stems in all of these dialects, as well as in Heb. ṭp, cold (adj.), and ṭ, cold (noun), etc. It is not remarkable that we should find an Aryo-Semitic word for cold, when we find so many for the action of fire (Nos. 1-4).

WORDS FOR THINKING.

51. Proto-Aryan man; Proto-Semitic ṭ, to think (to measure).

The familiar root man in Indo-European means, predominantly, to think. The following are a few of the numerous forms that represent it: Skr. man; Zend man, to think, suppose; Gr. μένος, spirit, disposition, μαίνω, for μαν-ω, to rave, μάν-τις, a seer; Lat. men-s, mind, etc., men-tior, to lie (i.e. to devise); Goth. ga-mun-an, to think of; A. S. ge-mun-an, remember, man-ian, to remind, maen-an, to wish = Engl. mean; Lith. min-į, to think of; O. Irish men-me, mind. The primary meaning is to measure, as all etymologists agree, and it is clearly a secondary from ma1 (No. 29). In some words for measuring, the root man actually appears, as in Lat. men-sus, participle of me-tior, men-sa, a table, imman-is, immense.—For the sense of thinking in the root ṭ cf. the form with indeterminative ṭ, Arab. ʿḏ, to care.

1 The root ma also means to think, as in Skr. māt-i, thought, Gr. μυτις, and in Gr. μαθ-μα-α, etc., to wish for; man in this case does not arise through the nasalization of the vowel.
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for, to be aware of; conj. II. and III. to consider, cogitate. Turning to the Proto-Semitic form with inner vowel expansion, we find the Eth. ꙛ', in conj. m. 2, means (1) to devise means, in general, and (2) to devise cunningly, fraudulently. The first meaning is, of course, the primary one. The corresponding Arab. مَكَّنَ, mid. يَهُ, retains the secondary sense of the Ethiopic, and means, to use deceit, to lie (cf. the use of Lat. mentior); but with mid. Waw it corresponds to the primary sense of the Ethiopic and to the sense of مَكَّنَ, above cited, meaning to care for, provide for. But the same root exists in Heb. מִית, likeness, image, form, and פָּרוּשׁ, a species, and is then evidently used to express the idea of a mental conception or image transferred to sensible objects (cf. the various uses of the Gr. ἐ̇δα). The notion of thinking is thus shown to be Proto-Semitic. If the primary notion of the root is sought for, it seems more than probable that it is to be found in those common Semitic words from the root פָּרְשָׁ which convey the fundamental idea of measuring. For example, the Heb. מִית; Arab. مَّنَّي means to measure out, allot (cf. Germ. ertzessen), and the same root in all the dialects means to number, while the Arab. مَّنَّا means a definite measure or weight. Derivations and kindred roots illustrate the same general signification. The Aryan and Semitic roots are thus shown to be completely in accord.

WORDS FOR KNOWING.

52. Proto-Aryan vid; Proto-Semitic מ, to know.

The root vid is one of the most familiar of the whole Indo-European stock. The citation of the following forms will suffice: Skr. vid, perf. ved-a, I know, vid, to find; Gr. ἴσ-εἰεύ, for ἴσ-εἴ, to see, ὑλ-δα, for ὑλ-δα, I know = Skr. veda,

1 Hence, in Job iv. 16, מִית is expressively employed for a form appearing in visions of the night. Gessner's association of these words with the Arabic sense of deceiving, is as though one should derive species from specious, or fingo from feign.

