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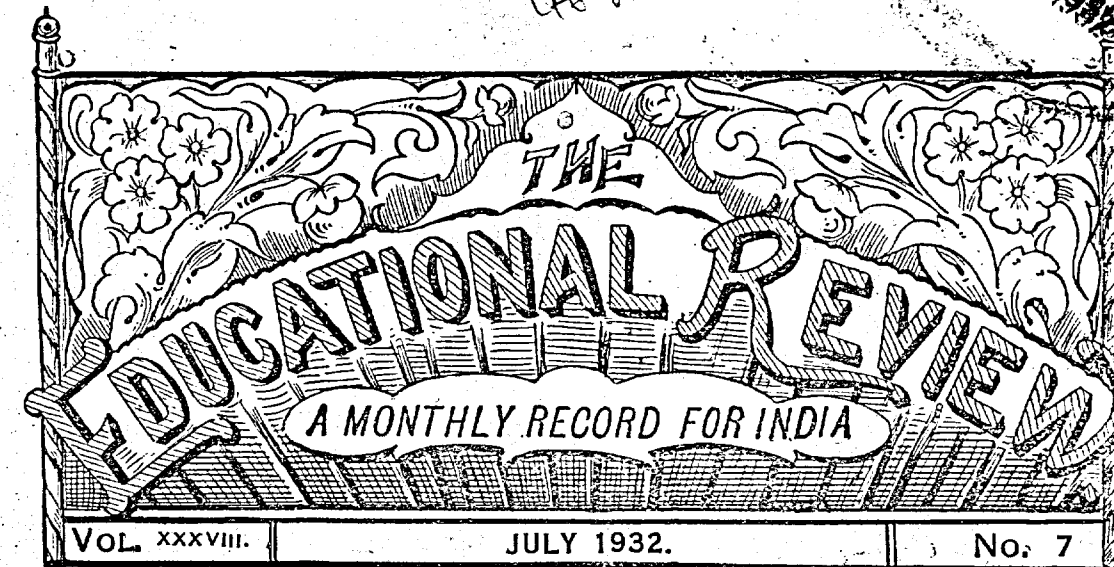
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								(to order)		
3.							vesh-	vēs-p-	vesorī	
								(narration)		
4. paṛai-	paṛai-						paṛān-		paṛag-	paṛ-
							(to prattle)		(to talk	(to
									against one,	of certain
									to slander),	conjugations of
									parparar-	pān-
									(to prattle)	
5. pul-	pulamb-	palumb-	paluk-	(to			plā-p-			
amb-		(to cry,	sound,	utter)			(to ask)			
		lament);								
		paluk-	(to							
		cry, as								
		birds)								
6. paṇi-										
pann-	paṇi-						paṇ-p-			
panuv-										
7. śol-	col-	sol-	cepp-				jōl-			
(to	col-									
speak);	cel-									
šapp-	cepp-									
8.										
							vañk-	ba'-		

¹ The study of semantically related word-groups may yield fruitful perspectives to the Dravidist. Prof. Hirt observes, with reference to IE (IGC *Grammatik*, I, 164): "Um auf dem

TAMIL	MAL.	KANNADA	TELUGU	TULU	GÖPDI
9. <i>mat't'ru, māru</i> (conversation)	<i>māt't'u</i>	<i>mātu; māt-ādu</i> (to converse)	<i>māṭi; māṭil-ādu</i> (to converse)	<i>mātu</i>	<i>māndi</i> (word, matter, affair)
10. <i>noṭi</i>	<i>nodi</i>	<i>nuḍi</i>	<i>nuḍi; nuḍug-</i>	<i>nuḍi</i>	
11. <i>ur-i-</i>	<i>urai-</i>				
12. <i>kūr-</i>	<i>kūr-</i>				

Other literary forms: *iyam*, *nural-āḍ-*, *moḷi-kīṭi*; etc.

Other words:— *pātera* (speech, conversation) and *pāter-* (to speak, converse) are common forms of Tulu.

North Göpdi has *katt-* (to say) instead of *in-d-*.

II

MEANINGS AND OCCURRENCE.

Group (1)

This is the most widespread among the several groups and is represented in all dialects except Brāhūi. Besides the instances from the main Dravidian dialects given in the table above, the following occur in the available texts of the lesser dialects:—

Tōḷa *ṭei* (he said), syntactical *ef, if*.

Kōrvi *aṇḍu* (he said).

Baḍaṇa *en-, an-*, synt. *endu*.

Bijapuri *anda* (he said).

Kōṭṭi *eḍḍu* (he said), synt. *eḍḍu*.

Gōḷari *andun* (he said).

Gōḷari *andin* (I will say).

Iṇṇi *enda* (he said), syntactic *ena* and *end'ru*.

(i) Tamil *en* has the general signification of 'articulation,' 'uttering a specified remark,' 'saying.' The other forms are semantically differentiated in actual usages. *Pēṣ-* 'to speak' entails a certain stress on the physical process of orderly 'articulation' or 'speaking'; *sol-* involves the idea of 'communication of thought'; *urai-* the firm utterance of an important idea; and *kūr-*

implies the conception of 'proclaiming.' The two last-mentioned verbs are purely literary words.

Tam *en-* is less popular in the modern colloquial than in the literary dialect of the past; nevertheless it is used in modern colloquial in contexts like the following, sometimes reinforced by *sol-*:—

"*Varāḍē*" (*y*)*ennān* or "*varāḍē*"*nnān* (he said "do not come"), where *ennān* is the colloquial development for literary *end'rān*, the past third person singular of *en-*. In the Tinnevely mass colloquial *-nn-* has a near cerebral value:—

enṇu. Sometimes, the past participle *ennu* (or Tinnevely, *enṇu*) is reinforced by the finite form of *sol-*: *varāḍē-nnu sonnān*.

The Tamil past participle *end'ru* (< *en-* + *-d-*, literally 'having said') has suffered 'discoloration' in the idiomatic uses to which it is put in syntactical contexts, as a relative participle, a conjunctive and an expletive. This "syntactic" use of the past participle of the old base meaning 'to say,' is found in a greater or lesser degree in all the south Dravidian dialects, in Kūi and Kūvi of central Dravidian and in Malto of the North.¹

Gebiet der Etymologie, namentlich auch in der Bedeutungslehre vorwärts zu kommen, empfiehlt es sich auch, Wörter eines bestimmten Begriffsgebiets in den verschiedensten Sprachen zusammen zu behandeln. Es lässt sich erwarten, dass man auf diese Weise auf gleichartige Bedeutungsübergänge stösst, und so eine Sprache die andere aufzuhellen imstande ist."

¹ Of the use of a conjunctive meaning 'having said' in NIA: Bengali *baliyā, bole*, East Hindi *bolī kē*, Marāṭhī *mhaṇun*, for introducing or recapitulating clauses in the sense of 'as,' 'because.'

Literary Tamil similarly employs in syntactical contexts other forms of the old verb *en-*:— The aoristic participles *en-a*, *enā* [old Tamil], and the conjunctives *en-in* (if so < 'saying-if') *en-in-um* (though so).

Endra-kāl [colloquial *en-āṭka* or *ennāṭka* (if so, 'that is to say')] is a combination of the participle *end'ru* and *kāl*, the colloquial representative of which is used commonly to mean 'that is to say,' e.c.

I would also suggest here that in colloquial emphatic imperatives like *vā-* (*y*)-*ēn* (do come, I say!), the verb *en-* appears as such with the radical vowel lengthened on account of emphasis.

(ii) In modern Malayālam, *en-* is not used as a finite verb; but in old Malayālam poetry we find *en'n'ān* [< *end'r'ān*, 'he said'], etc., commonly used as in Tamil.

En-,¹ however, appears in modern Malayālam in the following words with specific "syntactic" functions:—

¹ Gundert observes that the particles *ane*, *anē*, *ene*, in Mal. words like the following may be allied to the verb *en-*:—

Poḍun'n'ane (suddenly), i.e., *pōḍun'n'u* (sudden) + *ane*.

Ceruṅgane (in little pieces), i.e., *ceruṅṅa-ane*.

Niṭṭane (perpendicularly), i.e., *niṭṭ- (long) + ane*.

With these Mal. instances we might compare similar forms in Kannaḍa and Telugu like the following:—

Kannaḍa *kamm-ane* (fragrantly)

neṭṭ-ane (straightly)

kecc-ane (redly)

Telugu *kamm-ana* (deliciousness of taste or smell)

cikk-ana (thickness, closeness)

neṭṭ-ana (invariably).

Kittel observes (in his *Kannaḍa Dictionary*) that *-ane* of the Kannaḍa words may be related either to the base *an-* 'to say' or to the base *ā-* 'to become' (cf. the relative past participle *āna* of Tamil).

En'n'u (so, thus < 'having said'—cf. Tam. *end'ru*)

Ennāl (but, if so, *enn'u* + *āl*).

Enṇil (if so, then, *en-* + *g* + *il*, as in *varigil*, *pōgil*).

(iii) The literary dialect of Kannaḍa shows *en-* used as a finite verb as well as with syntactic functions for the past participle, as in Tamil.

An- appears to be a late variant of old *en-* used also like *en*:—

"*Bandaru*" *antu* [or *endu* in south Kannaḍa] *hēḷidanu* or "*bandaru*," *endanu* (he said that they came).

(iv) Tulu has *in-* and *an-*, the former being employed as a finite verb, and the past participle of the latter with "syntactic" functions.

"*Barpæ*" (*y*) *inde* ("I shall come," said he), "*Barpæ*" (*a*)*ndudu*¹ *paṇḍe* ("I shall come" thus said he), where *paṇḍe* [*paṇ-* 'to say'] is the finite verb, while *andudu* [pronounced actually *undudu* or *ndudu*] serves the "syntactic" function of Tamil *end'ru*, Kann. *endu*, etc. *Inpi*, the present future participle is used for introducing clauses or phrases. [See p. 131 of Brigel.]

The following Tulu phrases now used with definite "syntactic" meanings contain the past participle of *in-* or *an-*:—

Dāyeg-und-undā } (because < 'why-said-
Oyik-und-undā } became-if')

and-undā (namely, that is < 'said' became if').

The verb *endr-* (to say fully), used more frequently in the folk-speech than in the Brahmins' dialect, appears to be the intensive base (with the affix *-r-* added to the past participle stem) formed

¹ The Brahmins' dialect uses (*a*)*ntu* "syntactically," instead of *andudu* of the folk-dialect. There is also a common phrase *jānæ* (*y*) *annagā* (that is to say < 'why say if') which contains *an-*.

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A form of *ân-* is used syntactically like Tamil *endru*, etc., very frequently in these texts, e.g., ante "Ibrahimeh em abbaθ" *ân-y ugleyomx* (and "Abraham our father" so [*âny*] do-not-suppose).

In the LSI texts of *The Prodigal Son*, I find the participle *ânkeh* (declined past participle of Malto) of *ân-*, used at the beginning of a sentence to mean 'then' < 'having said':—*ânkeh ah côcah* (then he arose) [LSI, Vol. IV, page 454.]

Group (2)

We have already referred to the connotation (as evidenced in usage) of Tamil *pês-* as distinguished from *en-* and *sol-*. A native Tamilian distinguishes in meaning a question like *avan enna sonnân?* from *avan enna pêsinân?* The former is used only when the speaker wishes to elicit what ideas have been conveyed or communicated, while the latter would refer to the substance of another's 'speaking' understood in a general sense. *sol-* is never employed for *pês*¹ in contexts like *avan âmai*; *pêsa-mâqân* (he is dumb; he cannot speak).

(ii) Modern Mal. has lost the use of *pês-* which however is found in the old texts with the meanings 'talking,' 'challenge' > 'speaking defiance' (cf. *tammil pêccal ôḍ-âṇāṇu* cf. Râmacaridam), 'to chatter, as birds,' etc., in all of which the fundamental signification of 'speaking' with a stress on the physical aspect, is inherent.

(iii) Old Kannaḍa *pêḷ-* and its modern representative *hêḷ-* function with the meanings of

¹ Cf. *pêṣāḍe!* (do not speak!) or *kulaṇḍai pêṣa ārambiccadu* (the child has begun to exercise its powers of speaking), where the use of *pês-* is essential. In such contexts, Kannaḍa uses *mâtâḍ*, Telugu *mât (al) âḍ*, Tulu *pâter-*, and Mal. *samsârikk-* [adaptation from Skt.]

In Tamil, *sol-* is never replaced by *pês* when the idea of 'communicating thought' is implied or expressed; but in Burgāḍi [vide LSI] I find *pês-* functioning for the idea of *sol-*.

Tam. *sol-*, while *mât-âḍu* (to speak, converse) corresponds in usage to Tamil *pês-* in so far as the idea of 'conversing' is concerned.

(iv) Tel. *prêḷ-*, *pêḷ-* which structurally are related to Kannaḍa *pêḷ-* (vide below for the origin of Tel. *r*), but the meaning of the Tel. word is 'to talk silly, prattle.'

The function of Tam. *pês-* is performed in Telugu mainly by *paluk-* for denoting 'speaking, orderly articulation' and by *mât-âḍu* or *mâtâḍu* for denoting the idea of conversation.

Telugu *paluk-* has the meanings 'to sound,' 'utter,' 'express,' where the basic semantic note appears to be 'articulating' (cf. the Telugu phrases *paluku-râyi* 'echoing-rock' and *paluku-baḍi* 'pronunciation').

(v) The meaning of Kurukh *pês-* is restricted to that of 'ordering,' 'commanding.' (Cf. the same meanings, amongst others, for Kann. *pêḷ-*, *hêḷ-*).

Group (3)

While Tam. *parai-* occurs only in old Tamil texts, in Malayalam this word is the most common and dominant of all words for 'speaking' and 'saying.'

(i) Mal. *parai-* is employed in modern speech to convey the ideas of Tam. *en-* and *sol-*, while for the ideas of 'talking' and 'conversing,' Mal. uses the adaptation (from Sanskrit) *samsarikk-*, e.g., *kutti samsârikk- kuvân todanniyilla* (the boy has not begun to talk, i.e., exercise the power of speaking).

(ii) Tulu *pareṇo-*, allied in structure to *parai* means 'to prattle.'

(iii) Malto *per-* is used with the meaning 'to speak' in contexts like the following:—

Auḍur ga nîm maleker je Pâk Paranith, âḍi se nîmen pergiθ (Matthew, X, 20) (It is not ye that speak [auḍ] but the spirit of your Father speaketh [per] in you).

(iv) Brâhûi *pâr-* is the stem of the verb *pân-* in the Imperative plural, the past and the "probable future" tenses. The meanings conveyed by this Brâhûi verb (according to Sir Denys Bray) cover the ideas of 'saying,' 'speaking,' 'telling,' 'naming,' 'suing.'

Group (4)

Pulamb- in Tam and in old Mal. means 'to sound,' 'to lament,' 'to speak hastily, incoherently.' Modern Tamil retains the word, while it is extremely rare in the modern Mal. colloquial.

Kann. *palumb-* (to sound, lament) and *palumbi* (crier) appear to be allied to the above, as the meanings would show.

Tel. *paluk-* (to sound, utter, express, speak) seems to be more nearly related in structure to this group than to Gr. (2).

Kann. *paluk-* signifies 'to cry, chirp, as birds.'

Group (5)

Tamil *paṇi-kk* and Mal. *paṇi-kk* are literary words signifying 'to speak, as a superior to an inferior,' 'to order, command.' The word occurs in very old Tamil texts like *Purāṇāṇṇu* and *Maṇimēgalai*.

Tamil *paṇn-* with the meaning 'to speak, talk, declare' is probably a late literary form, so far as one could see.

Tulu *paṇ-p-* is, besides *in-*, the most common, form in Tulu for 'saying,' 'telling,' 'narrating' and 'communicating'; while *pâter-* serves to convey the meanings 'to speak' and 'to converse' of Tamil *pês-* in many contexts.

Group (6)

(i) Tam. *sol-*, as we have seen above, denotes the communication of some thought or idea through speaking, as is shown by the meanings: 'to say to,' 'to communicate thought,' 'to advise,' 'to command,' 'to praise,' etc. We have already seen how *sol-* is carefully differentiated in usage from *pês-*, etc.

(ii) Modern Mal. uses *col-* (i) in connection with the recitation of poems or of *ś'okas*: *kavita colluka* (to recite poems), etc.; (ii) in compound words like the following: *collu-viḷi* (command, advice, as given by elders, parents or superiors); *colpaḍi* (command, advice).

(iii) Modern Kannaḍa has the noun *sollu* (word) in the Mysore dialect; but the verbs are found only in the old texts:—

Soll- (to say, speak) *sollisu* (to say, speak, cause to be said, etc.)

(iv) Telugu has a compound *sollu-kappuḷu* (words or sounds used by the manager of a band of dancers); but a verb corresponding to this noun does not exist in Telugu.

(iv) Tamil *sepp-* is common in the old texts (e.g., in line 34 of *Kurāṇjippattu*: *seppalân-d'risin*), but it does not occur in the modern colloquial which retains only *sol-*.

Old Mal. *cepp-* is attested in the old Ma'ayâ-lam songs of North Malabar [*Vaḍikkan-pattu*]. Gundert observes that in certain local sub-dialects the word means 'to growl, like a dog'; but I have not been able to verify this observation.

(v) Schulze's instances of the use of *jôl-* illustrate the idea of the basic signification of 'communicating thought through speech' as in Tamil and Mal:—

Nânu ôpaa hâḍu jôlaani ('I not-consenting word do-not-say' = do not say anything to which I do not consent).

Lôku jôlini hâḍx vennamu (people advising word listen-to = listen to the advice of people).

Group (7)

The representatives of this group are derivative nouns meaning 'conversation,' 'exchange of words,' 'promise,' 'slander' in Tamil, Kannaḍa and Telugu. The words are originally from *mâr-* 'to change,' 'to exchange'; the derivative has

then apparently been restricted to 'exchange of words' which idea is at the back of 'conversation,' 'promise,' and 'abuse.'

Tel. *māṭal-ādu* and Kann. *māt-ādu* (both mean 'to converse,' 'to speak') are verbs formed of Tel. *māṭ*, *māṭ(al)*, Kann. *mātu* and the verb *ādu*.

Group (8)

(i) The most ancient use of *noḍi-kk* in Tamil is with the meaning 'to speak of strange things,' attested in *Kalittogai* where the same idea is conveyed by the compound *noḍi-śol*. As we shall see below, this meaning for *noḍi* is probably secondary, being derived from the more concrete significations preserved in Mal.

Kannada *nuḍi* means as a noun 'sounding,' 'uttering,' 'voice,' 'speaking,' 'word,' 'term,' 'language,' 'line in poetry forming a complete sentence.'

