THE MADURA SAURASHTRA COMMUNITY

A Study in Applied Economics

By

MR. K. R.-R. SASTRY, M.A.
Fellow of the Royal Economic Society (London).
Author of "South Indian Gilds";
"From a Rural School-Window", &c.

BANGALORE CITY:
PRINTED AT THE BANGALORE PRESS
1927
DEDICATED TO

MY DEAR MOTHERLAND
## CONTENTS

<table>
<thead>
<tr>
<th>Chapter</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>I. Introductory...</td>
<td>1</td>
</tr>
<tr>
<td>II. The History of the Community</td>
<td>2</td>
</tr>
<tr>
<td>III. Local Importance at Madura</td>
<td>7</td>
</tr>
<tr>
<td>IV. Spinning</td>
<td>9</td>
</tr>
<tr>
<td>V. Weaving</td>
<td>16</td>
</tr>
<tr>
<td>VI. Lace Work</td>
<td>21</td>
</tr>
<tr>
<td>VII. Dyeing</td>
<td>24</td>
</tr>
<tr>
<td>VIII. Marketing</td>
<td>32</td>
</tr>
<tr>
<td>IX. Other Minor Occupations</td>
<td>36</td>
</tr>
<tr>
<td>X. Their Education</td>
<td>39</td>
</tr>
<tr>
<td>XI. Communal Work</td>
<td>44</td>
</tr>
<tr>
<td>XII. Labour Conditions</td>
<td>53</td>
</tr>
<tr>
<td>XIII. Inequality—Yet Another Illustration</td>
<td>67</td>
</tr>
<tr>
<td>XIV. Striking Shortcomings</td>
<td>70</td>
</tr>
<tr>
<td>XV. Conclusion</td>
<td>75</td>
</tr>
</tbody>
</table>
The Madura Saurashtra Community.

CHAPTER I.

INTRODUCTORY.

The outstanding feature of Industrial and Commercial Madura is the corporate activity of the Saurashtras. It is not merely the student of Economics but also the globe-trotter who chooses to tarry a day at Madura,* that is curious to gather some particulars about this community. The nature of this study is mainly economic; and rites, customs and other interesting particulars come in to illustrate one definite economic feature or other.

The importance of the study of this community will be evident when one remembers the fact that the Saurashtras have settled in 56 places in South India. But the Saurashtras of Madura are better clothed, more wealthy, and better housed than their caste-men

* Madura in this study includes only the Municipality of Madura.
in other parts of South India—say Kumbaconam, Salem or Conjeevaram. The subject is thus highly instructive to the rest of their community.

Past notices of this community have been carried on with different aims. The valuable hints one gathers from the old as well as the revised Madura Gazetteers are meagre. The tourist's guide, published by Messrs. Higginbothams & Co., gives more prominence to some of their customs as is natural with a book of that type. The point of view of the community has not been taken up seriously; nor has the value of an economic study of such an important community been sufficiently realized before.

CHAPTER II.

THE HISTORY OF THE COMMUNITY.

The historical origin of this community is highly interesting, not to say edifying. Two recent booklets in Tamil have been published by a Saurashtra author with a view to establish the ancient Brahminical origin of the community. One blemish with these books is that very recent official notices are raised to the height of original evidence.

Initially, it is pertinent to raise the points for and against their Brahmanhood, since it has weighed with them rather heavily during the past three decades. The believers in their Brahminical origin point out that all rites from
Upanayana (holy thread-ceremony) onwards are performed by them. A more recent discovery consists in the Mangammal (1689-1704) Decision (Salivahana Era 1627 Parthipa Avani). One, Venkatarangar, a Brahmin astrologer, arrested eighteen Saurashtras who performed Upakarma (renewal of the sacred thread) and sent them to Trichinopoly for trial. Queen Mangammal convened a meeting of learned men well versed in the Sastras to investigate their right to perform these ceremonies. This meeting declared in favour of the Saurashtras and the Queen gave them a palm-leaf award, which is still preserved in Madura.* In support of this, the Circular of the Collector of Salem No. 90 Census, dated 25-1-01, where this community is returned as Saurashtra Brahmanas, is also cited.

But the Madras Census Reporter for 1901 brings in the following pertinent observation. “Since all the twice-born, whether Brahmins, Kshatriyas or Vysyas were entitled to do the same, the grant establishes little.” Further, in the Census of 1911 this community at Madura is returned as “Patnulkars”. In 1921† they are entered as “Saurashtras” and not included among Brahmins. This part of the question may be closed with the remark that

it is natural to expect the southern Brahmin to protest against the Brahminhood of a community so fundamentally different from them in their rites, customs and manners.