δέκα, a conception, etc.; Lat. vid-ere, to see, etc.; Goth. vait, I know = Skr. ved-a; cf. Engl. wit, wot, wit-ness; Eccl. Slav. vid-ěti, to see, ved-ěti, to know; Old Prussian vaid-imai, we know. The idea of knowing predominates in the system as a whole, but in some of the dialects the notion of seeing prevails; and it may be true, as Curtius says (p. 101, Engl. transl. of 4. ed., p. 124), that the fundamental expression was that of a seeing which apprehended and discovered. This fact, however, has no direct bearing upon the validity of our combination; for the sense of knowing evidently goes back to early Proto-Aryan times.—The Semitic root is no less ancient, as it is found in all the great divisions of the family. It sometimes expresses the idea of observing, though the physical notion of seeing is not found. We cite the following verbal forms: Heb. ידון; Chald. ידית; Syr. יד; Assyr. id-u, to know; Eth. פּרֵע, conj. II, to make known, etc. That the first radical was originally ת appears from the Heb. ידוי in the Hithpael, and the Assyrian forms are rightly assigned to the Assyr. יד, or original פ class, by leading authorities. The Ethiopic פ in the place of the first radical is probably an early dialectic variation. That the third radical, ר, is merely a determinative is made plain from the fact that the fundamental notion is expressed also by theProto-Semitic root רד. This in the causative forms, Heb. רדית; Syr. רדית; Chald. רדית, cf. Arab. רדית, conj. x., means both to celebrate and to confess, i.e. to make known.

1 See Lenormant, Etude sur quelques parties des syllabaires cunéiformes, p. 171; Schrader, Kellinschriften u.d. alte Test. p. 223.

2 These meanings can be best explained on the hypothesis of a connection between ידית and ידית. The common way of treating them is to make them causatives of the homophonous root רדית, to throw. But this does not explain them at all suitably. Nor is the attempt more successful (Gesenius's Hebrew Handwörterbuch, 8th ed. by Mühlman and Volck), to associate ידית with the Arab. ורד, to place. The connection is not obvious; and since the root in the sense of knowing is absent from the Arabic only of all the dialects, and in the sense of placing is found only in Arabic, the combination shows bad etymologising.
The root \( \text{wr} \) is thus shown to be as old and independent as the root \( \text{vid} \), and it is worthy of attention that the meanings coincide precisely. The application of both roots is almost exclusively to mental, not to physical apprehension. They do not signify to be acquainted with, but to know within the strict sphere of self-consciousness. These two roots seem thus to claim a common origin through their individuality, antiquity, and commanding influence in the fulfilment of a common destiny.

**Words for Being or Existing.**

58. Proto-Aryan \( as \); Proto-Semitic \( as \), to be, exist.

For the root \( as \) cf. Skr. \( as \), to be = Gr. \( \epsilon\sigma\nu \); Lat. \( es, est \); Lith. \( es-mi \), I am; Goth. \( im, is, ist \); Engl. \( is \). It is generally agreed that it rests upon the root \( as \), to be fixed, to sit (No. 41). — The Semitic root is represented by the Heb. \( \text{wr} \) and \( \text{wr} \). \( \text{wr} \) and \( \text{wr} \), there is = the Arab. \( \text{wr} \); Syr. \( \text{wr} \); Assyr. \( is-u \). The \( n \) in Heb. \( \text{wr} \) is plainly secondary, \( \text{wr} \) representing the fundamental Semitic sound, which is revealed in all the other forms. With regard to its origin, it should be remarked that several independent observers have already suspected its affinity with the root \( \text{wr} \), to be fixed, to remain (No. 41). Is not this remarkable double parallel with Proto-Aryan forms very strong evidence of the identity of the two pairs of roots here involved?

I have thus taken up the predicative roots of the two systems of speech which seem to justify an attempt to identify them. Something should be said now of those nominal forms which show a mutual resemblance. It should be remarked that, as a general thing, such forms cannot furnish nearly such strong evidence of relationship as do the verbal roots. The reason is plain. The general conceptions con-