The use of the verb also corresponds generally to the meanings of the noun. The distinction in actual usage of the verb *nuḍi-* is significant in that *nuḍi-* implies a pointed utterance emphasising, repeating or affirming an idea: cf. the Mysore compounds *nuḍi-kcā-* (to promise) and *nuḍi-kēdu* (vain admonition).

Telugu *nuḍugu* or *nuḍuvu* means 'word,' 'expression,' 'line in verse,' 'bar in music'; cf. the use of the word in *noḍikādu* (talkative person).

Mal. *noḍi-kk-* or *noḍi-kk-* signifies 'to snap with fingers,' 'to speak superciliously,' 'to call by signs'; but the actual signification of 'speaking,' 'saying' is absent in this speech.

Group (10)

- (i) Tamil *urai*, used as a noun only, signifies
(a) 'explanation,' 'commentary' [*Nālaḍiyār*]
(b) 'fame,' 'reputation' [*Śilappadigāram*]
(c) 'speaking,' 'utterance,' 'sacred writing'

The verb is formed with the addition of *sey-* (to do), to *urai*, and the meanings of the verb are
(a) 'to talk'
(b) 'to write a commentary.'

While the noun [especially with the meanings (a) and (b)] occurs in the oldest texts, the compound verb with *urai* appears to have cropped up latter.

(ii) Malayalam has, besides the noun *ura* and the compound *ura-cey-* (as in Tamil), developed also a verb *urai-kk-* with the meaning 'to say.' This verb, however, is purely a literary word and is not found to occur in the present-day colloquial anywhere. The meanings might be illustrated by the following examples:—

Uḷ koṇḍ-urekka (inside-with to say = to say to oneself).

Paramārtham okkave ura-ceydu (truth entirely he said = he gave out the full truth).

(iii) The use of the Kannada literary word *ore-* with a certain stress on the idea of 'emphatic utterance of an important thought' appears to be in normal accord with the significations that this form has in Tamil and Malayalam.

Examining all these meanings which the three dialects, Tamil, Malayalam and Kannada show for this word, one feels that the primary signification may be 'emphatic articulation.' If this is so, the forms might be ultimately related to the verbs *urai-* (to be rubbed), *urai-kk-* (to rub) of South Dravidian.

Group (11)

Kūr-, found in literary Tamil and Mal. only, has the meanings 'to assert,' 'to declare,' 'to proclaim,' 'to cry aloud, as an auctioneer,' 'to cry aloud,' etc.

Other words not belonging to any of the above groups.

(i) *Moḷi* (word, argument, statement, etc.) is found used in Tamil and Malayalam. Modern

Mal. retains the use of the word in special contexts like *moḷi koḍukkuga* (to give evidence) [in the language of the law courts], *moḷi paṇayuga* (to divorce) [in Moplah Mal.].

Old Tamil uses *moḷi* both as a noun and as a verb [cf. *moḷival* of verse 5 of *Purāṇānūru* meaning 'I shall say.'].

Other Tamil words, found in literary texts, are the following, most of which could be shown to be derivative in meaning:—

Tōl (speech, old poem, etc.) < *tol* (old).

Iyamb- (to say) < *iyamb-* (to sound).

Ad- (to move, play, use words, say).

Kiḷṇi (word, speech, language, theme) < *kiḷa-kk-* (to express clearly)—cf. Tam. *kiḷṇ-mb-* (to rise), Mal. *kiḷar-* (to be raised).

Nuval- (to say, speak, declare) < ?

Viḷamb- (to divulge, say) < base *viḷ-* (clear)—cf. *viḷambaram* (proclamation).

For other forms in literary Tamil, see *Sūtra* 390 of Nannūl.

(ii) Tel. has *āḍ-* in phrases like *nijam-āḍu* (to speak the truth), etc.

Literary *vā-kruḷsu* (explained usually as *vā* 'mouth' + *kūḍ-is-* 'to join') means 'to speak,' 'to name.'

(iii) Tulu has *pātera* (word, language), *pāter-* (to converse). These forms are unique in this dialect. The verb seems to be a secondary formation from the noun. If Kannada *bāy-terē* (opening the mouth) looks like a phrase that may have been adapted in Tulu as *pātera*, it is difficult to explain how *b-* changed to *p-* in Tulu unless we postulate corruption in the process of adaptation.

The verb is used generally to denote the idea of 'conversing' but it serves also for 'articulate utterance.' cf. for the meanings Kann. *mātāḍ-* and Telugu *mātāḍ-*.

III

SEMANTIC DIFFERENTIATION IN THE DIALECTS.

'Saying' 'uttering' 'Expressing' — 'Telling, communicating' — 'Speaking' — 'Prattling'

	en-, śol-	śol-	pēs	pulamb-
Tamil				
Mal.	[old] śol-; paṇai-	paṇai-	[old] pēs-, new samsārikk- [Skt. adaptation]	pulamb- pēl-, pēl-
Telugu	an-, cepp-	cepp-	māṭal-ādu	palumb- (to cry, lament) [Mys.],
Kannada	an-, en-; hēl-; [old] pēl-, pēl-	hēl-, [old] sol-, pēl-, pēl-	māt-ādu	palapala(v)enn- (to chirp, as birds)
				pareñc-
Tulu	in-; paṇ-	paṇ-	pāter-	
Kōvi	in-, veh-p-	veh-p-; jōl-	veh-p-	
Kōi	in-, ves-p-	ves-p-	ves-p-	
Gōṇḍi	in-	in-	vāñk-	
Kurukh	ān-	ān-; teñg-; ba'	kaonakhr-	parparār-
Malto	ān-	auḍ- [foreign]; teñg-	peṭ- (?)	
Brahui	ṭān- [variant stem ṭār-]	ṭān	(?)	

A few comments may be made here on the semasiological differentiation of the forms in the different dialects.

1. An examination of the meanings and usage of the forms reveals the following scheme:—

(a) The very general idea of 'saying' or 'uttering something specific.'

(b) 'Communicating thought by means of speech.'

(c) 'Articulation of words,' 'speaking' or 'using articulate expression.'

(d) 'Prattling' 'talking loosely or incoherently,' etc.

(a) and (b) are not very clearly differentiated in actual usage today in Dravidian, though in the southern dialects, as we have noted already, the ancient group (1) is used in a much more generalised way than the words for (b). *cf.* how English *say* [German *sagen* or French *dire*] conveys the idea of (a) and (b) in these languages, without a directive preposition in the former and with one in the latter.

But the differentiation between (a) and (b) on the one hand and (c) on the other, is a very clearly marked one; and in the southern dialects at least, the forms used for (a) and (b) are never used for (c) and *vice versa*. *cf.* in this connection the concrete meanings of English *say*, with those of *speak* (especially in contexts like *the child has begun to speak* or *please speak distinctly*.)

2. Gr. (1) conveys the idea of (a), wherever it is represented.

In some dialects the representatives of Gr. (7) do approach Gr. (1) in usage; but on the whole Gr. (1) stands for a more generalised significance than Gr. (7) in these dialects.

3. The 'communication of thought through speech' is generally expressed in Dravidian by a

definite set of words though different in different dialects.

Gōṇḍi *in* and Kurukh *ān*, though belonging to Gr. (1), appear to be employed today not only in the general sense of 'saying' but also in the sense of 'communicating ideas'; in the other dialects, the representatives of Gr. (1) are restricted to the general meaning of 'saying,' and other forms are used when 'communicating' is intended.

4. So far as (c) is concerned, the differentiation is absolute in the southern dialects:—

Tam. *pēs*.

Mal. adaptation *samsārikk*.

Kann. *mātāḍ*.

Tel. *mātāḍ*, *mātālāḍ*.

Tulu *pāter*-, as in *tuluṣu pāterye* (he talked Tulu).

All these forms besides meaning 'to speak' (with reference to the use of articulate words), also signify 'conversing.' This idea of 'conversing' is secondary in the Tamil word, while in the Telugu, Kannaḍa and Tulu forms the idea of 'conversing' seems to be primary and that of 'using articulate expression' is derived (by a kind of extension) from it. The structural analysis of the Telugu and the Kannaḍa words (*vide infra*) confirms this fact so far as these forms are concerned.

IV

MORPHOLOGY AND MEANINGS.

[As many of the instances that we are dealing with, are very ancient forms, it is not possible for us to trace precisely the structural inter-relationships in every case; our notes below, therefore, aim only at recording a few significant facts which emerge from the inspection of the instances.]

Group (1). The mutual relationship of the forms of this group is clear. Tam., Mal. and Kannaḍa show *en*-; Kann. has *an*- also, like Telugu, Kurukh (long *ā*-) and Malto; Tulu has *an*- beside *in*- which last-mentioned form also exists in Kūi, Kūvi and Gōṇḍi.

Some of the minor dialects of Madras (Tōḍa, Kōṭa) favour *en*-, while Baḍaga has *an*-. Of the minor dialects of the north, Kōrvi, Bijapuri and Gōlāri show *an*- [*vide LSI*, pages 326, 383, 390].

While these facts would point to a probable structural inter-connection of all the three sets with different initial vowels, it is difficult in the present state of our knowledge to decide which set may be the older.¹

Gōṇḍi alone shows an organic *-d-* in the base; *cf.* the *-d-* of Gōṇḍi *nind*- (to stand) beside *nil*- of the south.

Group (2). Tam.-Mal. *pēs*- is exactly identical in structure with Kurukh *pēs*-; the variation in the meanings (Kurukh 'to order') is not such as to preclude a relationship between the forms (*cf.* the meanings 'to speak' 'to order' for Kann. *pēḷ*-, *pēḷ*-, *hēḷ*-).

The forms of Kannaḍa, of Telugu and of Kūi, belonging to this group also appear to be allied. Old Kann. has *-ḷ*-, and new Kann. has its regular representative *-ḷ*--; initial *p* > *h*- is also a regular change of late middle and modern Kannaḍa.

Telugu *prēḷ*- and its variant *pēḷ*- (*cf.* *mrānu*, *mānu* 'tree,' *groyyi*, *goyyi* 'pit' etc. of Tel. for the dropping of *-r*-) are apocresized developments traceable to an older form with *-ḷ*-. The following analogies from Telugu would show

¹ The suggestion that the forms may have been of deictic origin (*i.e.* from the demonstrative particles *a*, *e*, *i*) is incapable of being proved.

that the *-r*- here in *prēḷ*- corresponds to *-ḷ*- of Tamil-Kannaḍa:—

cf. Tel. *mrēg*- (to smear) with Tam. *meḷug*-
 „ *proddu* (time, etc.) „ „ *pēḷudu*
 „ *krōvi* (tube) „ „ *Kann. koḷavi*.

These analogies would also indicate that displacement of stress and sound in the Telugu word may have acted on a formation with the ending *-al*: **pēḷ-alu* > **pēḷelu* > *prēlu* > *pēlu*.¹

As for the relationship of the Kannaḍa and the Telugu forms on the one side, and of Tam.-Mal. *pēs*- on the other, we cannot at present say anything, though except for the final sound the identity of structure and meaning necessitates their being considered together.

Group (3) Kūi *vēs*- and Kūvi *veh*- are certainly related; and Gōṇḍi *veh-t*- (to explain) and *vesori* (narration, tale) may be allied.

How far (and whether at all) this group is allied to Tam.-Mal. *pēs*- is a point that depends on the solution of the pre-historic problem of the possible alliance of initial *v*-, *b*- of certain Dravidian words on the one hand and of initial *p*- of other words.

Group (4) An organic *-r* (*-ṛ*) is found in all the words of this group. As the representatives in the literary dialects are ancient, it is difficult to determine the question whether this group with its *-r* (*-ṛ*) is at all related to other groups which show forms with initial *p*- and medial *-ḷ*-, *-ḷ* or *l*.

Group (5) Here we have to note the apocresis in Kūi *plā*-. (*vide* my essay on "Apocresis in Dravidian," *QJMS*, April 1932).

Kurukh *parparār*- may be onomatopœic. Tamil *pala-palā-nnu pēsugirān* (he talks prattlingly, meaninglessly, loquaciously) indicates the

¹ For other instances of this type of apocresized forms in Telugu, see my paper in *QJMS*, April 1932.

imitative use of *pal-a*. Kannaḍa similarly has *palapala(v)enn-* (to chirp, as birds). Possibly the entire group is imitative in origin.

Group (6). Are the representatives of this group native Dravidian? or, are they old adaptations of Indo-āryan *bhaṇ-*?

Though Brāhūi *pān-* (which has *par-* for certain stems) looks like a member of this group, I think we may have [on the analogy of *r-* verbs of Brāhūi like *ann-* (to be), *bann-* (to come)] to consider *par-* to be the older base and therefore as belonging to **Group (4)**.

Group (7). Mal. shows sub-dialectal *cel-* beside *col-*, and this might probably explain the *-e-* of Tel. *cepp-* (< **cel-p-*), old Tamil *ṣepp-* and Mal. *cepp-*.

Group (8). Are Gōḍi *vaṅk-* and Kurukh *ba'*- related to *vā, bā* (mouth)? The fact that the use of these words involves a stress on the physical aspects of 'articulation' and 'speaking,' suggests a relationship, but it cannot be proved.

Group (9). Here the inter-connections are clear.

māṛ- plus old affix *-t-* > *māṛ't'ru* [Tamil]; and *t'ir* of Tamil is regularly represented by *-ṭ* of Telugu and *-t* of Kannaḍa.

Gōḍi appears to have a voiced *-d-*, and to have developed a 'checking' nasal *-n* before *-d-*.

The semantic connections are equally clear.

- (i) *exchange* > *exchange (of words)* > *conversation*.
- (ii) *exchange of words* > *word, affair* by transference. [Tel. Kann., Gōḍi].
- (iii) *exchange of words* > *slander, abuse* by prosemy [Tel. and Kann.].
- (iv) *exchange of words* > *promise* [Tam., Tel., Kann.].

The meaning 'to use articulate utterance' which Kann. *māṭāḍ-* and Tel. *māṭāḍ-* have, appears to be a generalisation of the idea of 'conversing.'

Group (10) *noḍi-kk-* has in Tam. and Mal., besides the meanings already discussed by us above, the following significations: Tam. 'to snap with the fingers,' 'to call by signs,' 'to gesticulate'; Mal. 'to speak hastily or superciliously' 'to murmur, lisp, as fools' [Intransitive non-Kārita *noḍiyuga*], etc.

It is possible that the basic meaning here is 'to sound' and that this has produced the other meanings: 'to say,' 'to speak.'

Group (11) We have already observed how *urai*, etc. with the meanings 'to speak' involve the primary concept of 'emphatic articulation' and how in the light of this view it is possible to connect these meanings with the more concrete signification of 'rubbing' which *urai-* has in south Dravidian.

Group (12) The primary idea is that of 'proclaiming':—

cf. Tam. *kū-vu* } 'to crow, as cock,' 'to
Tel. *kū-yu* } scream,' 'to call out.'
Kann. *kū-gu* }
Kū, *kū-k-* (to shout).

V

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Gr. (1) Gr. (2) Gr. (5) Gr. (10) Gr. (3) Kur. *ba'*-
" (4) " (1) " (11) " *teṅg-*
" (9) " (12) Malto "

Borrowings:— Gōḍi *katt-*;
Malto *aṇḍ-*;

Kurukh-Malto *teṅg-* (?)
Gr. (6) of the south (?)

EDUCATION OF GIRLS AND SOCIAL EFFICIENCY.

BY MISS P. PARANJOTHI, B.A., L.T.

Madura.

IN these days when the women of India, like their sisters in other lands, are making gradual inroads into realms that were hitherto held sacred by men, thereby claiming equality with them in different walks of life and in these days when they appear in the limelight for their eminence in the cultural, professional and political spheres side by side with men, it is but important and proper that we who are engaged in educating the young directly or indirectly should consider very seriously the sort of education that is imparted to the girls of our country and find out how far it satisfies the growing needs of the community in general.

Education means the act or the art of developing and cultivating the various physical, intellectual, aesthetic and moral faculties in an individual, but this term has been given different definitions according to the varying thoughts and necessities of the different periods of its history. The classic definition of education emphasises the social aim and the social character of the subject-matter with some tendency to subordinate the individual or psychological side or at least to take individual capacity as a pretty definitely fixed thing.

The Renaissance definition alternates between an emphatic assertion of individual claims and an equally emphatic recognition of the claims of the new nationalities that were springing up amid the passing of Feudalism.

Coming down to the 18th century one finds that the definition of education is individualistic on one side and cosmopolitan on the

other. Conception in the 19th century on the other hand at first perpetuated the notion of harmonious and complete development of all the powers of the individual and then reacted to social definitions concerned sometimes in a nationalistic spirit (patriotic citizenship), sometimes in terms of industrially efficient service and sometimes in a somewhat broad and vague philanthropic spirit. At present social efficiency is the favoured phrase of the educationists.

Whatever is the definition given to it throughout the ages or whatever is the part emphasised in it, speaking generically, education signifies the sum total of the process by means of which a community or social group, whether small or large, transmits its acquired power and aims with a view to securing its own continuous existence and growth. If this be so, education must prepare people for life's opportunity, privileges and duties as we know for certain that the school of to-day is the training ground for the citizens of to-morrow.

Then what sort of education do we impart to our girls, so as to enable them to be socially efficient and perform their duties as loyal citizens? At present when women are clamouring for equality with men in the different spheres of life, I would be greatly behind times, if I say that girls ought not to get the same education that boys get in their elementary and secondary schools. Women are fighting, successfully or unsuccessfully, but legitimately, for equality with men and consequently they are making rapid progress, culturally, profes-

sionally and politically as well. In my opinion equality does not lie in the fact that women should ape men and try to do the work that men are entitled to do by Nature but it means that women, as they form one half of the population, should endeavour to perform those tasks that are entrusted to them, that is, they should devote their time to bring good mothers, good house-wives, good managers of the household and successful economics of the home. When they can accomplish these they can very well hope to hold their place and thereby claim equality with men in their life work as useful members of the society. Our women will be greatly benefited, if they follow the example of the noble matrons of Rome and heroic mothers of Sparta. The influence they wielded over their men-folk was indeed admirable. If the Romans won fame as the conquerors and legislators of the world, it was due to the training they had at home. If the Spartans were noted for their bravery they owed it all to the early education they had at home under their mothers. It is thus they kept up their partnership with men.