Before tracing the historical origin of the community, it is profitable to make a critical reference to the theories which are fondly believed by them. The theory of Devagiri origin has got an element of truth in it. Originally Brahmins living in Devagiri, the Saurashtrias, called also Girinarayana Brahmanas and Sonapuri Brahmanas, were supplying Goddess Laxmi with silk cloth on the Deepavali day. One year the supply fell short and they got the curse of weaving on their heads; and they were expelled from Devagiri. The second theory of Tantuvardhana runs as follows:—They are believed to be the descendants of an eponymous Tantuvardhana (lit. Improver of threads). Their origin is said to have been described in Brahmanda Purana Purvoktha Kanda I. Tantuvardhana born out of the head of Brahma, the four-headed god of creation, married Kusumakelika, the daughter of the Sun-god on the Rathasapthami day. The said bride brought the seed of “Karpasha” from Heaven and planted it on earth. From this cotton, yarn and cloth were made and distributed to immortals and mortals alike. This theory is not of any scientific value for tracing their origin.

The historical view is based on an inscription
at Mandasor in Western Malwa, dated 473-474 A.D.* It relates how the Pattavayas were induced to migrate thither from the Lata district on the coast of Gujerat by King Kumargupta (or one of his lieutenants called Bandhuvarman) to practise there, their art of silk-weaving. On the destruction of Mandasor by the Muslims, the Pattavayas seem to have travelled South to Devagiri (Doulatabad) and thence when the Muslims again appeared on the scene at the beginning of the 14th century, to Vijayanagar, where they seem to have learned† Telugu. After Talikottah—1565—one branch migrated to Madura and settled there through the patronage of the Nayak kings.

Other lines of evidence to confirm this historical view are six in number. A Mahratta MS. prepared at Salem by Mr. Cockburn in 1822 is found to contain the above tradition with remarkable similarity. Mr. Sewell’s “A Forgotten Empire” is full of the riches of clothings and trappings in the days of Vijayanagar glory. Many Saurashtras still speak Telugu. Their written characters still continue in Telugu and the language also contains many Telugu words. These go to confirm the theory that they must have settled for a sufficiently long time in the Telugu country. That they came into contact with the Yadhas at Devagiri gains some strength by the discovery of

† Also, the Madura Gazetteer, Vol. I, p. 110.
many Vraja words in the Saurashtra vocabulary. The Saurashtras observe the feast of Basavannah (or Boskana) which is said to be "almost peculiar to the Bellary country". This theory is also fortified by one of their marriage customs:—"On the day previous to the Saurashtra wedding, the bridegroom's party goes to the bride's house, and asks formally for the girl's hand. Her relatives ask them in a set form of words, who they are and whence they came, and they reply that they are from Sorath (the old name of Saurashtra), resided for a while at Devagiri, travelled farther south to Vijayanagar, and thence came to Madura. Then they ask the bride's party the same questions and receive the same reply."

Thus, the Saurashtras form a migrated community in Madura from "Saurashtra" (Cutch and Kathiawar). They were long ago silk-weavers in their original homes. Driven to distant places through political causes, the community could have carried with them only their valuables, and not least, their skill in weaving. Owing to the patronage of the Nayak kings, they were able to settle in a foreign country. How a thoroughly foreign community succeeded in not merely settling down in a strange country but within 300 years have contributed to "the proud position of Madura to this day as the second city in the Presidency"—this is an interesting story. This leads us to the study of the community as it is to-day.
CHAPTER III.

LOCAL IMPORTANCE AT MADURA.

Statistically, the Saurashtras at Madura are about one-third of its population; and 43% of the community settled in South India. In 1911 the population of Madura was 1,34,130 and in Madura District, the Saurashtras numbered 43,431. The figures for 1921 are as follows *:

<table>
<thead>
<tr>
<th>Total population</th>
<th>1,38,894</th>
</tr>
</thead>
<tbody>
<tr>
<td>Saurashtras</td>
<td>39,215</td>
</tr>
</tbody>
</table>

The fall since 1911 is appreciable, but there is a reasonable suspicion that the change in the terminology of the caste from "Patnulkar" to "Saurashtra and Saurashtra Brahmana", may have led to some error in calculation. The community still constitutes about one-third of the population.

Their geographical distribution at Madura is also a factor of considerable importance. Strangers in a distant country, the Saurashtras would have naturally settled in a quarter where they could form a separate colony as it were. The South and South-east portion of Madura till the Muriamman Teppakulam, is par excellence the Saurashtra quarter. The Saurashtra is easily distinguished from members of other castes by his yellow complexion, his foreign accent, and his shy manners. The term "awkward", used with reference to his manners, needs considerable modification. The

*Vide 'The Village Statistics', 1921, Madura Dt., p. 11
Saurashtra Club and the behaviour of the educated and cultured among the community have done not a little to remove this stigma attached to them by the compiler of the "Guide". Tall and generally handsome, he wears a small tuft on the top of his head, their women dress like Telugu Brahmin women, and it is a striking feature with them to go to the Meenakshi temple rather more regularly every evening than their sisters of other communities.