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2 See what is said by Mühlau and Volck in their edition (the eighth) of Gesenius’ Heb. Handwörterbuch. Even Gesenius, who wrongly assigned the Heb. \( \text{wr} \) directly to a root \( \text{wr} \), did not fail to perceive the connection with \( \text{wr} \), etc. (Thesaurus, p. 636).
veyed by such predicative roots as we have been discussing are necessarily expressed by a comparatively limited number of words in any language. If in a large number of these the primary forms and notions correspond to a certainty, the proof of ancient unity is overwhelming. But derivatives are numerous, and are based upon secondary applications of the roots, and not only upon their radical meaning. The chances of coincidence are therefore greater in this region. It should be noticed, again, that the chances of one family borrowing from another the names for sensible objects are immeasurably greater than the chances of appropriating signs for fundamental and generic conceptions, just as it is easier to appropriate a formula than a system of thought, or a maxim than an idea. Very much stress should, therefore, not be laid upon most of the examples of homophonous and synonymous words that might easily be brought forward. We shall, however, discuss two or three that seem worthy of special consideration from the character of the notions they express.

**Words for Horn.**

54. Proto-Aryan karna; Proto-Semitic ṭṭ, a horn.

The Indo-European forms are Lat. cornu; Irish, Welsh, and Cornish corn; Teutonic horna (Goth. haurm; Engl., etc. horn). The Greek may possibly have had the same word; see Curtius, p. 147 (No. 50). In Skr. it is probably represented in ṭṛ-ga, horn. There is another Proto-Aryan word for horn, kar-na (Fick, i. 58), which seems connected with words for head, such as Skr. āra-as; Gr. kāp-a, etc.; but no satisfactory root has been found. — For Semitic forms cf. Heb. ṭṬ; Chald. ṭṬ; Syr. ʿṭṭ; Arab. ṭṭ; Eth. ʿṭṭ; Assyr. karn-u. No plausible roots can be found for these forms. If karn-a and ṭṭ are not the same, the identity of the forms might be accounted for either on the assumption that the two were developed quite separately from distinct roots, or on the supposition that in very early times one family borrowed the term from the other. Considering the
apparent priority of Proto-Aryan related words it would seem as if, on the latter theory, the Semites must have borrowed from the Aryans. Neither of these hypotheses seems probable, but of the two the second is the less improbable.

55. Proto-Aryan *agra*; Proto-Semitic אגר, a field.

For *agra* cf. Skr. *ajra*, a plain, open country; Gr. ἀγρός; Lat. *ager*; Teutonic *akra* A.S. *acer*; Engl. *acre*, cf. Germ. *acker*, tilled land. The Gr. adj. ἀγριός agrees with the identical Skr. *ajr-ya* in its sense of belonging to the country, rustic, wild. It is a plausible, though not certain, conjecture of Kuhn (Zeitschrift iii. 334), who is followed by Pictet (Origines indo-européennes, 2. ed., p. 108), that the word means properly pasture ground, from *ag*, to drive (Lat. *agre-o*; Gr. ἀγρ-ω, etc.), or the place to which flocks are driven. But, as Pictet remarks, the use of the Latin and German words shows that it was very early employed to denote cultivated land. — The Semitic term is found in Assyrian *agar*, a field, in Eth. אגר (1) cultivated, inhabited land, a region, (2) a village, (3) a town or city. In the Himyaritic dialect of Arabic means a district, a town. The Ethiopic form appears in Amharic as אגר, but this is probably a degeneration. These forms are not susceptible of explanation from any Semitic source. The same alternatives are pre-

1 Prof. Sayce says, in arguing against Aryan-Semitic relationship (Assyrian Grammar for comparative purposes, p. 14): “Words like *agr* compared with *kip-as* are borrowed.” This implies the belief that such resemblances are not due to mere chance or “onomatopoeia.” If they are not borrowed, therefore, they must point to a primary identity. A fortiori, then, the conceptual roots compared above, which cannot have been borrowed, point to an ancient oneness of origin. But who would compare directly *agr* with the simpler *kip-as*?

2 Cf. Heb. הָעָר, wilderness, from עַרֹא, to drive, and the homonymous Syriac and Ethiopic words (see Gesenius, Thesaurus, p. 318).