At this stage let us stop and ask ourselves this question. Are we, as educationists, giving the girls a special training which equips them to be socially efficient or are we metamorphosing our girls into literary cranks, ignorant mothers and useless members of the community? It is high time we think very seriously of this matter. Women of the older generation often complain that educated girls are a failure as house-wives and poor managers of the household. Also we hear more frequently that education has turned the heads of our girls and made them hanker after costly pleasures and cannot-be-paid-for comforts. Does it mean that we have been forgetful to instil the truth of the famous lines of Pope

which run as follows: "A little learning is a dangerous thing. Drink deep or taste not the Pierian spring"? Of course I do not say that this can be taken to mean all girls who go through school, for there are those who are models in everything womanly, but these are a precious few.

From these one can easily infer that education at present is at fault. The education that is imparted to our girls in the elementary and secondary schools mostly corresponds with that given to boys in such institutions, but with a few exceptions. In secondary schools where the girls are being prepared for the S. S. L. C. Examination the curriculum followed in girls' schools is the same as that of boys. The high school presents a course of studies to girls to equip them for higher studies. The number of girls who avail themselves of this chance is very small, for the majority of girls do not generally go beyond the S. S. L. C. class. They stop either to become teachers or to follow other professions subsequently to enter home life, and a greater number than this stop with a middle school or elementary education. If this then is the case the education that is imparted to our girls must be entirely on different lines.

In this connection I want to point out how Germany dealt with this problem before the Great War. Education for girls was entirely on different lines from those on which the boys were educated. For example, the course of studies offered to girls was:—Household arts including practical cooking and household management; Kindergarten, Hygiene and care of children which included nursing, and Civics and Economics including visits to philanthropic centres, Book-keeping, Needlework, Religion; one of the following languages as it was found necessary, namely, German,

French, Latin or Italian, History and Geography, Science, History of Art, Gymnastics; Drawing, Painting, Music. This does not mean that girls had no facilities to equip themselves, for those girls who wanted an education equal to that of boys generally attended boys' schools.

In Switzerland where education is more liberal than in any other country in the world, the girls of different cantons receive special education which meet their local necessities and make them socially efficient.

Coming to our native land, we find that there are schools which try with other studies to give a special training to girls that is quite different from that given to boys, but this movement towards giving a different course of studies to girls is very young and the time has come for a definite parting of the ways. In these days when India aspires to hold her place among the leading nations of the world, it is very important that her citizens are fully equipped to enable her to realise this aspiration. Citizenship does not mean men alone, but it includes women who must be specially trained to discharge their duties towards her.

Let us consider, therefore, the type of education that women need. You know that in whatever sphere of life a woman shines, her primary consideration is her home and all other interests may be very important, but are only secondary. If in the home then she does her duty well, she has done her best to serve her community, her country and the world at large. Women's sphere of action is the home and it is left to her to make that home a success or a failure. If she is to make it a success she must be well equipped to meet the responsibilities, privileges and opportunities of home life. The best course of studies

that is offered to girls must emphasise the instruction in various aspects that make up the household arts.

We must then think seriously of the place that the household arts hold or should hold in education and its various aspects. Before proceeding any further with the subject, we must turn our attention to the definition of the word household arts.

Various terms have been used to indicate the content of this broad subject to signify its connection with the home and to point out the fact that science, fine-art and technical art are fundamental, but the term most in vogue at present is either home economics, household science and arts, household science or household arts.

The English Board of Education as early as 1911 introduced the term 'house-craft' whereas the term 'economics' is perpetuated by the Americans in the American Home Economics Association and is used in many institutions. In the opinion of some people the household science and arts would seem to include everything that is required but it is inconveniently long. Moreover, household science does not include the art of application. Household arts on the other hand while it seems to emphasise the practical or the applied side, also implies a scientific and artistic basis. Therefore the last term is coming in to common usage in the institutions in many of the leading countries of the world. There are many other suggested definitions, but the term household arts covers all that is included under domestic art and domestic science, together with other more recently developed industrial, economic and hygienic aspects of home activities. In short it teaches the art of right living.

Having considered the definition of the term it is only meet that we should know something of its origin and history, in connection with education. In certain forms the subject has had a long history. Some phases of the subject were advocated even early in the sixteenth and seventeenth centuries, when Comenius and in a more general way Luther and many others emphasised the educational value of household activities. In the eighteenth century it was emphasised by philanthropists and in the nineteenth century Pestalozzi and other reformers began actual experimentation for educational purposes. One of the first things that they did on these lines in England was to introduce needle-work in private schools and in schools where the well-born girls were educated, it formed part of the finishing education which was popular in the eighteenth century.

The claims for recognition of the domestic arts of cookery, laundry work, house-wifery and needle-craft in the curriculum of the school and college received sparse recognition in Europe before the middle of nineteenth century. Even after that date their introduction into any scheme for education of women or girls was for many years gradual, partial and tentative.

During the last fifty years there has been developed a remarkable range of diversified and more or less highly organised courses of instruction in primary and secondary schools, technical institutions, training colleges, Universities and all institutions working for social betterment. Consequently courses of instruction were arranged in many countries for rural districts while post school courses, residential or otherwise, provided for the needs of farmers' daughters or girls of leisure classes.

In the United States of America these subjects have received even University recognition in the form of college courses for under- and post-graduate students. In Germany, Great Britain, Ireland, Norway and Denmark great attention is given to the scientific principles that underlie the practical processes. In the United States of America the earliest recognition of this field was given by one Miss Catherine E. Beecher, a pioneer in women's education, who published in 1840 a *Treatise on Domestic Economics for Young Ladies at Home and School*. In England Hannah Moore in the late eighteenth century had written emphatically on the subject. At present household arts form a definite part of the education of girls in many countries.

From a historical point of view it may be looked upon as the part of the modern movement for an education—a so called practical education which fits people better for daily life. In reality it is an effort to better the home-life of the people. But strange to say this movement had its origin outside the school system, yet it was indirectly strengthened in school by the development of hand-work for girls as well as for boys. Gradually people began to realise that systematic school training in home arts was desirable. Then later on they were so fully convinced of their importance that they felt that household arts should be included in the curriculum of schools. This realisation and conviction were the outcome of certain factors of which the most important were as follows:—

1. The growth of preventive medicine and hygiene.
2. The desire to counteract the disintegrating influence of modern industrial and social changes upon home life and industry.

3. The recognition of women's needs in respect of technical and professional training.
4. Attempts to solve the problem of domestic science.

Analysing these facts we find that the aim of instruction in household arts is threefold. First, it wants to improve not only the home conditions but also the existing domestic work and methods. Secondly, it aims at solving the problem of domestic service and lastly, aspires to give women vocational and professional training. The countries in Europe try to carry out one or the other of these aims according to their needs. The urgent need of the poorer classes dictated the utilitarian methods general in these courses, but now in the secondary schools of the countries of Europe the tendency is to connect them with laboratory work in elementary science and with art studies in the studio. Contrary to usual custom the subjects were first introduced in the secondary schools of Russia, Germany and Denmark.

When household arts began to find a definite place in the curriculum of studies for girls in the United States of America needle-work, cookery and house-wifery were prominent. In course of time they felt the need for scientific and artistic foundation and therefore rudimentary principles in Chemistry, Physics and Physiology were taught. Then later the requirements in science were raised. Since the importance of the home for individuals and social welfare has been recognised, emphasis has been placed on the principles and practices that have to do with the proper conduct of the home.

The subject has passed through several stages of development and at present deals

with the following fundamental problems connected with home life:—

1. *The Food Supply.*

Under this head it wants to teach girls about production of food, its cost, composition, nutritive value and food sanitation, etc.

2. *Clothing.*

In connection with this the importance of clothing, its cost and functions, costume in health and beauty and the care of clothes are generally taught.

3. *Shelter.*

The important things that the pupils ought to know about this are the cost of building, rents and taxes, sanitation and simple mechanics and household furnishing for convenience, economy and beauty.

4. *House-wifery.*

The girls are taught some of the most useful things that make home an attractive and pleasant place, for they are taught the process of cleansing, preserving and renovating all household materials including laundrying.

5. *General Management.*

This problem is solved by teaching them about household budgets savings, purchase of household goods, household labour, division and order of work and the State laws that affect the householder.

6. *Care of the Family.*

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7. *The Employment of Women in Industries.*

Under this subject they are to know of the wages, education, and plans for betterment.

Almost all the leading countries of the world have introduced household arts in their institutions in some form or other but it will take a long time for me to deal with the progress of all of them. Therefore before I close I put down what they do in this connection in the United States of America, Great Britain and Germany.

In the U. S. A. as in other countries instruction in the household arts originated outside of the school system and its modern form sprang only during the latter part of the last century chiefly from the renewed interest in all these lines at the time of the Philadelphia Exposition held in 1876. The work was first started in the Eastern States and was supported by private funds in classes outside schools. First of all serving was taught, then special classes in cookery were established and public demonstration and lectures aroused public interest. Consequently cooking schools were begun privately in Boston. Later the Women's Educational Association of Boston voted to support a cooking school and made a contribution towards it. Special institutions like the Y.W.C.A. summer schools also trained girls and women in household arts. At present the subject has received even University recognition.

In Great Britain references to the importance of domestic economy in the education of well-to-do girls are found in the writings of Hannah Moore, Erasmus Darwin and other educationists even in the 18th century. As in the U.S.A. the enterprise was first started in private schools and later was recognised by the Board of Education. In the 19th century

when the appalling home conditions of the labouring classes were known, school kitchens and wash-houses in some industrial schools were started to meet the special needs of the labouring classes. Before long this was found to be very expensive and therefore was not pressed until later. Then practical instruction in cookery under trained teachers was recognised by the Board of Education, cooking centres were started in primary schools, and Government grants were made to support this movement. By 1905 domestic subjects like cooking, laundrying work, household management needle work, elementary dress-making were introduced in several institutions for girls. At present they form a definite part of the curriculum followed in girls' schools.

Germany has also had the same difficulties in introducing household arts as subjects that are to be taught in girls' schools. In 1792 Hippel, the friend and disciple of Kant, when advocating higher education for women, drew attention to the need for special training in domestic science on account of its influence on human well-being; but the first efforts made a century ago to arouse interest in the subject resulted chiefly in the establishment of schools for training servants. When they realised the importance of domestic subjects gradually cooking classes and sewing classes were started. In some cases girls were taught these subjects for a year or two after they finished their elementary or secondary school education. To-day Germany like other up-to-date countries can boast of well-equipped domestic science laboratories in her girls' schools.

The progress of this movement as manifested in the countries I have mentioned

above, the etiquette classes that are a special feature of the girls' schools and colleges of Japan and the model cottage system that is favoured by some of the educationists in connection with the education of girls at present fully justified the importance of household arts as a means by which girls can really hope to become socially efficient.

There is in India, to-day a great need for such well-organized courses of domestic subjects to enlighten our women and girls in their special sphere of work. Poverty, the bane of many an Indian home, the appalling death rate of babies, the indescribable ignorance that prevails among women with regard to their own health and that of their children, the management of the home, sanitation, simple forms of hospitality and the use of leisure hours and the utter lack of civic responsibility are to be redressed. Education is the only factor that can remedy all these evils. Then, is it not the legitimate duty of the educationists to provide facilities so that they may fully equip themselves to meet these demands?

At the time when India is agitating for Swaraj and striving hard towards that end and when she feels that the time is come for her to be re-organized as one among other nations, how can she hold her place if more than half of her population is still un-equipped to perform even the ordinary duties of life?

Are we going to rest satisfied with a few enlightened women who are usefully serving the country when the majority of them are steeped in utter ignorance?

I appeal to you, therefore, ladies and gentlemen, and those that are connected with

TYPICAL TAMIL BOOKS FOR MODERN TAMIL HOMES

BY

E. S. SUNDA, B.A., B.L., F.A.U.

Senator and Member, Academic Council,

Annamalai University,

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RS. A. P.

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HOW TO CHOOSE A SCHOOL CRAFT.

BY MR. R. S. GUPTA, B.A., LL.B. (ALL.), DIP. ED. (BRIS.).

Agra.

THE school is a select environment where the creative energy of youth may work towards individuality under the best of conditions, a place where the young are disciplined in certain forms of activity, and the curriculum must be treated as such, not as a series of separate subjects. It must include activity which safeguards social life and creative activities which are the foundation of civilisation. It must include literature, forms of art, handicraft in its æsthetic and constructional aspects, science, history, geography and religion.

But on account of a lack of practical acquaintance with or interest in a craft, many teachers, it is feared, still look upon craft-work of any kind as just hand work. I state the fact in order to point out that in the minds of many Indian teachers, the objections hitherto raised against introducing the work in schools are very largely, and very naturally, caused by a large number of difficulties which loom up all at once when thought is given to the idea.

DISTRACTING QUESTIONS.

Questions such as the following crowd in all together and cause a great dread of the whole thing: "What is a craft? How can it be recognized? How shall I know that I am working on a good craft? What scope is this craft-work going to give me and my pupils that is not provided for already in the

curriculum? What scope is there for any connection with art? What connection can I secure with other subjects in the curriculum? How much time is to be given to the work? Where is the time to come from? What subject or subjects must be sacrificed? Who is going to teach the craft-work? How can qualifications be obtained? What books are available? How much technical skill is really necessary? What kind of a scheme can be drawn up, and where can I find ideas for it? What is it going to cost? What about equipment and supplies?" and so on. There is no need to wonder at the delay on the part of the academic-minded teacher when these questions, which are all very much to the point, occur to him. And they all come in at once! I propose in this article to give answers to these questions, and to analyse the principal crafts in such a way as will help any one facing the problem to find a solution.

WHAT IS A CRAFT?

I would answer this question by referring the reader to those age-long occupations which were practised by primitive man, and are still practised by him, because the products are necessary to man's material comfort and enjoyment.

Among the most important of these I would classify weaving in various materials—*e.g.*, wool, cotton, willow, cane and rush. This craft is a part of

the greater occupation—the provision of clothing. Pottery, or the making of utensils; book-binding, wood and metal working may be classed under the title "Home-making."

All these crafts have persisted in some form or other from time immemorial, and are now being practised in schools all over England. Each has a purely utilitarian side and an artistic content.

GRADATION.

Each of these crafts has an infant's period, a period when the results are very simple and crude in idea and construction.

Each has grown up to its present state of complexity and efficiency. Therefore each one has a development in growth. It is this fact which makes it possible for us to arrange a scheme of work which will fit the educational requirements of our children.

SCOPE FOR REFINEMENT.

Every craft began crudely and was refined by the application of thought to the technical results. The desire to produce a better and more satisfying piece of work is inherent in the large majority of people. A very little experience in any craft stimulates the critical faculty and the guiding of this into constructive channels is part of the aim of craft-teaching. Every craft contains scope for improvement in design and for some form of decoration. Moreover, the design is practical, it has to be applied to something which is to be made and therefore it must work.

CONNECTION WITH OTHER SUBJECTS.

All crafts have a history, and as the materials of the craft are, at one time, and in some form or other, products of the earth, they must have connection with geography.

It will be found that practice in a craft demands a fine appreciation of the need for careful measurement and setting out, so that we have very definite historical, geographical and mathematical contrasts.

TIME ALLOWED.

One of the main features of the problem is the question "Where is the time to come from? What can I cut?" It is becoming more generally recognised that the principal aim in craft-teaching is not the production of pretty things, but the training of the intelligence. Also, a child may be quite intelligent, in spite of the fact that it may not be good at arithmetic. Again the child who has had little success in the ordinary subjects may have its interest quickened and intelligence trained on practical lines, so that there may be more response to the more academic methods.

These are facts which are making more and more teachers decide that time *can* be spared, even from English and arithmetic. The amount of time allowed at present varies a good deal in the upper standards and much depends on the provision of materials and equipment, and the facilities for attendance at a handicraft centre.

TEACHERS' QUALIFICATIONS.

There are many ways in which any teacher may become practically qualified to teach any craft. In the first place, it is necessary to rid oneself of the thought that is so firmly held by some people that "I'm no use with my hands." A little sound teaching of the principles of tool manipulation will soon correct weakness of that kind.

In the course of a fairly wide experience in teachers' classes, the writer met only one teacher in a Bristolian school who could not be trained to handle tools properly; and that proved to be a case of seriously defective eyesight.

Many wood-work centres in India are now providing their own classes, at which various crafts are practised under an expert. Some provincial authorities provide all the classes required by the teachers in their service, either through their officials or by specialists engaged to give courses of classes and lectures. It must not be concluded that attendance at these courses robs any one entirely of a holiday, for in addition to sound training, the promoters strive to give teachers who attend a thoroughly enjoyable time. It is generally advisable to spend the whole of a course on one, or at most two, crafts, so that a short-graded scheme may be worked through, and a grasp obtained on the practical value of scheme gradation.

BOOKS.

Books are very necessary as an aid in the teaching, both for the teacher and the pupil. The pupil should be taught

to look for ideas and to work from written instructions, so making him independent and enabling him to carry on with the craft after school days are gone. A school library should contain a good variety of books on craft-work, and these should be easily accessible to students.

TECHNICAL SKILL.

A good deal of fear is entertained regarding the amount of hand skill which a teacher must possess before any attempt is made to teach even the smallest elements of a craft. As the craft has grown up from simple to complex, so we, as teachers, can analyse and find its gradation in the difficulty of its operations.

These appear when we begin to work in the craft, and not till then. If we wish to learn a craft there is only one way to do it, and that is not by way of talking about it. Practise a craft, and the difficulties appear to be overcome by yourselves, just as surely and much more quickly than they were overcome by the primitive workers in the craft, whatever it may be. We shall also be able to appreciate something of the child's difficulties.

As teachers we should be able to approach any subject, and, applying the principles of teaching in an analysis of it, develop skill, sufficient to enable us in a very short time to begin to teach our children some of its simple elements. No one can deny that there are many fine craftsmen among amateurs, and it is a fact that in all crafts there are to be

found those who, beginning as novices and amateurs, are now classed among the professionals.

ARRANGING A SCHEME.

As with any other subject in the curriculum, so with craft-work, a well-designed scheme makes the work of teaching a much simpler and easier task. The scheme should develop slowly in small steps, in the operations of the craft. Do not overcrowd the demands on the children's skill. This is avoided by providing a number of articles to cover a range of operations instead of attempting to carry out these operations in one, two or more examples of a more complex nature. The main advantage in this plan lies in the fact that results are

more easily and quickly produced; they are better than they otherwise would be because there had not been a mental demand beyond the child's capacity to respond physically in mastering manipulations.

When the elementary operations have been mastered it will be found that it is possible with most children to speed up the gradation, but with children of sub-normal intelligence it will be found most necessary to retain the slow gradation. The work very quickly becomes individual in character, i.e., in the child's progress, and in the stiffness of the problems which a child may be set to solve.