They form a caste by themselves having their own priests and temples. Though subdivisions have been formed owing to their increasing numbers and division of occupation, their communal attachment is remarkably strong. Their marriages take place within Madura only; in fact, it is considered derogatory if one were to make an alliance with people in Salem or Kumbakonam. In a strange land, partly by necessity and partly by the accident of difference in language and modes, they formed a separate community. This self-centred characteristic is of economic importance in the centring and practical monopoly of dyeing and weaving industries among themselves.

Their mythical origin from Tantuvardhana, (lit. improver of threads) gives a clue that weaving was a time-honoured trade even in their original homes. That this is a community of business pursuits, is forced upon everybody through more channels than one.
CHAPTER IV. 

SPINNING.

A systematic study of their exclusive trades of weaving and dyeing is called for. Since in the modern process of textile-making, the spinning of yarn precedes the process of weaving, it has a prior claim. Primarily, the different stages which cotton has to undergo before spinning have to be borne in mind. Ginning in cotton centres, cleaning and pressing are not done by the Saurashtras in Madura.

When spinning is taken into account, two broad divisions are obvious: handspun and mill-made yarn. The hand-spinning or Charka industry in the Saurashtra community is easily narrated. When compared with the work of the Saurashtras in Namakkal (Salem Dt.), where yarns of counts varying from tens to forties are made in Charka, the progress at Madura is quite negligible. About 100 Charkas are at work. Khadi cloth has not yet become popular with the bulk of the community. Further, people of the warping industry have been complaining of the Charka yarn not being useful for warping and sizing purposes. The workers of Khadi have to improve their counts if the output were to be used for weaving purposes. Thus, the output under this head is quite negligible and may be left out of account for all practical calculations.

Mill-made yarn alone may be said to meet the demands of the Saurashtras. The quantity of yarn consumed at Madura by this community
may be arrived at if figures from the supplying agencies are available. Here again, under the two divisions of Inland and Foreign, the figures may be grouped.

A. Inland Yarn.—The Madura Mills Co., Ltd., through their five local agents, the Kollpatti Mills, Limited, through their Agents—Sri Vilas’ at Madura—and the Sri Ram Mills, Limited—a purely Saurashtra concern—have to be taken into account.

I. The Madura Mills Company, Limited:—24’s and below. Approximate quantity consumed by the Saurashtras—1,000 bales per mensem.

II. The Kollpatti Mills, Ltd.—24’s and below. Approximate quantity consumed by the Saurashtras.—Figure is said to be very low since Kollpatti Mills have not fetched a market at Madura.

III. The Sri Ram Mills, Ltd.—10½’s to 24’s. Approximate quantity consumed by the Saurashtras—150 bales per mensem.

B. Foreign Yarn.—For counts above 40’s to 160’s the Saurashtras get their supply through the two local agents of Messrs. Beardsell & Company and Rally Brothers. During the pre-war and war years when Messrs. Rally Brothers were having the bulk of the trade, the swing is now turned towards the other side. Messrs. Beardsell and Company has two-thirds of the business while the remaining one-third is still retained by Rally Brothers.
The order of demand for these finer counts of yarn is as follows:—

A. 40’s Grey.
B. 40’s Coloured—yellow and orange.
C. 60’s Medios. Not white.
D. 70’s 80’s. do. do.
E. 100’s, 150’s and 160’s—for finer manufactured goods.

*Foreign Yarn.*—The approximate quantity consumed is given below:—

<table>
<thead>
<tr>
<th>No. of Counts.</th>
<th>Bales consumed per mensem.</th>
</tr>
</thead>
<tbody>
<tr>
<td>40’s to 44’s Grey.</td>
<td>100</td>
</tr>
<tr>
<td>40’s Yellow and Orange.</td>
<td>150</td>
</tr>
<tr>
<td>50’s Black.</td>
<td>30</td>
</tr>
<tr>
<td>50’s Grey.</td>
<td>30</td>
</tr>
<tr>
<td>60’s Grey.</td>
<td>30</td>
</tr>
<tr>
<td>60’s Medios—Not White.</td>
<td>60</td>
</tr>
<tr>
<td>80’s Grey</td>
<td>15</td>
</tr>
<tr>
<td>100’s Grey</td>
<td>15</td>
</tr>
<tr>
<td>80’s to 100’s—Half Bleached.</td>
<td>30</td>
</tr>
<tr>
<td>80’s to 100’s—Fully Bleached.</td>
<td>30</td>
</tr>
<tr>
<td>150’s to 160’s—Medios.</td>
<td>10</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>500</strong></td>
</tr>
</tbody>
</table>

Thus the Saurashtra community consumes 1,150 bales of inland yarn and 500 bales of foreign yarn per mensem.