3 For examples of this word, see Norris, Assyrian Dict. i. p. 15.

4 See Dillmann, Lexicon, col. 20.

5 Ewald (Auszführliches hebr. Lehrbuch, 8th ed. p. 402), who is followed by Dillman (1.c.), combines these words with Heb. מַעַר, a tiller, husbandman, and its homonym in Syriac and Arabic, at the same time connecting all of them with Lat. *ager*, etc. But מַעַר is probably from מַעֲר, to dig, found in conj. v. in Arabic.
sent as in No. 54. In the present case the chances of the words being borrowed seem very slight, and the chances of fortuitous coincidence no stronger.

**Words for Wine.**

56. ? Proto-Aryan *vain*; Proto-Semitic יין, wine.

Leading etymologists are at variance upon all possible questions connected with this most common Indo-European word for wine. The ascertainable forms are Gr. ὠἶνος; Lat. *vinum*, anciently *vain-um*; Goth. *vein*; Armenian *gin-i*, for *gwin-e* (= Georgian *gwin-o*), for *win-i*. Similar words in the Keltic seem to have been borrowed from the Latin. For a full discussion of the possible origin, as well as the history, of these words the reader is referred to Pictet. It is difficult to find a suitable etymology in the Indo-European family, though several notable attempts have been made. — The Semitic forms are Heb. יין; for יין, wine; Arab. ظرة, dark-colored grapes; Eth. ḫη, wine and a vineyard. No satisfactory etymon has been found for these words. It should be remarked that some eminent Indo-European etymologists, after Friedrich Müller, hold to the Semitic origin of the non-Semitic forms. It is probable that both the primitive Semites and primitive Aryans cultivated or were acquainted with the grape-vine. The evidence for the theory of the ancient identity of the terms involved is of the same general character as that adducible for Nos. 54 and 55, though borrowing on one side or other is perhaps more probable in the present instance.

Although many other cases more or less plausible could be cited, these are the only nouns which seem worthy of serious discussion in a treatise like the present. I think they are worthy of attention from impartial students; the agreement between the first two especially seems hard to account for on any other theory than that of oneness in origin.

Another class of words should be mentioned, though not

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discussed. These are pronominal and demonstrative roots which are surprisingly alike in the two systems. But for two reasons the treatment of them here would be unprofitable: (1) In most cases only a single consonant is found in each one of a pair of similar roots, and the identification is not so conclusive as when two or three consonants are the same. At all events, such combinations would meet with that objection. (2) Such roots are found to be (though in less measure) alike in most of the languages of the world; and it is easy to put aside all these resemblances on the assumption that demonstrative roots, being interjectional in their character, are apt to be alike everywhere, since men, in a state of nature, are held to express similar feelings by similar sounds.

The following table will exhibit in one view the comparable forms which have just been expounded. Some of the forms have a twofold representation which is not exhibited here in every case.