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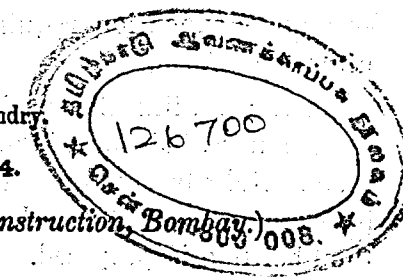
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REVISION OF THE S. S. L. C. SCHEME.

BY MR. S. VAIDYANATHA AIYER, B.A., L.T.

Wallajapet.

THE revised S. S. L. C. scheme is now in the melting pot to be revised. The "C" group subjects loom large in the controversy. Advocates for retention and abolition are equally strong and powerful. Hence it would indeed be difficult to find a solution which would leave the scheme on a permanent and beneficial basis, unlike the old S.S.L.C. scheme which came in to improve the bygone—but of revered memory—the Matriculation—and unlike the revised one in place of the old. It is a pity that this revised scheme is in need of a further revision so soon.

Of course human institutions are not perfect and man-made laws are either amended or cancelled in the light of actual working. But what is strange with the scheme under consideration is the continued complaint and the suddenness of the need for re-revision.

Perhaps this is because symptoms only are treated and not the root cause; and new symptoms come in to engage the attention. So something should be radically wrong somewhere with the secondary education requiring a millennium for reform.

Now, regarding the specific question—retention or abolition of the "C" group—much might be said on both sides as has been done already. It is to lessen the strain the abolition is proposed. For the "A" group subjects now cover a fairly comprehensive area affording general know-

ledge for a secondary course and just enough for preparation and specialisation for a college course. For, it is only the pick of the boys that seriously think of taking a college course. Hence the "C" group is either overlapping or extending the "A" group.

One cogent objection against the abolition is the revival of the purely literary aspect of education which the old Matriculation emphasised and which the S. S. L. C. scheme tended to reduce by introducing subjects like Book-keeping, Shorthand, Typewriting, Correspondence, etc.

A second objection is that the equipment for the teaching of these subjects involving a large outlay would be a waste or be lying idle.

Another is that the majority of the boys stop after the S. S. L. C. Examination and try for jobs. If the S. S. L. C. curriculum as proposed is without the above subjects, how would the secondary school course be a preparation towards it?

Hence one suggestion is to retain the "C" group with the non-academical subjects, making provision for such boys that choose these subjects to leave out one of Elementary Science and Outlines of Histories and Geographies and considering mainly the record in English, Second Language, Elementary Mathematics, the non-cultural subjects and

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REVISION OF THE S. S. L. C. SCHEME.

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either Science or Histories and Geographies.

This is a half-way measure not expected to give a satisfactory solution, as there may be difficulty in the working of the curriculum and a large number of boys may not have the benefit.

Another suggestion is to put these subjects under "B" group along with Drawing, Manual Training, Physical Training, etc., ostensibly to make all take them, but really giving, as it were, a premium for neglect or indifferent work as "B" group subjects generally were and are.

Hence I would propose to meet in a manner the objections and the suggestions mentioned above—to have the teaching of the vocational subjects as an adjunct to the school utilizing the equipment and the service of the teacher.

This section will of course be independent of the S. S. L. C. curriculum. Classes

will be held both in the morning and evening—7 to 9 A.M. and 6 to 8 P.M. Pupils of the school, not necessarily of the higher forms will be allowed to bring up any subject taught and prepare for the Government Technical Examination. This section being a part of the school and being under the same management the necessary sanction of the Government will be given, as boys are being already prepared and presented for the Public Examination.

Levy of special fees, if any, for subjects for which instruction is given here, working hours and other details may be considered in due course.

This therefore retains the non-literary and vocational side of secondary education, at the same time utilizing the services and the equipment and giving the benefit to as large a number of pupils as possible.

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THE TEACHING OF MATHEMATICS.

BY MR. P. V. SUBBA, RAU, B.A.

Peddavadugur.

IN almost all departments of human activity Mathematics takes a very important role inasmuch as it is valuable both on account of its practical utility and as a means of mental training. It is highly necessary for performing numerical calculations of various kinds and it is an inevitable factor for success in many trades and professions. According to an eminent writer on Education, Mathematics, as a mental discipline, possesses the following outstanding merits and advantages.

MERITS AND ADVANTAGES.

In the first place, Mathematics affords to the pupil his earliest acquaintance with abstract thought. Secondly, it promotes mental freedom, flexibility and vigour, and then helps to bring the faculties under control. Thirdly, it cultivates and strengthens the habit of concentrated attention. Fourthly, it develops the reasoning powers, inductive reasoning power as well as deductive reasoning power. The fifth advantage is that it induces habits of accuracy and of systematic arrangement. Another advantage is that it fosters self-reliance and stimulates the pupil to solve his own difficulties. Lastly, it encourages quickness of apprehension and readiness of resource, so that the pupil is enabled to distinguish between what is absolutely essential and what is merely accidental.

The author further explains and says that from the stand-point of practical utility these may be summed up under the heads of Intelligence, Accuracy, Neatness and Expertness in the ordinary calculations of business, and in order to attain the above, attention has to be paid to the following hints.

HINTS.

1. The instruction must be made as realistic as possible. The order of teaching must proceed from the concrete to the abstract, and all later rules must be connected with those immediately preceding them.

2. The questions must be graduated according to the varying intelligence of the pupils and the same truth must be presented in a variety of forms.

3. Short examples must be given for test. Give long sums occasionally as tests of prolonged effort combined with accuracy.

4. Neatness of figures and logical arrangement and accuracy of working must be insisted on. Graphic methods should form an essential feature of the work.

5. Too much should not be attempted in one lesson. Each truth must be fully grasped before another is attempted and frequent opportunities for revision must be provided.

6. Problems should be introduced early as they furnish the best means for

training the intelligence. They should be useful and interesting and fairly deducible from principles already learned, so as to afford practical applications of earlier rules.

7. Every lesson should involve mental exercises, and a close relation must always be observed between mental and written Arithmetic. The children may be encouraged to use short methods of calculation, though the teacher should not introduce these until the ordinary processes are well understood.

8. Numbers should generally be written by the pupils from *dictation* instead of being merely copied from the black-board, and they should be accustomed to read their answers *in words*. Similarly, the meaning and use of various arithmetical signs and terms such as +, ×, ÷, *difference*, *product*, *quotient*, *dividend*, etc., must be introduced and explained in the teaching of the rules to which they belong.

9. All work must be carefully examined. The pupil should be made to discover the errors himself, but a judicious amount of individual help will be necessary for the duller and more backward children.

10. Children should be encouraged to prove their answers whenever possible, either by converse processes or by working the given exercise by an independent method. Generally the answers should not be announced until the sum has been finished by all.

11. Uniformity of method should be preserved throughout the school. Preference should be given to that method which will be useful in later stages of the work, even though it may be slightly more difficult than another.

12. Children of fairly equal ability in reading, writing, geography, etc., are often found very dissimilar in their powers and methods of arithmetical reasoning and calculation. Hence reclassification for this subject will often be necessary, as uniform progress is impossible among learners of very unequal ability.

13. The scheme of teaching should be framed with reference to the circumstances of the school, and the course in Arithmetic should be correlated with Drawing, Elementary Physics, Manual Training, and Housewifery, by means of exercises involving practical measurements, the drawing of lines and planes, and the use of current market prices, etc.

14. In order to secure regular and vigorous effort, and honesty of performance, good discipline is essential. Constant vigilance must be exercised in order to detect at once the slightest attempt to obtain unfair assistance.

We have said just at the very beginning of our theme that Mathematics has, as other subjects have, a two-fold value—value as knowledge (this being the utilitarian or realistic aspect of education), and value as a means of mental discipline (this being the disciplinary or humanistic aspect of education). Learn-

ing, according to the former view, is valuable in so far as it serves us when we begin to play our part in the drama of life. The aim of this view, furthermore, is to make the pupil become a practical man. The object of the second view is to enable the individual to possess the physical, mental and moral power giving the subjects taught a secondary place and making them only instruments for attaining the above result. The acquisition of information therefore should be considered simply as *a means* and not *an end*. The all-important question in the child's future intellectual welfare is not so much *what* is learned, as *how* the knowledge has been acquired. It is here that the teacher should step in and harmonise the two views and help the pupil to fulfil his part in life.

THE ART AND SCIENCE OF EDUCATION.

From the foregoing lines we arrive at an art and a science of education, an art which seeks to prescribe rules and methods for conducting most successfully all school work, and a science which is concerned with the laws of development of the child's mind and the methods employed by the teacher must conform to the laws of development in order to ensure success. The practical school method is closely associated with the art of education while suitability and accuracy of the means adopted have their relation with the science of education.

THE TWO SIDES OF MATHEMATICS.

All subjects have to be taught well, and all good teaching has two sides, the knowledge or instruction side and the

training or education side; and Mathematics is no exception to the rule. There ought to be a judicious blending of instruction, which is the giving of information, with training, which is but the using of this information in order to exercise the mental activities in the most useful and profitable way. The self-activity of the pupils must be exercised in every lesson, and ample scope must be given for independent effort. Let the pupils try like Bruce of Scotland, and it does not in the least matter if a few tears have to be expended. Mathematics is specially important to us because in it the two functions (instruction and training) are closely interwoven. The value of the teaching process in so far as this subject is concerned lies in the manner in which it brings out the natural activities of the pupils and develops in them a sense of their inherent powers.

THE TEACHER'S WORK.

The work of the teacher, therefore, naturally centres round a comprehensive scheme, which he has to arrange in the light of the instructions and principles enunciated above. The result of such sincere work must perforce produce efficient and effective instruction, sound discipline, and a high standard of mental training. Selection of suitable topics for study, furnishing the minds of the pupils with suitable information, and cultivating and developing the mental, moral and physical capacities of the pupils in the best possible way are among the primary duties of a conscientious and god-fearing teacher. Over and above all

these is the ability of the teacher to arouse the attention and interest of his class by his conversational and descriptive powers and making the *dry bones live*.

REQUISITES OF A SUCCESSFUL TEACHER.

A teacher, if he is to be successful, should have a working knowledge of the laws of psychology, an earnestness of purpose, a simplicity of style and manners, a well-informed mind, better methods and apter illustrations, a lucid way of putting things before his pupils, a dignity of his knowledge and labour and a burning desire to use his knowledge in the service of his less fortunate brethren. The teacher's utterance does much. What the teacher *does* effects more, but what he *is* will do most to his pupils, and upon what the teacher himself *is* is the greatest stress laid.

ACCURACY AND SPEED IN MATHEMATICS.

The most important part of the work of a teacher of Mathematics consists in his ability to secure in his pupils speed and accuracy in all calculations though the development of the powers of the pupils (power to think and to do) is the ultimate aim. We have to consider here what Mathematics can do to achieve this end. Much drill is needed. Frequent rapid drills of old matter will be useful where accuracy and speed are the sole ends in view. The timid beginner needs encouragement to try; and blind guessing should be discouraged and conclusions should be drawn after the facts are well-understood. In order to realise the above aims the following are neces-

sary:—Certainty, simplicity and applicability.

CERTAINTY.

Experts have disagreed in every other subject but never have they done so so far as Mathematics is concerned. The mathematician can find his own errors or be convinced of them by others, and nothing is accepted on the word of another. Hence this subject is one in which students are quite sure whether or not their conclusions are right. Pupils should reach a stage of independent certainty sufficiently early, and no dogmatic statements should be accepted merely on the authority either of the teacher or of a book.

SIMPLICITY.

It would be difficult for us to find a subject in which a better gradation is possible. It begins with a few and uncomplicated definitions and proceeds step by step to quite elaborate cases. Work can be adapted exactly to the development of the pupils. Its drill has been well compared to that of the athlete who by carrying the same calf every day finally carried an ox!

APPLICABILITY.

The value of the study of Mathematics from this point of view, namely applicability, has been much questioned. Experience shows that eminent mathematicians have failed miserably in administrative work, and hence, it has been held by many, the subject is more valuable owing to its certainty and simplicity than to its applicability.

OTHER VALUES OF THE TEACHING OF MATHEMATICS.

I wish to conclude this article by giving a few of the general values of the teaching of Mathematics, and take up a detailed consideration of the subject in its various aspects later on. The chief values of the teaching of Mathematics are:—

1. The power of generalising is developed.
2. There is ample scope for the use of symbolic language.
3. It is in ideal form for other sciences.

4. It affords an exercise in making discoveries.

5. It offers ample scope for the early exertion of mental powers on their own account for the mere pleasure of doing, i.e., love knowledge for its own sake.

6. It cultivates a reverence for truth.

7. It cultivates the habit of self-scrutiny.

8. It develops the imagination.

9. It cultivates the power of attention.

10. Lastly it fosters the habits of neatness and accuracy.

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THE FUNDAMENTAL PRINCIPLES OF MOTHERCRAFT.

BY MR. NATHANIEL P. K. SIRKAR, B.A.

Howrah.

THE influence of the Women's movement in India has in recent years been felt in many directions. Among other things we notice an increasing interest in matters connected with maternity and infant welfare. Health exhibitions and lectures, baby shows draw crowds of visitors. The Calcutta Corporation deserves great credit for establishing maternity homes and hospitals and units where free medical aid is given to women who require it. These are no doubt very encouraging signs, but for the vast majority of people living in remote towns and villages there are no such facilities for getting relief and enlightenment. Europe and America are full of hospitals and clinics for children, dietic hospitals, welfare centres for babies and mothers, institutions for the mentally and physically defective children. In London and Vienna up-to-date clinics have been set up for the analysis of little children. The widespread teaching of mothercraft has brought about a marked improvement in the health of the infant in the Western countries where research workers are patiently and steadily carrying on investigations into the nature of food.

India is unfortunately sadly lagging behind the Western countries in the matter of child-rearing. A sound knowledge of the laws of hygiene and mothercraft is essential for healthy motherhood and healthy babies. In the distant villages experienced doctors are rare, and, in view of the great poverty of our people in general, a knowledge of the laws of hygiene and a training in mothercraft would

save the lives of thousands of mothers and infants. If the prospective mother had a clear and definite idea of how to manage herself and her baby, she could take an intelligent interest in the forthcoming event, and minor troubles could be quickly remedied by following the right methods early.

In spite of the good work that is being done in women's hospitals and nursing organisations, the maternal mortality in India stands at a very high figure. As regards infant mortality, the ratio of deaths under one year per thousand is recorded as 189 (as against a figure of 70 for England and Wales) according to the Report of the Simon Commission, Vol. I. The late Dr. Chuni Lal Bose said that 30—40 per cent. of infants under one year of age die every year in Calcutta alone, which he attributed to neglect and to the lamentable ignorance of the laws of health.

GENERAL REMARKS ON MOTHERCRAFT.

There is noticeable now-a-days a general tendency to lessen the burden of motherhood by substituting artificial for natural food for babies. Many mothers belonging to rich and fashionable families consider it the height of fashion to entrust the feeding and rearing of their babies to ignorant untrained house maids. Although artificial feeding has been necessary and successful in individual cases, a baby deprived of its mother's milk is deprived of its birthright. It must be impressed on mothers that babies fed in the natural way have better chances of growing into healthy children than those fed on artificial foods. Breast feeding is beneficial both to the baby and to the mother. Apart

from hygienic and economical considerations, it conduces to a sense of oneness between the baby and its mother which artificial feeding, however scientific, can never achieve.

The teaching and training of mothercraft should include in the programme a thorough knowledge of baby's clothing, feeding, nursery hygiene, cooking of children's food in health and disease, a workable knowledge of common ailments, and nursing sick babies. If the body is not properly developed during the early days of infancy, no amount of after-care will undo the mischief already caused to the system. Theoretically no mother has any right to bring a baby to the world unless and until she is thoroughly conversant with the rearing and managing of the baby. It is incumbent on those responsible for the education of girls, who will in due course become mothers, to bring home to them the necessity of maintaining a high standard of health, both before and after the birth of the baby, by paying proper attention to the laws of hygiene and diet. By improving the diet of the nursing and expectant mother, we can decidedly improve the health of the baby. In case of difficulty a doctor should be consulted instead of experimenting straight-away with new and patent foods and medicines. Feeding or rearing of children is no easy matter and cannot be undertaken by mothers without practical experience. The scientific preparation of artificial food should be learnt by all mothers and would be mothers. The necessity of utmost cleanliness, regularity, accuracy in weighing and measuring should be impressed on them. Our schools afford an unique opportunity of initiating the girls into this fine art. It is also necessary to open welfare centres throughout the provinces and series of lectures should be organised and fixed for specific days. Both unmarried and married girls could attend these lectures with

advantage. But all these are impossible without the help and active co-operation of physicians, though teachers are now slowly realising that their duties do not consist in imparting only formal education.

Baby's clothes should be clean, light, loose and porous. It should not be overclothed, and, if normal, should have a daily bath.

Dummies should never be given to babies. It is unhygienic, creates lack of self-control and has an injurious effect on the formation of teeth.

Dirt and neglect constitute the bane of childhood. Much of the diseases and injuries of children are directly traceable to personal uncleanness and indifference on the part of the mother. Clear, definite instructions should be given to girls in schools regarding the care of teeth, cleansing the hair, scalp and skin, bodily hygiene in general and avoidance of common bad habits. The preservation of teeth is one of the most difficult problems of child hygiene. The physiology and structure of the tooth should be clearly explained to children. They should also be taught how teeth exercise their influence on food and *vice versa*. But no amount of teaching in cleanliness and hygiene will be effective unless the schools themselves with the teaching staff are models of cleanliness and regularity. The provision of bath in schools is essential for the practical demonstration of bodily cleanliness.

Young mothers do not sufficiently realise the fact that health depends more upon the quality and assimilation of food than on the quantity taken. A child's educational capacity depends primarily on the formation of good habits and on the quality as well as the quantity of food available. Test weighing just before

and after feeding should be carried out if the baby is losing weight, vomiting or suffering from stomach disorders, digestive defects, and necessary action should be taken according to the results obtained. The badly nourished child can put up little or no resistance to germs of diseases. Observation of children's stools is of great importance in child rearing. The colour, consistency, frequency and the characteristic deposits in stools will indicate what is wrong with the method of feeding. Rickets, scurvy, anaemia are all brought about by deficient food. Infants fed on bottle milk require some fruit juice, e.g., orange, lemon, grape, apple, etc., to prevent scurvy. Vitamin D present in milk, butter, egg yolk, etc., prevents children getting rickets. It is the mother's duty to see that her children's diet contain proteins, fats, mineral salts, carbohydrates and above all the vitamins, in right proportions. Improper feeding has a most injurious effect on the teeth. Ill-health in the mother during pregnancy is the cause of defective milk-teeth, and ill-health in the child during the first two years is the primary cause of defect in the permanent teeth. Salts, lime, phosphorus must be present in the mother's diet. She must therefore take milk, green vegetables and fruits. Deficiency in lime and absence of vitamin in her diet are responsible for deficient development of the bones and teeth of infants, and these cannot be rectified later on in life.

Weaning:—Weaning should be gradual and completed by the tenth month. Babies are liable to be upset by sudden change of diet. Weaning should not be introduced during hot weather or during sickness of any sort. It should be utilised in teaching the child the habit of mastication.

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Sleep:—Most town children and babies get insufficient amount of sleep. To cut down a child's sleep is as cruel as to deprive it of its food, since the growth of the infant takes place mostly in bed. The deep peaceful slumber of childhood is the inherent right of every child.

Babies should live a very quiet life resembling as far as possible its life before birth, and should be kept warm with the minimum of handling. Dr. Freud says:—"The biological intention of sleep seems to be recuperation; its psychological character, the suspension of interest in the external world. Our relation to the world into which we came so unwillingly seems to include the fact that we cannot endure it without interruption. For this reason we revert from time to time to the pre-natal existence. At least we create for ourselves conditions quite similar to those obtaining at the time—warmth, darkness and the absence of stimuli." (Freud: 'General Introduction to Psycho-Analysis'). We do not sufficiently recognise the fact that little babies are not overfond of their new environment. We adults sleep that we may dream and forget life's trouble by re-experiencing the golden days of our childhood. Childhood memories persist throughout life in the unconscious though outwardly forgotten. The unconscious is no respecter of persons or of time. It loves to dive into our hoary past with all the ardour of an archaeologist. To it, our yesterdays are far more important than our to-days or our to-morrows. Babies sleep because in their dreams they can return to the paradise from which they were expelled by force—Birth is a violent disturbance of a state of bliss. Otto Rank, developing the idea of the great master Freud, says that birth is a great trauma (psychic shock) whose effect can be traced in

many aspects of life (*vide* Rank: 'The Trauma of Birth'). The cry of the infant immediately after birth is due to a feeling of separation from the mother. A baby aged one year would require at least 18 hours' sleep. But unfortunately babies are too much disturbed and have too little sleep. Proper mental and physical development of babies is not possible without adequate sleep. Let us try to understand the situation and be more considerate to the poor helpless little babies. What right have we to deny them their birthright when the "Enduring power, not ourselves, which makes for righteousness" giveth His beloved children sleep—sleep in which the harsh wicked reality ceases to trouble and the weary little ones are at rest?

Habit:—Early childhood is the time for the formation of good habits. Habit is a path in the brain. It is easier to form a good habit than break a bad one. Children generally prove refractory in the matter of emptying of the bowels and bladder. According to psycho-analysts, the sphincter activities are associated with erotic stimulatibility. Having experienced the pleasure of retention and postponement, the child desires to part with his excremental discharges at his own time and place and strongly resents parental interference though he may not openly dare to lodge his protest. We must not overlook the fact that the child's love-life at first is a blend of the auto-erotic and the narcissistic. Freud says the child requires some time before he develops the sense of shame and disgust. The desire present in many mothers to prolong the charming period of childhood, encourages their growing children to persist in their infantile ways of thought and action, and this is unjust to the child. The sooner the child

learns to take care of himself the better for his future. Children unconsciously mould their conduct after the pattern of their elders. If they see the elders living harmoniously together, they will imitate them. The child imitates his parents, not simply because he is constantly in their company but primarily because in the light of his limited, uncritical vision of life, he really believes in the innate righteousness of his parents' attitude. The preliminary development of what Freud calls Super-Ego—a part of the regulating mechanism of the Ego corresponding roughly to the popular conception of conscience but essentially operating in the not-conscious level—occurs at that period of the child's life when he has learnt to take more than passing interest in the natural discharges of his body. The child should never be made the centre of attention. The habit of parading one's child before a number of visitors should be discouraged. Dr. A. Adler says that the tendency in babies to come into the limelight, to compel the attention of the parents, makes itself felt in the first days of life. If undue attention be paid to children at the beginning, they will constantly attempt to create situations favourable to themselves. No child should be looked after exclusively by one person. Sleeping with the mother is a bad practice. Food should not be given irregularly simply because the child cries.

MENTAL DEVELOPMENT.

All mothers should know something of the mind of the child. If you want to win a child's heart, you must be a child again, you must be born again.

Dr. S. Ferenczi in his famous "Contributions to Psycho-Analysis" has with great ingenuity traced the gradual development of

the sense of reality in the child. There are six principal stages in the growth of his mind. Only the briefest outline can be given here with a few comments:—

1. *State of Unconditional Omnipotence.* Ferenczi defines omnipotence as the feeling that one has all that one wants and has nothing left to wish for. This stage exists only so long as the child is in his mother's womb.

2. *Hallucinatory Omnipotence.* The stage begins with the birth of the child. Nurses try to soothe the struggling and crying infant by immediate attendance to his wants and artificial creation of the pre-natal situation.

3. *Period of Omnipotence by Magic Gestures.* The child gets all his wants supplied by the use of gesture language. He believes himself to be the centre of an adoring universe.

4. *Projection Phase.* The child recognises that there are things which do not obey his will and that thoughts alone will not change the outer world. An out-and-out opportunist, it does not take him long to discover that an isolated sound is not enough to produce the effect he desires. He therefore attempts to translate his memory-images into verbal-symbols through various permutations and combinations in the world of sound, and thereby to be on a footing of equality with the adults with whom he finds himself surrounded as soon as he parts company with his daily enchanting world of dreams. Here we find the beginning of the perception of objective reality.

5. *Magic Thoughts and Magic Words.* The child begins to talk and to substitute

actual statement of his desires for gestures. The illusion that his wishes are still sovereign continues more or less.

6. *Disappearance of the Feeling of Omnipotence and Recognition of the Sense of Reality.*

N. B. In the course of the evolution of his soul the child passes through three distinct stages. In the first he believes in his own omnipotence, in the second in the omnipotence of his earthly father and in the third in the omnipotence of God or the powers that be. In the second and third stages there is more or less object identification.

Play. Play is as important to the child as feeding or sleeping. A good mother should always be able to find time to play with her little ones. Most mothers do not know that the child has a world of its own. The preparation for the future can be seen in a child's games. Dr. A. Adler says: "Play is indivisibly connected with the soul. It is not an insignificant matter to disturb a child in his play." A play reveals the quality and the quantity of his social feeling. Prof. K. Koffka and Melanie Klein have attempted to enter into the kingdom of the child's mind by studying the different ways in which he handles his toys.

The custom of telling children palpable lies results in the child doubting his immediate environment and questioning the seriousness of life. Children's questions should not be evaded. They should be treated reasonably and not expected to obey blindly. The child may obey through fear and not through love. In that case he simply represses his deep feelings. All repressions are harmful. According to Freud repressions of lasting consequence occur in early childhood. The impressions which storm in upon a child from

the earliest days of his infancy will colour his attitude throughout life. If from his early childhood he has been brought up in a vicious circle his natural ego-centric current will gravitate towards social thoughts and deeds. To the child, more than to the adult, a thing of beauty is a joy for ever. In addition to giving him his conventional daily bath for the well-being of his body, it is our duty to bathe him regularly in beauty, in harmony, and in truth, for the well-being of his soul. Corporal punishment is rarely necessary and does harden the child. Even a mild punishment may be interpreted by the child as a blow to his narcissism. Children are apt to be vindictive and personal. They are not really so innocent as they appear. The child is essentially a lover of self. Its outstanding tendency is to crave, not to give love. In his remarkable "Analysis of Phobia in a Five-Year Old Boy" (Collected Papers, Vol. III) Freud found clear evidence of social wishes. Love of animals should be instilled in the mind of the child as it teaches self-control and thoughtfulness for others.

NERVOUS CHILDREN.

Nervousness in children is often due to lack of self-confidence on the part of the mother which is quickly transmitted to the child. Even if a child accidentally hurts itself, the mother should always try to keep her head cool. Nervous children are rarely found among children brought up in the open air. They are often afraid of the dark. This is sometimes due to foolish suggestions and sometimes to the working of the child's over-sensitive imagination. An experienced Psycho-Analyst should be consulted in serious cases. Kindness, patience and self-control are necessary in dealing with nervous children.

Conclusion:—The proper rearing of children is an extremely difficult and complicated affair. Dr. Stekel, the well-known Neurologist of Vienna says: "We do not as yet appreciate how careful we must be in our relations with the children. Our educators are still guilty of a serious blunder when they conceive their duty to be to instil goodness in the child through the instrumentality of fear. There are only two educational levers—one's own example and love. (Stekel: 'The Homo-sexual Neuroses'). Too often the parents transfer their own conflict on to the child. Whenever the child finds reality too harsh or alien to his nature, he takes refuge in his inner wonderful world of phantasy, majestic in its silence, radiant in its gorgeous colour and beauty. It is a dreamland brought into being by the transvaluation of emotion and pain, where word has little or no significance. Eye hath not seen such rhythmic dance of light and colour, ear hath not heard such rapturous ethereal music as is given to the child to see and hear in the magic city—the Jerusalem of his day-dreams, the Jerusalem built in his imaginative vision, of pure gold and amber which gives him solace and protection amidst the storm and stress of life. The child longs to live in a never-ending stream of gladness. That is why he is so restless. Movement is the essence of his nature which craves for self-expression through the eternal song of creation.

It is good for us to try and understand the child by obtaining a glimpse into the holy of holies—his soul in action,—by lifting the dark veil of mystery in which he is shrouded. This could only be achieved by sympathy, encouragement, loving kindness, understanding heart, and above all by our good wishes and blessings, for his great To-morrow.

INDIAN STUDENT EMIGRATION TO GREAT BRITAIN.

BY MR. B. M. THIRUNARANAN, B.A.

Bangalore.

THE exodus of Indian students in large numbers to European countries for purposes of study is a phenomenon of comparatively recent development, though accessible records show that Indian students were already studying in the educational institutions of Great Britain over a century ago.¹ From the date of its opening in 1828, Indian names appear on the Roll of Students of University College, London. The first Indian name on the College Roll is that of F. Nugee, who was a student of Law; the second name is that of Lobo Raphael, who was admitted in 1840; and four medical students were admitted in 1845.² Rajah Ram Mohan Roy, when he went to that country in 1831, taking five months for the voyage round the Cape of Good Hope, brought with him his youngest son, whom he "placed under the care of the late Rev. D. Davison, M. A."³ Miss Carpenter goes on to say that "we do not hear of any other Hindoo of high caste visiting this country since the death of Rajah Ram Mohan Roy, until in 1841 or 1842, his friend, Dwarkanath Tagore, came to England, and in 1845, four native Indian medical students accompanied hither Dr. Henry Goodeve, the founder of the medical college in Calcutta": which is as fair an indication as we can now obtain, of the very small beginnings, since immersed in obscurity, of this student migration.

These pioneers were drawn, naturally, from those who were quick to take advantage

of the educational facilities which were provided in India in those early days. "The Parsis and the Hindu clerical castes, as well as the families of Brahmins, who, by tradition, inclined to Government employ, quickly availed themselves of opening opportunities, especially in the capital province of Bengal and in the seaports of Bombay and Madras. The Rajputs and Thakurs, the great Hindu fighting caste, at first held entirely aloof from English education. The majority of the Mahomedan upper classes—adventurers by descent and soldiers by tradition—, clung to their own history and literature, and turned their faces away from the new learning, failing to realise that, in course of time, under Western rule, Western education must necessarily become the channel to office and power."³ There may also have been a few others who proceeded to Europe during those years, especially through the influence of Christian missionaries, though there is no mention of any such in available records.

Why did these pioneers go, and what did they do? Some of them, doubtless, had realised that "under Western rule, Western education must necessarily be the channel to office and power." There was also a growing desire, greatly aided and fostered by the missionaries, on the part of the Indians to study and understand the Europeans better. To this end we find Ram Mohan Roy giving much of his time and labour; and much later, in the 1850's, we come across Syed

¹ Lytton Committee Report on Indian Students, 1921-22.

² Miss Mary Carpenter's "Last Days of Rajah Ram Mohan Roy."

³ Verney Lovett: "History of the Indian National Movement."

Ahmad Khan doing the same thing, and also helping to form an association for travel to Europe, before he himself undertook the long and arduous voyage, at a time when the Suez Canal was being cut, and the travellers had to journey over land by train and catch the connecting boat at Port Said. Macaulay's famous Minute of 1835 had decided that in future all education should be given in English; and in 1844 Lord Hardinge announced that preference would be given in all examinations for public posts to those who knew English. The system of recruitment to the Covenanted Civil Service by competitive examinations was introduced in 1853, and ten years later Satyendranath Tagore passed it, being the first Indian to do so. The Chartered High Courts were established in 1861, by the Indian High Courts Act, at Calcutta, Bombay, Madras and Allahabad, and only English was used in them, and English barristers alone were allowed to appear on the original side. The Cama Fund was established in 1863, giving scholarships to enable Indians to go to England for their education. In 1864 five similar scholarships were given by Jamsetji Jeejeebhoy for studying law; and four years later the Government of India passed a resolution founding nine State scholarships for Indian students for study in England. The next year we find Syed Mahmood, Syed Ahmad Khan's son holding one of them.

Institutions.	1911	1912	1913	1914	1915	1916	1917	1918	1919	1920
Inns of Court (Adms.) ...	69	81	85	48	52	88	26	19	142	154
Edinburgh University (Nos. in Residence) ...	...	229	222	180	147	186	184	105	88	153
Oxford (Adms.) ...	56	62	66	70	61	70	50	49	20	53
Cambridge (Adms.) ...	81	82	85	88	89	26	22	11	40	44
University College, London (Adms.) ...	48	...	71	65	49	89	21	19	58	99

He was the first Mahomedan State scholar. The Bar seems to have swallowed most of these early migrants, though the first Indian barrister, Mano Mohan Ghose, was called only in 1866. Some entered the Indian Civil Service, and a few went to Cambridge, like Ananda Mohan Ghose, who was a holder of the Premchand Roychand Scholarship, and became President of the University Union while he was there from 1869-74. Contemporaneous with him, Toru Dutt, the poetess, was also at Cambridge, whither she proceeded with her sister for a year, after receiving a school education in France and Italy. She was four years altogether in Europe (1869-73), and was, as far as records show, the first Indian woman to study in Europe. These are the beginnings.

No complete census has ever been taken of the Indian students receiving academic or practical education in foreign countries. An unofficial enumeration made about forty years ago yielded a total of 160 for those who were in Great Britain. By the end of the century their numbers had more than doubled, and every succeeding year showed a marked increase. The Lee-Warner Committee which reported in 1907 estimated the number of Indian students then in Great Britain to be about 700. The numbers still continued to increase, owing, chiefly, it is said, to the stimulus provided by the events and lessons of the Russo-Japanese War, which made Indians realise the value of scientific and technical proficiency. But there was a marked decrease during the War years, when the number of arrivals was naturally small.

In the absence of complete or adequate statistics, the table of figures given above indicates fairly correctly the general trend, if not the exact proportions, of the migration during the decade it reviews.

The Lytton Committee on Indian students has compiled in its report a very useful collection of figures for 1921, and the educational department of the office of the High Commissioner for India has published

annually, since then, reports which contain figures regarding the numbers of Indian students in the various educational institutions of Great Britain. The value of these figures, however, is considerably diminished by the unfortunate lack of completeness and the unsystematic mode of presentation. Such data as could be gleaned from them, together with the figures obtainable from the Lytton Committee's report, have been incorporated in the following table:

Years.	Total Nos. in institutions.	No. of women.	No. of scholars.	No. at Ox. & C.	Law.	Medi- cine.	Engl- neering.	Agri- culture.	Com. & Econcs.	Re- search.
1921	1801	45	85	289	344	205	267	117	130	92
1926-27	1600*	(20)	175	167	469					
1927-28	1800*	70* (24)	195	161	503		350*			
1928-29	2000*	(27)	281	152	539	450*				
1929-30	2400*	61* (25)	301	157	583	358*	540*	110*		250

Figures in brackets show nos. of scholars only.

* Figures are only estimates.

The observations of many competent persons confirm the features revealed by the foregoing table. The increase in the numbers of scholars is a desirable feature, especially as a large proportion of them are engaged in receiving technical education and training in special branches of knowledge and their skilled services will prove very valuable when they return home. Similarly, the increasing numbers of women students, of whom a large proportion are scholars, is also another welcome feature. Though a very small part of the total Indian student body in Great Britain, they are destined to play a very important part and render very valuable services to India when they return, and it is a hopeful sign that while the majority of them specialise in medicine and teaching, they are also to be found in almost all faculties. The number of students going over for medical studies is also known to be increasing, though there are no statistics available, and the same

is the case with engineering. But while there are many medical students doing post-graduate or special courses, the engineering students are mostly composed of those working for a first qualification. It has also been observed that, in recent years, there has been a growing number of students going over to specialise in psychology and education. The number of those working for higher and post-graduate degrees and qualifications has also increased. Generally, it may now be said that Indian students may be found studying in many different fields of knowledge, the difference in numbers being, perhaps, a corollary to the conditions of demand for the different kinds of education and skill they are acquiring, in the home market. Here certain anomalies need to be explained. The number of students appearing for the I. C. S. competitive examination in Great Britain is steadily increasing in spite of the fact that a similar

examination is held in India; the chief reason for this is that a very much smaller number is selected through competition in India than here, and the better chances are a great attraction. While some of those who compete for the I. C. S. also pursue definite courses of study at some institution or other, a much larger proportion of them join one of the Inns of Court, and put in terms for the Bar, which is a side-line at first, but eventually becomes the only qualification for most of them, as only a few get into the I. C. S. This is the real reason why the number of students studying for the Bar continues to increase in spite of the fact that the differences between Indian lawyers and English barristers have been removed or equalised by the establishment of Bar Councils in India.

Having dealt with the history of this student migration and indicated its size and certain other characteristics regarding its composition, it is also interesting to note some of its geographical features. While formerly Indian students used to congregate at a few centres and in certain Universities, they are now to be found much more widely distributed among the different Universities and institutions in Great Britain. One may well say without risk of exaggeration that there will be few educational institutions of University rank or other places providing facilities for advanced studies or training in Great Britain which have not had Indian students in them at some time or other.