<table>
<thead>
<tr>
<th>Proto-Aryan</th>
<th>Proto-Semitic</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. लेकु</td>
<td>ט</td>
</tr>
<tr>
<td>2. कद</td>
<td>פפ</td>
</tr>
<tr>
<td>3. कर</td>
<td>ש</td>
</tr>
<tr>
<td>4. द</td>
<td>ע</td>
</tr>
<tr>
<td>5. भा</td>
<td>י</td>
</tr>
<tr>
<td>6. भर</td>
<td>ט</td>
</tr>
<tr>
<td>7. भर्क</td>
<td>פפ</td>
</tr>
<tr>
<td>8. भर्ग</td>
<td>ל</td>
</tr>
<tr>
<td>9. भस</td>
<td>ל</td>
</tr>
<tr>
<td>10. अर्क</td>
<td>פפ</td>
</tr>
<tr>
<td>11. भार</td>
<td>ע</td>
</tr>
<tr>
<td>12. भहि</td>
<td>ע</td>
</tr>
<tr>
<td>13. पात</td>
<td>ת</td>
</tr>
<tr>
<td>14. पार्क</td>
<td>י</td>
</tr>
<tr>
<td>15. कर</td>
<td>ס</td>
</tr>
<tr>
<td>16. कर्त</td>
<td>י</td>
</tr>
<tr>
<td>17. कर्प</td>
<td>י</td>
</tr>
<tr>
<td>18. कर्स</td>
<td>י</td>
</tr>
<tr>
<td>19. सा</td>
<td>י</td>
</tr>
<tr>
<td>20. तक</td>
<td>י</td>
</tr>
<tr>
<td>21. मःर</td>
<td>נ</td>
</tr>
<tr>
<td>22. मःर्क</td>
<td>נ</td>
</tr>
<tr>
<td>23. मःर्ग</td>
<td>נ</td>
</tr>
<tr>
<td>24. मःर्द</td>
<td>נ</td>
</tr>
<tr>
<td>25. मःर्स</td>
<td>נ</td>
</tr>
<tr>
<td>26. गांम</td>
<td>ב</td>
</tr>
<tr>
<td>27. तन</td>
<td>נ</td>
</tr>
<tr>
<td>28. नात</td>
<td>נ</td>
</tr>
<tr>
<td>29. मःद</td>
<td>נ</td>
</tr>
<tr>
<td>30. रःक</td>
<td>נ</td>
</tr>
<tr>
<td>31. रःक</td>
<td>נ</td>
</tr>
<tr>
<td>32. कःप</td>
<td>נ</td>
</tr>
<tr>
<td>33. कःमर</td>
<td>נ</td>
</tr>
<tr>
<td>34. अक</td>
<td>נ</td>
</tr>
<tr>
<td>35. सःद</td>
<td>נ</td>
</tr>
<tr>
<td>36. सःर</td>
<td>נ</td>
</tr>
<tr>
<td>37. रःघ</td>
<td>נ</td>
</tr>
<tr>
<td>38. दि</td>
<td>נ</td>
</tr>
</tbody>
</table>

The forms exhibit in one view the comparable forms which have just been expounded. Some of the forms have a twofold representation which is not exhibited here in every case.
<table>
<thead>
<tr>
<th>Proto-</th>
<th>Proto-</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aryan</td>
<td>Semitic</td>
</tr>
<tr>
<td>39.</td>
<td>39.</td>
</tr>
<tr>
<td>tal</td>
<td>נָלִי to raise, weigh.</td>
</tr>
<tr>
<td>40.</td>
<td>49.</td>
</tr>
<tr>
<td>sad</td>
<td>סָד to sit.</td>
</tr>
<tr>
<td>41.</td>
<td>50.</td>
</tr>
<tr>
<td>as</td>
<td>אָז to be.</td>
</tr>
<tr>
<td>42.</td>
<td>51.</td>
</tr>
<tr>
<td>man</td>
<td>מָנָה to be fixed.</td>
</tr>
<tr>
<td>43.</td>
<td>52.</td>
</tr>
<tr>
<td>klu</td>
<td>מַלָּה to shut.</td>
</tr>
<tr>
<td>44.</td>
<td>53.</td>
</tr>
<tr>
<td>var</td>
<td>גָּרָה to keep off.</td>
</tr>
<tr>
<td>45.</td>
<td>54.</td>
</tr>
<tr>
<td>sar</td>
<td>מָרָה to bind.</td>
</tr>
<tr>
<td>46.</td>
<td>55.</td>
</tr>
<tr>
<td>mak</td>
<td>מָקָה to press.</td>
</tr>
<tr>
<td>47.</td>
<td>56.</td>
</tr>
<tr>
<td>grap</td>
<td>מָכַה</td>
</tr>
<tr>
<td></td>
<td>to carve.</td>
</tr>
</tbody>
</table>

With regard to these forms, taken in connection with the ideas they express, it is necessary to make some closing remarks:

1. It should be observed that no form has been admitted against which the objection might fairly be made that it is onomatopoetic in its origin. The list might have been largely increased if such terms had been included. On the other hand, it is impossible, in the case of most of the terms compared, to see how onomatopoeia could have had to do with their origin. The only ones in which this might be suspected are those which express the ideas of cutting or separating and rubbing or bruising. But these notions might be expressed in a hundred different ways; and here the coincidences are so numerous and striking, in both primary and secondary forms, that we must, in reason, either maintain that the onomatopoeia acted in primitive Aryo-Semitic speech, or reject that theory altogether for those classes of roots.