Most of the students used to go over to England, some years back, in August or September, just before the session began in that country. And they used to be passengers on British steamships, mostly, crossing overland from Marseilles or Toulon or Brindisi,

or going over all the way by sea to Tilbury Docks or Plymouth. But in recent years, they have gone at most times of the year, and on boats belonging to almost all the steamship lines, with regard to which the cost of the passage and the treatment they are accorded are the primary considerations. British steamships have lost custom, generally, for several reasons. The ubiquitous Briton coming home from the East on these boats is prejudiced if he is not patronising towards the natives, and both attitudes are extremely unwelcome to the latter, who are becoming increasingly sensitive to such things. It is also common knowledge that there is, in the Indians' opinion, no end of conventions and consequent restrictions on these British boats, not a little due to the fact that, to the home-coming Britisher, as a rule, anything British is sacrosanct and inviolate, and his knowledge of things British usually pertains to the Britain of his own youth. These conventions have little meaning and less use for the Indian student, and he has learnt to avoid them. Consequently, while there are few Indian students on the British boats, unless they are Government scholars, (or for other reasons, such as the cheapness of the third class passages on some of the two-class steamers on the Australian service, which call at Colombo), it is not uncommon for the French and especially the Italian boats to carry large contingents of Indian students at certain times of the year. As these boats stop at the Italian ports, these students cross overland from Venice, Naples and Genoa, to the Channel ports and thence to London often breaking journey at intermediate points, especially at Paris, because of the transport arrangements there. And this foretaste of continental life and hospitality is often the

deciding factor later on, as to where the student spends his holidays while he has to stay abroad to finish his studies.

It is a far cry from the days when Ram Mohan Roy sailed round the Cape and Syed Ahmad Khan saw the Suez Canal being cut; but what used to be an individual's arduous enterprise then has become a regular annual feature now, and it has been estimated that over 800 Indian students go over every year. It costs at least half a million £ (or nearly 75 lakhs of rupees) to keep the 2,000 students there, and various opinions are held and expressed as to whether India gets an adequate return for this expenditure; but it is impossible of exact measurement. With the development and improvement of facilities for higher education in India, the recruitment for all Government services in India itself, and the disappearance of discrimination between Indian and British qualifications and

of the exaggerated prestige attached to British education, there is bound to be a considerable falling off in these numbers in the long run. In the meanwhile, however, an increasing knowledge and wider recognition of the Continental Universities, and fuller appreciation of the quality of the education and training they give, working hand in hand with the all-too-noticeable colour-prejudice and unfriendly attitude of the British people, as contrasted with the greater friendliness and interest experienced on the Continent, is tending to divert more and more students to the Continental Universities and institutions.

But a considerable number of Indian students go over to Great Britain as to the Continent, either on account of the general advantages of a foreign education, or to attend special courses of study under experts, or for post-graduate research. These reasons will continue to operate permanently in taking Indian students over.

Madras University.

B. A. Degree Examination, 1933.

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MR. SYED ZAHUR ALI. B.A., B.T., M.R.A.S. EDUCATIONIST OF HYDERABAD.

BY "HISTORICUS."

THE educational world of Hyderabad and H. E. H. the Nizam's Government have lost one of their prominent educationists by the sudden demise of Moulvie Syed Zahur Ali Sahib, President of the Hyderabad Teachers' Association, and Principal of the Darul-Uloom High School. All of a sudden, one December morning of last year, the public of Hyderabad were thrilled with sorrow by the sad news of his unexpected death. The schools and the offices of the Educational Department were closed for the day all over the Dominions and it seemed as if the Goddess Saraswathi herself went into mourning at the passing away of her devoted son.

He was one of the very few officers of the State who combined a supreme sense of duty with sympathy and fair-minded fearlessness, which won the admiration of all who came into contact with him. He was a great patriot and nationalist. His life was ever guided by nobility, courage and humanity. He was a great lover of Arts and Letters in which spheres of activity he has left unerring impress of his personality.

Mr. Zahur Ali was born of middle class parents at Madras on the 10th October 1879. Thus he was 52 years of age when he breathed his last. Being pious Muslims of very cosmopolitan views, his parents took care to instil in him love of God and country, free from

the jarring notes of caste, creed and community. The eldest member of the family, he possessed in full all those winsome qualities that endeared his parents to their neighbours and that bespoke his noble descent.

After finishing his early education at various schools, he joined the Nizam College wherefrom he graduated and entered the Educational Department in August 1904. Those were days when the time scale was not dreamt of and when merit could soar high irrespective of academic qualifications which are now at best of a negative value. My knowledge of him extends over two decades. I came to know him very intimately when he was the Head-master of the Presidency Middle School which he brought to a high level of efficiency. While there, he wrote a book entitled "Philately: Past and Present" which spoke of his interest in stamp collection, a hobby which was popular in the latter decades of the last century. He was, for a long time, member of the Young Men's Improvement Society, that highly popular and useful institution in the Residency, Hyderabad. His abiding interest in the welfare of that institution was recognised by the grateful members who elected him as the Honorary Secretary for a year, the duties of which he discharged with remarkable success.

When the Warangal High School was in need of an experienced Head-master,

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Mr. Zahur Ali was sent thither on promotion. The qualities of his head and heart were fully revealed when he strove hard to improve its tone and efficiency. He soon won a name among the public for his candour, courtesy, kindness and kinship. His useful work at Warangal was very much appreciated with the result he was transferred on promotion to Darul-Uloom, an old, respectable institution, where oriental studies were encouraged. Very soon, he reorganised it and not only made it a repository of Islamic Culture but also improved its tone by a veneer of English studies. Once at the job, his energy was unbounded and he sought might and main to fill the school with the rays of a new dispensation.

Meanwhile, the Osmania University Scheme came into force and the great fillip given by it to the study of Urdu created a sensation everywhere and the new spirit of adventure and assimilation was reflected within the portals of Darul-Uloom. Mr. Zahur Ali applied himself heart and soul to advance the purpose and policy of the new order of things.

It was found, ere long, by the University authorities that the Osmania University College was becoming overcrowded and that some of the High Schools were willing to share the work by becoming Collegiate High Schools and thus relieve the pressure on the central institution. Thus came into existence the present City College and the Aurangabad College where college education was introduced

as an experimental measure, at first with University allowances for those doing teaching work in the college classes. The founder-Principals of those two institutions deserve the gratitude of all for being the pioneers of a host of other Intermediate Colleges. Messrs. Syed Mohamed Azam and Abdul Haq are gentlemen of such great outstanding merit in the field of education in Hyderabad that it is well nigh impossible to estimate their services to the State.

When Mr. Abdul Haq, the Divisional Inspector of Aurangabad Subah, was appointed Principal of the Aurangabad College, Mr. Zahur Ali was sent on Rs. 500-800 to relieve him. As usual, he was very strict in the discharge of his duties. He tried his best to improve the state of education therein. But he was unfortunately lacking in those official virtues like tact and reserve which an honest and plain man as he was he could not easily command. Truth is always unpalatable and he gave an overdose of it to all and sundry. This unhappily resulted in his unmerited degradation and transfer to Warangal early in October 1926.

It is said that the greatness of a man shines out more in adverse than in affluent circumstances. As one who was watching the meteoric rise and fall of our hero, we can say, without any fear of contradiction, that he took the change in a submissive and pious spirit and with redoubled energy worked hard for the welfare of the school. Very often, he

used to speak of his return to Warangal as his "Punarjnanam" or re-birth with a touch of melancholy mirth which moved his hearers with grief and hope. The wheels of Time are moving fast and poor Zahur Ali was not to be left behind. His undeserved sufferings and unmerited hardships won for him the devotion of some of his assistants who laboured hard to make his regime a success. The foremost of those who deemed it their duty to stand by him in fair weather or foul was his First Assistant Mr. T. Sri Raman, M.A., whose enthusiastic co-operation ensured the success of the school in all its departments of activity.

Mr. Zahur Ali had a nice way of winning the admiration, respect and devotion of his assistants. He would now and then go to an indifferent or recalcitrant member of the staff and say "My dear Mr. so and so, let us agree to disagree. Let not our personal feelings stand in the way of the due performance of public duties." Such a fatherly advice, it is needless to say, won the implicit obedience of even the most reactionary.

Towards the close of the academic year in 1336 F., a proposal made by the First Assistant for raising the High School to an Intermediate College drew much attention and it was finally decided to approach the higher authorities to sanction the proposal. Assured of the minimum number of students for the college classes, the then Divisional Inspector of Schools took up the scheme and secured the sanction of the Government. The popularity of Mr. Zahur Ali

and his immediate assistants was responsible for the co-operation of the public which materialised in the grant of about 20 scholarships of Rs. 5 each from the leading Vakils and Contractors of the place. Nawab Masood Jung, the Director of Public Instruction, visited Warangal in July 1927 to declare the college open. The opening of an Intermediate College at Warangal, the capital of the far-famed Kakatiya kings is a landmark in the history of Telingana and a turning-point in the lives of many persons.

Mr. Zahur Ali, we must remember, started at Warangal with a handicap. He had to recover his lost grade and that was possible only if he continued to be in the good books of his immediate superiors. The proposed allowances for the Principal and teachers handling the college classes created a rift in the lute and ere long, signs were visible of a storm brewing. But, thanks to the patience and energy of Mr. Zahur Ali, work was carried on in the face of untold obstacles. Personal jealousies and petty quarrels proved a perpetual source of anxiety and Mr. Zahur Ali was very much exercised over it. His most faithful adherents were removed one after another, his work was paralysed and he was obliged to go on leave to recover his shattered health. So, early in September 1928, he went to Kashmir, the Eden of India, in order to recoup his broken health and incidentally to collect data for his proposed book on "The Moghal Gardens of Kashmir."

His return to duty was however greeted with a transfer order to Gulbarga where he had worked as an assistant in the early period of his service and the broken man once again struck his tent and marched on to a far away land. Very often in his life, he had left the fruits of his toil to be plucked by others and himself went to the wall. Very often, he had felt the tortuous ways of the world and as often he had obeyed the powers that be with a readiness rarely found among ordinary men. Just at a time when his hard work was bearing fruit, and when the chances of his recovering his original superior grade was approaching, cruel fate mocked at his hopes and embittered his feelings. Each succeeding blow on his devoted head made him more God-fearing and resigned. He bore others' crosses and suffered in silence to see the pettiness of the world around him.

After nearly a year's stay at Gulbarga he returned to his old Darul-Uloom at Hyderabad and with his usual skill and energy discharged his duties. He was elected President of the Hyderabad Teachers' Association and took a prominent part in the Conference held last year. But his constant worries and anxieties were gradually telling upon his health and though he was his former self to all appearances, yet his intimate friends could detect a fall in his former health and at last after a very short period of illness, he died leaving behind him a host of friends and admirers, a large number of brothers and relatives, his beloved wife and five daughters.

The proverbially poor school-master cannot be expected to have died rich and so it is hoped that our benign Government will undertake the education of his daughters and grant suitable scholarships for the purpose.

May his soul rest in peace in the bosom of Him whom he served so faithfully throughout his life!

This study of Mr. Zahur Ali would be incomplete if we do not refer to his excellent powers of journalism and to his artistic tastes. Even as a student, he was a discerning lover of English literature and as years advanced, he improved his powers of writing to such an extent that the Editors of the *Modern Review*, the *Indian Review*, the *Hindustan Review*, the *Educational Review*, etc., were eager to publish articles from his pen. He was a very good writer of easy, vigorous and telling English prose. Further, his articles teem with telling anecdotes and bubble with witty remarks and wonderful description. We have only to refer the reader to his brilliant essay on the "Head-Master" which he contributed to the *Madras Educational Review* in June 1931 to understand his powers of expression and instruction. It is the quintessence of his long experience as a head-master and is a beacon light to all those that travail in the dreary, albeit dizzy, heights of Principalship of a High School or a College.

It is an earnest wish that his learned brothers would collect all his contributions to the various journals and publish them in a Memorial Volume so that the fruits of his labours for the delectation and instruction of the public may not be lost in oblivion and thus his name be treasured in the loving memory of his hundreds of assistants and thousands of students all over the Dominions.

religious houses. The hero of the hour, for once laying aside the lordly contempt with which he usually received my well-meant efforts, suggested that Henry needed money "because he had to spend such a lot on wedding rings." I remember with pleasure an older boy who stoutly maintained that hydrostatics were a worthless science for the excellent reason that "our pump at home never works like that." On one occasion I justly suffered from the humour of one of the senior boys. A pair of cycle handles had been lost, and in announcing the fact after prayers, I spoke with less than my usual lucid accuracy. I said the handles "had been taken or fell off." "They will have fell off" was the well-deserved criticism of my youthful hearer.

An essay on 'This School and its Staff' contained the illuminating statement that "Mr. Blank is very nice, but when he isn't, you wonder if you will ever see your mother again." Another story is a further example of filial devotion. We had left at nine o'clock for a school excursion; about three hours later, one of the excursionists turned to me and said, with an air of profound concern, "Sir! although it is so long since I left home, I have not yet forgotten my mother and father."

It is well known that a lesson may be given on any point and at any distance from that point, and matters come up for discussion which have little connexion with the nominal subject. On such an occasion I once asked for a definition of "Heaven." I was told that "Heaven is a place where people want to go to." (Small boys habitually disregard the instructions of the learned professor who begged his students to remember that "a preposition is a bad word to end a sentence with.") The words "when they die," were added as a rider to the original statement. "Please, sir," said a particularly lively member of the form, "I don't want to go to Heaven."

The problem of matrimony gives rise to infinite jest, and, particularly in the case of small boys,

of most excellent fancy. A talk about Mahomet gave Form II an opportunity to air their views. I had explained that Mahomet allowed his followers to have several wives but forbade them to drink intoxicating drinks. The principle of teetotalism was unanimously approved because "if you drink too much you do such silly things." The feeling of the meeting was dead against polygamy and there was some support for the view that marriage is undesirable because, "if you are married you have to give your wife such a lot of money at breakfast to pay bills." On a vote, the expediency of monogamy was carried, with a strong, and very vocal, minority in favour of celibacy. I had explained to a somewhat older form that, owing to differences in the laws, marriage was an easier operation in Scotland than in England. "Could I marry anybody, sir?" anxiously inquired a youth who was obviously distressed at the possibility.

But the boys do not supply all the humour of school; occasionally the master reveals a pretty wit. Sarcasm on the part of the master is not playing the game, for if the boy answers in the same vein he is punished for impertinence. But kindly humour is always received in good part and blesseth him that gives and him that takes. "William Pitt," asserted the staff historian, "was born in 1703 and joined the army." "Please, sir! did he join the army in 1703?" "Yes, he then belonged to the infantry." On another occasion the boys were ordered to write a letter to Uncle John. One youth announced that he had not got an Uncle John, whereupon the master, with the courtesy for which schoolmasters are famous, said, "I will lend you mine for this morning." "Please, sir! what is his address?" "I don't know, he's dead." These two replies always seem to me to be excellent examples of the humour of school. I made them myself.

Reports give to harassed masters a good opportunity of unburdening their souls. The famous

statement that "His arithmetic troubles him more than it does me" was written more in sorrow than anger. Many of us know the boy whose conduct was reported to be "very good on the whole, but he ought to cultivate the appearance of not appearing tired." And we all sympathize with the feeling which prompted one of our number, when a member of his form had been more than usually obstreperous, to exclaim, from the depth of his heart, "Thank heaven! you are not twins." It is recorded that one house-master found it impossible to express in scholastic language his real opinion of the conduct of a certain boy. In an inspired moment he wrote, "He would make a good parent," and so contrived a double debt to pay.

Humour not only brightens the dark places of school life; it may also prove a valuable instrument of discipline. Boys are naturally robustious and tend to move from place to place as gracefully and quietly as a charging rhinoceros, but a rule

that no boy may clatter about the class-room "unless he has large feet" ensures sedate and even lady-like movement. A colleague of mine, with a fine appreciation of the limits of boyish endurance, checked those headlong rushes to the window which sometimes take place in the best regulated forms by insisting that no boy should look out of a window "except in the case of a dog fight." A polite request for another answer, "in your wiser moments," often produces the desired effect, and an appeal "not to work too hard" rouses even the laziest of boys to a show of energy which is always gratifying although too often temporary. An entreaty "not to be funnier than you can help," reduces the form jester to a condition of speechless calm. A small boy is a potential jack-in-the-box and bobs up and down in his seat on the smallest provocation, but a gentle intimation that such conduct is due to lack of sufficient brains to keep his body down leads to a state of more or less stable equilibrium—*The Journal of Education*.

THE BARD'S LAST RESTING PLACE.

BY DR. H. W. B. MORENO, M.A., PH.D., D.LITT.

Calcutta.

There let him rest, the bard in his last home,
Upon the mountain crag that butts the sea,
Where oft he used to lie, beneath the bough
Of yonder knotted trunk, whose waving
crest

Shelters and warblers, while the squirrels
leap

To snatch the nuts laid by, for winter's
store.

No carved and shining stone, nor ridge, nor
mound,

To mark the hallowed spot, nor crude design,
For one who loved and longed but to be free.
His canopy above, the spacious dome

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Lit by the darting rays of Sol's fierce sphere,
To warm his heart and stir his bosom's fire.
There let the sea waves dash in might below,
Or run to woo the proud, unyielding rocks;
And when the sun sinks silent in the West
And daffodils all rear their golden heads,
While daisies peep along the meadowed path
To speed the hastening day, when the low
tide

Calmed and bestilled, gives muffled sounds
and slow

And songsters meet to chant their evening
lays,

While distance echoes soft the tinkling bells

Of herds that wend their ways to neather'd
folds,—

There let the mingled notes bear to his ear
A holy vesper, for such strains had taught
His throbbing lyre and him often to thrill
The gathered rustic group, dozing to sleep,
Drunk with the nectar of his honeyed lips;
For with a frame great-souled, with spirit
free;

He brought to earth, the precious flame,—
like him

Who stole from off Olympia's lofty heights
The living fire, for mortals here below,—
While those who heard renewed was their
strength,

Warmed by the glow of hidden heavenly joy,
To reach the heights celestial, passing
strange,

Only to sink with wings all scorched and
prone,

Deep in the bosom of the numbing sea.
And when the dews, like angels' tread, will
fall

And glow-worms trim their myriad
twinkling lights,

Perchance the wildly sauntering forest beast
Will come from out his lair to stay awhile,
Wondering why there a double silence
dwells,—

Awhile he stays and sniffs, then turns his
way

As he espies the writhing serpent's length
Close by his side, hissing upon the path,
To reach the hollowed cleft beneath the
clod;

And when the winds are blown and gathered
lie

Within the bag Aeolus holds, the blinking
stars

Will bear their rapturous cadence to his ear,
The heavenly harmony of moving spheres,
While pale the horned moon creeps o'er the
tops

Of distant hills to catch the harmonious
flood,

Sung for immortal broods, entrancing sweet,
Which echo faint, his soul in rapture caught,
When silent in the solemn midnight hour
He breathed the joyous lilt, such gifts divine
Made him to lisp, for numbers to him came,
So curtained round and snug beneath the
turf,

He will rest on till bursts the crack of doom
Demanding all the earth and moving sea,
To yield their dead; and multitudinous
The spectres wan, with faces raised, shall
rise

Caught in mid-air, while angel choirs on
high,

With cherubim, shall wake a slumbering
world,—

Such melody that once he fondly on his lute
Essayed to draw, self-charmed,—a soulful
theme,—

The song that yet will bid Earth's sorrows
cease,

For dawns millennium's morn—a dawn of
peace.

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Per Mr. K. P. P. TAMPY,
New Lodge, Trivandram.

PLACES OF EDUCATIONAL INTEREST.

XIII. TANJORE.

BY MR. L. N. GUBIL SUNDARESAN,

Teppakulam, Trichy.

The historic city of Tanjore is a place visited by tourists as being the capital of the Cholas. After the Cholas, the Nayaks took possession of the city and the Mahrattas succeeded them. This garden of India—even now spoken of as Chola-desa—and the most civilised portion of South India is composed of the deltaic portion of the Cauvery. The capital is famed for the three important places—the palace, the big temple and the library.

The Temple. The temple built in the latter half of the 10th century by Raja Raja Chola is a specimen of Indian architecture and is a wonder in its peculiar way. The pyramid constructed over the huge Lingam—the Phallic symbol of the Siva shrine—is of 13 strata. There are stories of Raja Raja Chola arranging the carrying of the big stone-dome by the old mechanical method from the village of Sarapaliam.

On a study of the incidents in the annual Brahmotsavam celebrations, one important institution is worth noting—there was the institution of a drama—opera performance—*Koravanchi* as it is called—in connection therewith. The substance of it that 'A magician and astrologer woman appears on the scene—before the Raja and his mate and prophesies that by the grace of God Brahadisa, the presiding deity—through his pleasure on account of the annual Brahmotsavam celebration—the whole kingdom will be prosperous, the king and his mate will have their wishes accomplished and there will be peace and plenty

in the land.' This sort of effect is recorded in the Bharata Natya Sastra in connection with the origin of Drama—and it is thus seen that the Koravanchi Drama has been adopted from the Sanskrit Drama in all the Brahmotsavams of the temples in the Tanjore kingdom. There was a Tyagaraja Koravanchi and at present there is the Sarabhoji Koravanchi enacted even to-day on the Tiru-kalyanam day at Tanjore in the presence of Brahadiswaraswami.

Another incident is the way in which the Tiru-kalyanam is conducted. A party of people are invited in all marital pomp as if they were the party of the bride's house.

Whereas at Tirumalavadi, a Brahmin family has that temple honour on the marriage occasion of Nandikessa, a non-Brahman family has that honour in the Brahadiswarar temple.

This clearly shows that there was no caste question so far as Siva temple celebrations are concerned.

As for the number of images and sculptural monuments, much has been written and so I stop with this description of this temple.

One peculiarity is that the three Tamil saints have not chosen to write about Brahadisa. But there is an excellent brochure by one Sivakolundu Desikar—a work *புத்தலயர் உரை*—a description of Tyagaraja's procession in the Tanjore big temple which contains much information about the place. It is for the historians

of antiquarian interest to study and expatiate on the greatness of the historic city from the book.

The Library. The library dates from the time of the Nayak kings as proved by the fact that there are several rare books in Telugu. And many Sanskrit works have been preserved in Telugu script. The Nagari came in only with the Mahrattas. The present name of the library is after the name of Tanjore Saraboji Rajah. It is due to the fact that Dr. Barnell was carried away by the impression that in his time some manuscripts were purchased for the library by Raja Saraboji in his tour to Benares and Calcutta and also the fact that Schwartz wanted to make a name for his English educated ward over and above his ancestors though they had done more for the library.

For example Tulagaji wrote a Sanskrit work on music—*Suptasaramrita*—and other Mahratta kings were great patrons of literature and arts. Chokkanatha, Ramabhadra, Tryambaka Raya and Bhaskara Raya had left their immortal works long before the time of Saraboji. The library is now in charge of a Committee—the District Collector, the District Judge, one Member of the Royal family, one nominee of his, and one nominee by the Government. The work of preservation and acquisition of books for the library is an arduous task. I think it requires the services of specialists and could be satisfactorily done by honorary men as in the case of the Local Self-Government. There was a suggestion for the preservation of Telugu manuscripts recently. The Sanskrit manuscripts are also well-worth preserving and no time should be lost in getting copies made

from the decaying palmyra manuscripts, especially rare works not found elsewhere. The Librarian-Secretary makes his presence rare on account of his ill-health and the Committee meets once in a month or two and the management of this charitable trust needs improvement in many directions. In the cause of preservation of Indian culture, additional stress has to be made in this respect.

The Palace came into existence in the Nayak times. The statue of Saraboji was the Durbar hall of the Nayak kings. The figures on the pillars are said to be those of the musicians of their times. The Sangita Mahal was built by Viraraghava Nayak and there is the Durbar hall of the Mahratta kings to the east of the library with the pictures of the kings of that dynasty. The five story-building was constructed by Saraboji. The Nayak kings used to climb the tower everyday just before the meal and have a *Darsan* of the tower of Mannargudi Rajagopala-swami and Srirangam and that tower is preserved even to-day. There is a record in Sangita Sudha to show that the jewel-coat now worn by Sri Ranganatha on Vaikunta Ekadasi day was presented by Achyuta Nayak, king of Tanjore. This shows the devotion of the Nayaks to Sri Ranganatha. The two spacious gardens the Dasta Mahal and the Huzur Mahal are now in ruins. Now the palace is in the possession of the D. P. W.

The facts above show that the city is in ruins and all interested in the preservation of artistic and monumental curios should take all necessary steps for the same.

OUR SCIENCE COLUMN.

5. OPTICAL PROJECTION IN SCHOOLS.

By Mr. V. N. VISWANATHA AIYAR, M.A., L.T.

Madras.

Strictly viewed, this article should not have been included under the above general title; it was however thought useful to include it under the heading, as the use of the Hartl's Optical Disc is closely related to optical projection.

It is a matter of common observation that experiments in optics are the most fascinating in the study of Physics and lend themselves to special demonstrative effect. Sir Isaac Newton was the first to realise this and some of his classical experiments, specially in the study of the spectrum, are even now demonstrated in the form devised by him. Besides, experiments on reflection, refraction, total reflection, etc., are extremely important in theory. For demonstrating these, the practice till the invention of Hartl's Optical Disc was to go in for special apparatus for each experiment. Naturally there was multiplication of costly and fragile apparatus in the optics shelf. Considerable room had to be found for accommodating them, as a visit to one of the well-furnished laboratories would show. The invention of the Optical Disc, somewhere about 1916, caused almost a revolution in the methods of optical demonstrations. It may be hazarded that almost every serious teacher of Physics was planning some kind of apparatus which would serve the variety of needs. Authors

were not slow in recognising the merits of the invention, which was placed in their hands. Duncan and Starling in their textbook of Physics (Macmillan) first published in 1918 state that "one of the most convenient pieces of apparatus for demonstrating many of the optical laws is the Optical Disc." The American firm of instrument-makers, the Central Scientific Co. of Chicago, designates it in the characteristic American style as 'a complete laboratory in optics.' In the face of such eloquent testimony, it is unnecessary for the writer to dilate upon the advantages of possessing the apparatus. A pamphlet on the 'Optical Disc' describing and illustrating the numerous experiments performed with it can be obtained on requisition to the agents of Cenco in India, viz., The Scientific Instrument Co., 1, Johnston-ganj, Allahabad, or from their branch at Calcutta. Some of the experiments are no doubt of an advanced character and are evidently not required for boys of the School Final stage. The special parts concerned with these need not be obtained for high school work.

The Optical Disc is of robust design and can stand some rough usage. It must not however be supposed that its performance is not sufficiently accurate. The results obtained with it can compare favourably with those

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NEWS AND NOTES.

INDIAN.

DELHI.

A severe heat wave is passing over Delhi and its neighbourhood, the temperature rising to 120°. Several deaths are reported each day. Acting on the advice of the Municipal Health Officer, all the schools in Delhi have changed their working hours. The schools will close at 10-30 A.M. June is a very hot month. In the interests of young pupils, it is suggested that schools change their working hours working only in the cooler hours of the day.

UNITED PROVINCES.

1. Powers of Chairmen of Education Committees of District Board are being gradually cut down. Sometime ago the headmasters of vernacular middle schools were given the power to select books for their schools. Now the Department itself has decided which books of which publisher will be used as text in primary classes.

2. A little before the A. V. schools closed for the summer vacation, the Inspector of Schools, Benares Division, launched on an interesting experiment of supplying sprouting gram to scholars in the mid-day recess. Boys are reported to have taken to it with much liking.

3. The new edition (1932) of the Education Code is out. It is reputed to be the best of all Education Codes in the country. It is noteworthy that powers of heads of schools in matters of internal administration have been defined. This is expected to save the heads of institutions from unauthorised raids of managing committees in this respect.

4. Speculation is much rife regarding the proposed legislation to compel the Allahabad and Lucknow Universities to have honorary

Vice-Chancellors. Educationists like Dr. Ganesh Prasad and Dr. Tarachand are arrayed on opposite sides.

5. June is the month of anxiety for teachers. Notices to quit are the order of the season. Even the most insignificant members of managing committees suddenly grow important. A very interesting case concerning the N. R. E. C. College, Khurja, is engaging attention at present. The Principal allowed a Mushaira to be held in one of the College hostels. A local watchmaker, perhaps suspected by students to be an informer, was belaboured by boys. Some teachers including the Superintendent of the hostel got involved and had to leave. Certain members of the managing committee holding the Principal rather than the teachers responsible for the whole thing have resigned, thus causing an impasse. Developments are being watched even by 'The Leader' ordinarily accused to be indifferent to teachers' lot.

6. Due to representation of the U. P. Secondary Teachers' Association the Government has agreed to effect a 10 p.c. cut on the Government grant-in-aid rather than on teachers' salaries as was previously proposed.

BOMBAY.

When about a month ago it was announced that Sir Dorab Tata had made a trust of his property—about 3 crores—no one had any idea that that announcement was soon to be followed by the announcement of the death of Sir Dorab Tata and the conditions of the trust were discussed in newspapers where it was maintained that a good part of the trust money should be earmarked for the benefit of the Parsee community.

This is the second big endowment for charities on a cosmopolitan basis, the first being the well-known N. M. Wadia Charities, and it is

worth noting that both of them are made by Parsee millionaires—India owes a lot to the foresight, courage and patriotism of the late Sir Jamshed Tata and on his death his mantle had deservedly fallen on his two sons who maintained the high traditions of their illustrious father. It was the Tatas who gave India its Iron and Steel Industry and it was they who founded and helped to maintain the Indian Institute of Science at Bangalore, a premier institute of research in Chemistry and Electrical Engineering. There is hardly a line of trade where the Tatas do not have a prominent share and by their enterprise they have given India some notion of what real industrialism may mean. The Tata Hydro-Electric Works the Tata Oil Mill Industry, the Tata Construction Syndicate, are some of their well-known undertakings and recently they were planning to run an air line across the country from Karachi to Bombay.

Sir Dorab Tata who died of heart failure on the 3rd of June was the last of the famous house of Tatas, there being no male member now left to continue the line for Sir Jamshed. Ever since his wife's death last year Sir Dorab had been anxious to make some kind of settlement of his properties and a trust deed was duly executed on March 11. It follows the same lines as those of the Wadia Charities, the funds being utilised without any consideration of caste, creed or race. Sir Dorab has also set apart a sum of Rs. 2,500,000 for instituting scholarships for research in what are commonly known as incurable diseases. Born in 1859, Sir Dorab was 73 years old when he died. His death creates a gap in the public and industrial life of Bombay which may not be filled for years.

MADRAS.

1. The results of the S S. L. C. examination conducted by the Government have just been published. While there is a fair amount of satisfaction at the results, still there are several cases of real hardship and the Moderation Board appointed by the University of Madras has recommended certain modifications in the rules of eligibility.

2. A Conference of Medical Inspectors of Schools will be held early in August. The Minister for Health is expected to open the Conference and Major J. R. D. Webb, Director of Public Health, to preside. The Minister for Education will watch the Conference. This Conference is arranged in good time as it is expected to throw light on the results so far achieved by the system of medical inspection in schools, and make valuable suggestions for more effective medical inspection.

3. The Government of Madras acting on the recommendations of the Retrenchment Committee have ordered that one teacher in every Government secondary training school for men be retrenched. It is estimated that this will result in an immediate saving of Rs. 50,000 and an ultimate saving of Rs. 75,000 per annum.

The salaries of teachers in Government employ have already been subjected to the 10 per cent. cut and this measure is expected to increase the quantity of work of teachers. Thus under-pay and overwork will be the result of the economy measure. Will it lead to better results?

4. The Y. M. C. A., Madras, conducted its annual Summer School of Music this year also. A large number of women teachers attended the school.

REVIEWS AND NOTICES.

THE CLAY CART (GRADE V), EDITED BY H. O. KERSHAW. B. G. PAUL & CO. Pp. 93. Price 8 as.

This is a rendering of the story of the famous Sanskrit drama. It is to be remarked that the book does not bear the name of its author. The frontispiece shows a total ignorance of the conditions of the time of the story.

SUGGESTIONS FOR PRIMARY SCHOOL TEACHERS, BY H. DIPPIC, M. A., D. S. O., INSPECTOR OF SCHOOLS, BIHAR AND ORISSA. OXFORD UNIVERSITY PRESS. Pp. 228. Price Rs. 2-8-0.

This is a valuable book on the problems of elementary education in India. The chapters deal both with the theory and the practice of the subject. The book is written from personal experience and observation and shows great insight. We wish all training schools will benefit by this book. If it is translated into the vernaculars it will be found useful directly by the teachers of elementary schools.

The book is divided into three parts, dealing with "Organization," "The Teaching Art," and "The Practice of Teaching in Lower Primary Schools." Good sense and clear exposition are to be seen everywhere. Details are not overlooked either. There is a wonderful grasp of the subject.

A HAND-BOOK FOR GEOGRAPHY TEACHERS, EDITED BY D. M. FORSAITH, LECTURER IN GEOGRAPHY AT GOLDSMITHS' COLLEGE, UNIVERSITY OF LONDON. METHUEN & CO., LTD., 36, ESSEX STREET, W.C., LONDON. Price 4s.

This delightful volume of 336 pages of feather-weight paper is a timely publication to Geography

teachers in our high schools. H. R. Mill's book on this subject is not now easily available and so this up-to-date publication supplies a real need. "This book is concerned with the teaching of Geography to children under fifteen and it is hoped that it may prove helpful especially to the non-specialist general teacher." The book is divided into six sections:—

1. Syllabuses and schemes of work.
2. Indoor Geography.
3. Outdoor Geography.
4. Book lists.
5. The teaching of International Geography.
6. Geography and the League of Nations.

A short introduction as to the proper method of teaching is included in each section. Section IV is particularly valuable on account of the complete bibliography of books on different aspects of Geography, the publishers, cost price and a small criticism of each book. It adds places where geographical teaching apparatus can be secured. A copy of this book would be an asset to the Geography section of every high school library.

PHILIPS' 'NEW PROSPECT' READERS—LIFE OVERSEAS: AUSTRALIA, BY E. YOUNG AND GILMOUR. LOCAL AGENTS: LONGMANS, GREEN & CO., LTD. 72 pages. Price 8d.

The enterprising house of George Philip and Son have taken advantage of the recommendations of the Hadow Committee on books in Public Elementary Schools in England. The Report says: "Books should be enjoyed by children reading alone" and "a strong inducement in learning to read is the interest of a continuous narrative." To fulfil such a purpose the new series has been brought out and includes fiction, travel and exploration and life overseas. The small book under review comes under the last group.

It is profusely illustrated with scenes of Australian life and is written in fairly simple language. The book deals only about sheep and cattle farming and mining. No mention is made of life in Australian towns or of the "black fellows." The latter topic is treated in a separate volume of the series. In the interest of high school education in this province may we suggest that an Indian edition is brought out summarising and synthesising the matter contained in the two volumes (in a book of this size) together with an account of life in Australian towns? Such a volume would help our high school boys to have a complete picture of Australian life by reading a single volume as a supplementary reader in English.

AN INTRODUCTION TO BIOLOGY, PART II, (ANIMAL LIFE), BY M.V. SUNDARESAN, GOVT. HIGH SCHOOL, KOLAR.

This book is written for the use of the pupils of the higher forms of Secondary Schools and follows closely the S.S.L.C. syllabus in Animal Life. The author has been careful in presenting only the salient features in the life-processes of animals and avoiding unnecessary details. The mode of treatment is good, language simple and illustrations are suitable and profuse. The teachers of Secondary Schools will find this a useful addition to the suitable text-books for the use of pupils.

ALL ABOUT MYSORE, A COMPREHENSIVE HANDBOOK, UP-TO-DATE AND ILLUSTRATED, COMPILED AND EDITED BY D. V. GUNDAPPA. (KARNATAKA PUBLISHING HOUSE, BANGALORE CITY). Pp. 141. Rs. 2.

This small book is intended to be a guide to the tourist and casual visitor and also helpful to some extent to the more serious student. It gives information on all aspects of Mysore, its physical features, flora and fauna, mineral resources, agri-

culture, history, the machinery of administration, industries and commerce, wealth of the people, their income, taxation, etc., besides a notice of the principal places and an economic map of the State. The information, the author claims, has been mostly taken from authoritative sources; and in many points it has been brought up-to-date. He hopes to make the publication an annual one and to issue it both in English and in Kannada.

LIBRARY OF INDIAN WISDOM: NEO-HINDUISM, BY D. V. ATHALYE. D. B. TARAPOREWALA, SONS & CO., BOMBAY. Pp. 220. Price Rs. 5-8.