2. The close phonetic correspondence between the forms compared should be well considered. If it is admitted, as I think it will be, that in these discussions there has been no straining after an imaginary identity of primary meaning

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1 It is to be noted, however, that ideas which are usually held to be expressed most frequently by onomatopoeia are rarely conveyed by similar terms in the two systems of speech. For example, no two terms for breathing are alike, and only one pair of words for calling resemble one another. The onomatopoetic theory is a very easy one to employ, but it is apt to be overworked.
in the roots and no false phonologizing in the harmonizing of the forms, the results are well worth serious attention from this standpoint. The main fact in the question is simply this: leaving out the cases in which an interrogative mark has been used, we have over fifty pairs of roots which agree exactly in their primary notions and ultimate forms. The value of this fact, as bearing upon the issue involved, may be estimated from the attempt to conceive what the chances would be against such an agreement, if the two linguistic systems did not spring from a common source. That two peoples, not having a common origin or a common early history, should have separately framed a primitive speech from precisely the same elements would seem to be a phonological and psychological miracle after which such difficulties as are presented by the confusion of Babel would become problems only fit for the kindergarten. The chances would have been just as good for a merely partial agreement in any one of an infinite variety of ways. In bi-consonantal forms the first radical and the second in each pair might have been the same and the other two have differed from one another by the whole range of phonetic expression. Or in the dissimilar letters the divergence might have been slight, involving only cases of possible sound-shifting. Of the tri-consonantal roots, of which a goodly number have been cited, a much more various and bewildering series of combinations than even these might have been presented, if the theory of a chance coincidence were valid. And the proved conditions of the question must shut us up to that theory of a purely fortuitous resemblance, unless we assume that the two systems were originally one.

(3) The ideas which are found to be expressed by the

1 In a few cases, but only in a very few, there are bye-forms in one family or the other, which differ from the forms above compared, by merely this slight measure. The Proto-Aryan root ḫag, to extend, along with the form ḫag, has been already alluded to (No. 30). In Proto-Semitic, the only ones are ḫ and ḫb, to separate, along with ḫ, ḫb, and ḫs (Nos. 11, 12, 13); ʿsq, to extend, along with ḫsq (No. 29); ḫī, to raise, along with ḫbr (No. 39), and perhaps ḫb, to be round, along with ḫb, to bend (No. 32).
same forms in the two systems are just those which we should naturally expect to have been employed by a primitive people. The notions are simple and primary. The action of the forces of nature; the most spontaneous works and ways of men and animals; the efforts and movements required in the most essential acts and arts of life, are what we find represented in this brief, but rich vocabulary. There are only three ideas expressed here which do not relate to the world of sense; but these are the most essential of all metaphysical conceptions: to think, to know, to be. Only one term is absent which we might seem to have a right to expect: there is no word in our list relating to human speech. But even this accords with what our observation of language would lead us to look for. Words for speaking are notoriously different, for example, in the different branches of the Indo-European family. They are mostly secondary and originally figurative. The same remark holds equally good of such terms within the Semitic family.

From all that has been said it seems to be a just and necessary conclusion that the primitive Aryans and primitive Semites possessed in common a good working vocabulary.

1 Proto-Aryan words for speaking are but few, and most of them are but sparsely represented. Only one, the root *sak has been at all persistent. Pictet has no treatment of this subject in his "Origines indo-européennes."

2 In fact, it is doubtful whether any Proto-Semitic word for speaking has survived.