This book is an exposition of Swami Vivekananda's conception of Vedantism and of the Swami as the greatest modern exponent of the ancient Vedic religion. The author gives a biographical sketch of the Swami in the first chapter where he stresses on his hero's central idea to carry religion to the doors of the poorest and sums up his contribution to national thought and aspiration in the little sentence of six words—"I feel that India is young." The Swami's thoughts on Hinduism and the Vedic religion are summed up in the second chapter wherein it is explained how Hinduism is based on no personality and it is this impersonal side that has saved it from disasters and disintegration. The next four chapters deal with the four *yogas* or spiritual paths which appeal to different individuals and are based on the special development of different sets of mental characteristics and qualities. The Swami's ideal of practical Vedantism begins with an exhortation that everyone has to fill himself with the ideal and to attune his conduct with the ideal. The Vedantic ideal is, in essence, the gospel of strength, self-reliance, optimism and hope; and the practical Vedantin is sturdy, enterprising and not easily cowed down by failure. The Swami's teaching that, both on the individual

and on the social side, practical Vedanta means more and more the perception and observance of unity all round has been well explained. His resolute opposition to all ideas of a universal religion which he regarded as a sham is also well brought out, as well as his conviction that there should be due harmony and co-operation between science and religion. According to him, the greatest service that Buddha rendered to mankind was to rouse its moral energy with a great and unparelled vigour; while Islam failed to infuse vitality into the drooping veins of India, though its levelling tendency gave some respite to the lower classes and its ideal of equality admirably reacted upon the crystallised social fabric of India. The most effective way of social reform was to give back their individuality to the masses which they have lost by centuries of poverty and tyranny. His ideals of social reform are now finding increasing acceptance. Lastly the author describes how to the Swami, love of India and devotion to her great religion were only means for helping the world and how he valued the Vedanta as the sole remaining salvation of the world. The book well fulfils its object of giving in brief compass all the spirit and essence of the Swami's teachings on Vedantism and the spirit of Hinduism.

JOURNAL OF THE ANDHRA HISTORICAL RESEARCH SOCIETY, VOL. VI, PART II.

This number which was only recently published, opens with an appeal for funds and takes stock of the financial position of the Society which was started ten years ago and has published *The Raja Raja Narendra Pattabhisheka Sanchika*, *the Kalingadesa Charitra* (both in Telugu) and also the quarterly in English which is running through its sixth annual volume. It also proposes to publish a commemoration volume in Telugu, entitled the *Kakatiya Sanchika* having celebrated the Kakatiya Day at Hanumakonda—

Warangal in April last, when a historical exhibition was held and a number of papers bearing on Kakatiya history were read. The Society maintains a free reading room and library and has started the nucleus of a small museum.

In this number Mr. R. Subba Rao gives the third chapter of the History of the Eastern Gangas of Kalinga containing notices of its early kings like Indravarma I and his successors and holds that the identification of Kalinganagara with Kalingapatam could not stand. He describes the condition of the land at the time of Hiuen Tsang's visit and says that Dantapura was still in a flourishing condition then. Dr. Lanka Sundaram gives the first instalment of his thesis (submitted to the London University) on the Revenue Administration of the Northern Sarkars (1759—86); and Mr. M. Rama Rao has given a paper in which an attempt is made to elucidate some of the problems connected with the early Kakatiyas.

ANNALS OF THE BHANDARKAR ORIENTAL RESEARCH INSTITUTE, VOL. XIII, PART II.

In this number of the journal, Dr. B. C. Law traces the contents and importance of the chief books of non-canonical Pali literature, like the *Nettipakarana* (a treatise on textual and exegetical methodology), the *Petakopadesa* which is a different manipulation of exegetical methodology, the *Milinda Panha* which now exists only in the Pali, the original text, having been lost, Buddhaghata's *Abhidhammavajira*, the *Jinacarita*, which has the same value as the *Buddhacharita* and the *Lalitavistara* have among the Northern Buddhists, the *Rasavahini*, etc. The writer analyses the contents of the books of *Milindapanha*, explains how it puts together the isolated and disconnected controversies occurring in the *Kathavatthu*, gives a list of the place-names, etc., occurring in the treatise and supplies

a list of books which can be consulted on the subject.

Mr. A. Biswas writes on society and culture as reflected in the *Brahmanas*, particularly in the *Aitareya Brahmana* of the Rig-veda; while Mr. Atul K. Sur traces the Linga-worship to non-Aryan origins and neolithic times and says that it was flourishing in the Indus valley in the period of the Rig-veda and became fused with the cult of Siva in the epic age. Dr. Pathak discusses the date of Akalankadeva. There are also discussions on the date of Trivikrama, the Prakrit grammarian, and of Anantavirya.

THE NEW ERA STORY BOOKS, BY MISS C. GORDON. MADRAS: B. G. PAUL & CO. BOOK I, Pp. 32. Price 3 as. BOOK III, Pp. 60. Price 6 as.

These books are made up of lessons on popular themes and must make suitable reading in schools. The themes are taken from a large variety of sources.

CHANDRAHASA (GRADE IV), EDITED BY J. C. ROLLO. B. G. PAUL & CO. Pp. 60. Price 6 as.

This is a popular South Indian story told in prose chapters with quotations from English poets.

THE PROJECT METHOD IN INDIAN ELEMENTARY EDUCATION—ITS THEORY AND PRACTICE (IN TAMIL), BY RAJANAYAKAM. THE CHRISTIAN LITERATURE SOCIETY. Price Rs. 2-4-0.

With the one purpose of doing their very best for the children of the world, earnest thinkers in the various parts of the world have evolved various types of education for the children of those places. One of the latest methods of

teaching in the Elementary School has been termed the Project Method. It is always said that each teacher must be an experimenter and choose the methods suitable to the advancement of the children who come under him. With this spirit in view, it is refreshing to note that an experimenter in South India took up this method in right earnest and adopted the same to the conditions in this country. The book under review written by Mr. Rajanayakam with an introduction by Mr. H. Champion, Principal, Teachers' College, Saidapet, ably sets forth an account of the method as carried out by the author in the London Mission Community Training School, Erode.

Written by a teacher who has practically worked out the method, the author has understood the difficulties of the method and as such, he has given practical suggestions in the way of schemes of work, list of stories for a year, etc. It is possible to adopt the method, though not wholesale at least in parts, by any one who believes in the dictum that education should be by life, for life, and through life.

The subjects for Projects given in the book are within the range of the Elementary School children. It is also left open to the teacher to choose the projects which could be accomplished by the children provided the teachers take into consideration the nature of children and their requirements, the number of teachers and their qualifications, the equipment of the school and the conditions of the locality. But one caution seems to be necessary. The teacher must compare both the Project curriculum and the Elementary School curriculum and see that the children's needs and requirements are duly met with in the school teaching.

Especially in number-work, it would be useful for the teachers if the book can give the specific types of problems and the various short-cuts in

mental work which could be done in connection with the several Projects. The method by itself gives scope for individual and collective work, for natural correlation of various school subjects and for children's constructive work. These salient features have been brought out by the author in the scheme of work. The chapter on "New Type of School Management" ably sets forth the mutual relation of teacher and pupils in the school.

The book deserves careful reading by the Elementary School teacher and deserves a place in the libraries of all Training Schools. The teachers have to be introduced to the method and they should thoroughly discuss the usefulness of the method and its limitations in the Elementary School.

We hope that a reading of the book will at least produce a change of heart in the teacher and give a new outlook on the teaching of children in the Elementary School. We also recommend the book to various Teachers' Associations for Elementary School teachers in the Tamil country.

JOURNAL OF ANNAMALAI UNIVERSITY, VOL. I, No. I, APRIL 1932. EDITOR DR. B. V. NARAYANASWAMY NAIDU, M.A., B.COM., BAR-AT-LAW. PUBLISHED BY THE ANNAMALAI UNIVERSITY.

The first number of the Journal has been issued under the editorship of Dr. B. V. Narayanaswamy Naidu. The Journal displays a very high standard and contains instructive articles on a variety of subjects such as education, arts, history, mathematics, and natural science.

According to its editor, the Journal has been started in order to embody the original work done by the members of the University and to place it permanently on record. We congratulate the Editor in attracting to its pages, even in

this first issue writers of great merit and distinction. Mr. P. A. Subramania Iyer contributes an article on "The Teaching Profession in English literature." Mr. V. G. Ramakrishna Iyer writes about the Chidambaram temple and Mr. K. Rama Pisharoti about the dramatic art in Kerala. Among other articles are some dealing with Algebra and Geometry (Mr. A. Narasinga Rao) and one on Natural History by Mr. R. V. Seshaiya.

Besides the above the Editor has written the University Notes, and Reviews are also included in the Journal. There are a number of attractive plates in the Journal.

The Journal will, as at present arranged, be published twice a year.

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THE EDUCATIONAL REVIEW.

It is gratifying to find that the recent visit of Sir Rabindranath Tagore to Persia has already resulted in closer cultural relations between the two countries. Intimation has been received from the Persian Government that His Majesty the Shah has been pleased to sanction the endowment of a chair at the Shantiniketan for the exposition of Persian culture. The Vishwabharati at Shantiniketan claims to be a World-University and it is obvious it cannot fulfil the ideal, unless the cultures of various countries are represented at the centre. In view of the intimate relations which have existed between Persia and India in the past this step is particularly welcome. We have always felt that the possibilities of fostering good feeling by cultural relationship between the Hindus and Mohamedans have not been adequately explored in this country after the passing away of Moghal rule, but the endowment of a chair at Shantiniketan which is already a good centre of Sanskrit and

Hindu studies, in general, should serve in some measure to bring about such a consummation. It is good to remember that there are affinities of a strong kind between Persia and India in the department of literature as well as in art.

A Sub-Committee appointed by the Government of the United Provinces to consider the future of the grants to the Universities of the Provinces by the Government has made certain recommendations which may not be of general interest to the rest of India. But it is interesting to note that the Committee has suggested the formation of a provincial Inter-University Board, to consider the problems of co-ordination among the Universities of the Provinces, excluding, we presume, the Universities of Benares and Aligarh which claim to be of an All-India nature. The Committee need not have gone out of its way to express the opinion that an All-India Inter-University Board cannot be of much use to the United Provinces of Agra and Oudh—it is not difficult to

conceive of an All-India University Board meeting for the consideration of University problems of general interest to the whole country and also of provincial organisations to subserve the interests of smaller areas which may contain more than one University. The Presidency of Madras seems eminently fitted for the formation of a Provincial Inter-University Board, seeing that as many as three Universities function within its jurisdiction. A Provincial Inter-University Board with the three Vice-Chancellors of the Universities and the Director of Public Instruction and the Minister of Education may be of real use for higher educational interests and it is a suggestion worth consideration by the authorities concerned. The Universities of Mysore and Hyderabad may also be expected to take advantage of such an organisation. We must of course not be understood as suggesting that the usefulness of the present Inter-University Board should in any way be reduced. In fact, there is the nucleus for the formation of Provincial Inter-University Boards in the practice which the Inter-University Board has already inaugurated, of having meetings of representatives of Universities from provinces which contain more than one University, at the time of each annual meeting.

The following communique has been issued by the Punjab Government:
The Punjab University Commission.

In accordance with a resolution passed in the Legislative Council of the Punjab in

December 1931, the Punjab Government (Ministry of Education) has appointed the following committee to examine the working of the University of the Punjab and its constitution, rules and regulations, with a view to suggesting such changes as appear to be necessary for the better control and administration of the University:

CHAIRMAN.

Sir George Anderson, late Director of Public Instruction, the Punjab;

MEMBERS.

Dr. Wali Mohammad, Professor of Physics, Lucknow University;

Prof. P. Seshadri, late Secretary of the Inter-University Board of India;

Mr. Rahman, late Secretary of the Aligarh Muslim University Inquiry Committee and lately of the Aligarh and Dacca Universities;

Sardar Buta Singh, Deputy President of the Punjab Legislative Council;

Prof. J. F. Bruce, Professor of History, University of the Punjab (Secretary).

The following are the terms of reference:—

(1) To inquire into the extent to which the present system of University education meets the actual needs of the province;

(2) The amount of teaching given directly by the University and the degree of control exercised by the University over the teaching imparted in colleges;

(3) The composition and powers of several authorities of the University and the powers and duties of the officers of the University;

(4) The administration of the University including the quality of teaching imparted by the University, the efficacy of the control exercised by the University over the teaching given in colleges and facilities for research;

(5) The income and expenditure of the University;

(6) Qualifications demanded from candidates for admission to the University classes and to affiliated colleges ;

(7) The control exercised by the University over secondary education ;

(8) Relations of the University and its associated institutions with the Government ; and

(9) To make such proposals, if any, as may appear to be advisable in each of these respects.

A detailed questionnaire will be issued at an early date to educationists and educational bodies and institutions throughout the province. In the meantime, the Government of the Punjab (Ministry of Education) invite any persons interested in the University, who desire to do so, to forward their views on all or any of the various topics within the scope of the terms of reference. These memoranda should be addressed to the Secretary of the Punjab University Committee, c/o the Director of Public Instruction of the Punjab, Lahore.

It will be noticed that the terms of reference are quite comprehensive and a report examining so many different aspects of University work and organisation should prove of great value, not only to the University concerned but also, perhaps to a wider educational world. It may not be wrong for other Universities in India also to think of such self-examination, at least once in every few decades.

It is a matter for regret that India will not be represented at the ensuing meeting of the Educational Experts Committee at Geneva owing to the inability by Prof. P. Seshadri to go to

Europe this year to attend its deliberations. But the work of considering the best means of teaching the aims of the League to young people goes on in a satisfactory manner. There has been a further examination of the prevailing text-books in Schools and Colleges in various parts of the world, so as to discover how all elements of racial bitterness can be removed. Attempts are also being made to bring together organisations in different countries which specialise in the study of international relations. In view of the recent Disarmament Conference, it is also interesting to note that the sub-committee has lent its moral support to the cause of disarmament by expressing its opinions in no uncertain language. A Convention is also being drawn up for the consideration of the League of Nations and its adoption by its various State members which will make it obligatory on the part of Governments to shape their educational policies in the direction of peace. Lest it should be imagined that the League is blindly for peace, irrespective of considerations of national honour and self-respect, it may be pointed out that M. Destree, the well-known ex-Minister of Education in Belgium, has suggested that the Committee should consider the limitations which should be placed on the preaching against war. M. Destree is of opinion that war is justified on occasions of defence against external aggression, but it is of course easy to see that if there is a vigorous League of Nations capable of enforcing

its authority over the world, the need for war should be eliminated even on such occasions.

We are glad to find that Mr. Grant Anderson, the well-known actor and organiser of dramatic companies, is embarking upon a new enterprise which will be watched with great interest all over India. He has brought together a number of educated Indian actors and actresses of great promise and proposes to travel with them over various countries of the world in the East and also later in the West. It is well-known that there is considerable histrionic talent in India and an opportunity like this should enable effective self-expression. We congratulate Mr. Grant Anderson on this effort and we hope that the Indian actors and actresses who will accompany him will cover themselves with glory. India has everything to gain in prestige by the success of its children in any field of activity.

The annual report which has just been issued of the All-India Women's Education Fund Association shows a useful record of work. It will be remembered that the scheme for the establishment of a central Women's Training Institution at Delhi contemplates the collection of more than twenty lakhs of rupees for the purpose. The Association has been able to collect, for the present, only a sum of less than five lakhs of rupees, though we find that the organisers are not entirely devoid of hope that they will be able to start the institution at an early date. The Association has em-

ployed for some months now, an organising Secretary, Miss Agha, M.A., LL.B. who has toured some of the provinces in India for the purpose of collecting the necessary data for the establishment and working of such an institution. We are not sure if the organisers have behind them the knowledge and experience necessary for work of this kind, but we trust that with the help of some educational experts, they will be able to start the institution at an early date. We also hope that when the present financial depression is over, the organisers will be able to collect the necessary funds for placing the institution on a sound footing.

In the course of his recent Convocation Address to the Indian Women's University at Poona, Babu Rama-

nanda Chatterjee gave expression to some sound opinions on women's education which deserve wider attention. While appreciating the progress made by the University in recent years, Mr. Chatterjee referred to the possible dangers of segregating the sexes and having separate Universities for women. He recalled the representation made by the girls of the Bethune College, Calcutta, to the Calcutta University Commission regarding separate Universities for women. They urged, and rightly too, that if there was a separate University for women, the competition would be limited to women only, the standard was likely to be lower, with the consequence that women were likely to lag behind. Mr. Chatterjee pleaded that the standard should be kept equal to men's Universities and women must be prevented from

developing an "inferiority complex." We are glad to find that Mr. Chatterjee expressed himself strongly in favour of co-education and wanted opportunities for the mutual education of the sexes. We are also glad to have his experienced testimony that higher education does not unfit women for domestic life. He said he knew of highly educated and intellectual women in and outside Bengal who are mothers of many children and good mothers and good housewives too. We wish there were wider realisation in this country of the truth in Bapu Ramananda Chatterjee's statement: "With the mind and soul of half the population atrophied, if not also partly deformed, to talk of national progress would be a mockery. And apart from the question of the collective progress of the people of India, whether it be given the name of national progress or any other name, there is the question of the individual right of every human being, male and female, to all the means of self-development, self-expression and self-creation with a view to nearing perfection as the days and months and years pass. To keep girls and women in ignorance would be as unjust and as grievous a wrong, as it would be to keep boys and men in ignorance. The case, then, for the education of women is unassailable. We must have schools, colleges and Universities where our womanhood can receive education."

It is with profound regret that we have to record the death of Rao Sahib C. Ramaswami Iyengar, well-known as the organiser and the life and soul of the Ramakrishna Students' Home, Madras. In spite of having no special worldly advantages, the late Mr. Ramaswami Iyengar was able to build up an institution from very humble beginnings which has now taken an integral place in the educational life of Madras and will stand as an enduring monument to his life of service and sacrifice. Endowed with real religious spirit, Mr. Ramaswami Iyengar was, at the same time, of an eminently practical turn of mind and it was due largely to his ability and tact that the institution is what it is to-day. That a single person should have been able to find the sympathy and public support necessary for the establishment of such a big Residential High School is a feat of which anybody may be proud and Mr. Ramaswami Iyengar has left a legacy to the city which we trust will be kept and fostered with care. We offer our deep condolences to his brother, Rao Bahadur C. Ramanujachariar, who has been his co-worker in the establishment and maintenance of the Ramakrishna Home and also to the other members of his bereaved family.

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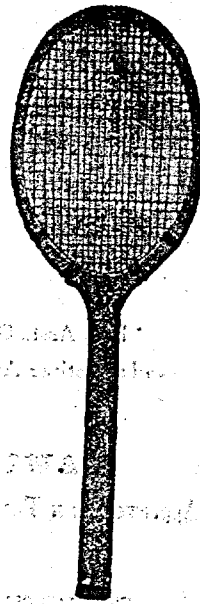
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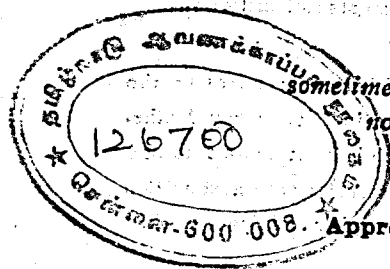
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