When there is such a huge demand for yarn, it is an interesting fact to find out that the Saurashtra concern of Sri Ram Mills is able to meet only 9% of the local demand of their community. To cope with the increasing demand, another Saurashtra concern under
the name of The Madura Industrials, Limited, has been very recently registered and floated.

How the Saurashtras are managing their first spinning concern, is an index to their skill in managing big business concerns. The Madura Saurashtra Sri Ram Mills Company, Limited, was started on 14th September 1916. Before December 1919, it ceased to work for some time. It is purely a spinning concern; and yarn from 10's to 30 counts are spun here. The raw product is procured from Virudupatti (Tirunelvelly District). There is an yearly consumption of cotton worth Rs. 3 lakhs. For the year ending 30-6-1921 the purchase of raw cotton amounted to Rs. 2,91,595-0-6. It is managed by a Board of 7 Saurashtra Directors.

The Capital invested in this Company is as follows:—

**Authorized Capital.**

(1) 4,500 Ordinary Shares of Rs. 100 each ... 4,50,000
(2) 1,500 5% Cum. Pref. Shares of Rs. 100 each ... 1,50,000

Total ... 6,00,000

**Subscribed Capital ...** 5,24,300

**Paid-up Capital.**

(a) 4,500 Ordinary Shares of Rs. 100, less 27 Ordinary Shares forfeited, i.e., 4,473 Ordinary Shares of Rs. 100 ... 4,47,300
(b) 743 Cumulative Preference Shares Rs.
of Rs. 100 each fully paid . . 74,300

Total . . 5,21,600

In the report of the Registrar of Joint-Stock Companies, it is found that the Company has reduced its capital by Rs. 270 in 1921-22.

There are 6,000 spindles at work in this concern which bears no comparison with the 170,000 spindles actually at work in the Madura Mills Company, Ltd., on the other side of the railway line from Madura to Madras. Even in output, this concern turns out only 5 to 6 bales a day while the Madura Mills, managed by Messrs. A. and F. Harvey, turn out about 130 bales a day. As the Managing Director of the Sri Ram Mills tells the present writer, "there is no near possibility of competing with Harvey's."

The site, on which the present Mill is situated, is held only on lease which continues for six more years. The Company has already spent a sum of Rs. 1,34,468-10-5 on the Mill premises and buildings; and it is time for the Management to acquire a permanent site for the business.

The net Profits declared for the year ending 30th June 1921 are thus disbursed:--

Net Profits during 1920-21.

From trading accounts Rs. 1,64,372 0 11
B. F. from last year , , 6,082 15 4

Total Rs. 1,70,455 0 3.
**How disbursed.**

Remuneration of the Managing Director,
- 15% of the net profits: Rs. 24,655 12 9
- 7% for Reserve Fund: Rs. 11,506 0 3
- 5% Paid-up Capital: Cumulative Preference Shares: Rs. 3,715 0 0
- 15% Dividend on the Building shares: Rs. 67,095 0 0

Balanced carried forward: Rs. 63,482 2 10

**Dividends.**

- For half-year ending June 1920: 6%
- 1 Year 1920-21: 15%
- 1 Year 1921-22: 18%

Here again, this Company has declared a dividend of 15% on ordinary shares in 1920-21 when the Madura Mills Company, Ltd., was able to declare a cent per cent dividend. This shows that there is still scope for improved methods of management, though this Management has declared an addition of 9% in 1920-21 on the previous years.

The Mill engages about 500 employees daily while the Madura Mills Company, Ltd., employs close on 6,000 workers. The scale of wages paid by this concern runs thus:

**Adults:**
- Male. Re. 0 10 0 to Re. 1 4 0 a day
- Female. „ 0 5 0 to „ 0 9 0

**Children:**
- Male. Re. 0 4 0 to Re. 0 8 0 a day
- Female. „ 0 4 0 to „ 0 8 0
It is striking that this compares favourably with the average daily rate of wages paid in the Presidency in 1920 * which is as follows:

Average daily rate for the Presidency.

| Adults (male)  | Re. | 0 10 8 |
| Children (male) | ,   | 0 5 2 |

The working hours are from 6-45 a.m. to 11-30 a.m. and 12-30 p.m. to 5-30 p.m.

There is some reduction from the eleven hours’ day which was in vogue in the previous year. There is one holiday in a week. A small dispensary is also situated within the compound with a compounder and an assistant. It is intended only for ailments during working hours. The number of cases attended to, may, with profit, be entered by the dispensary.

There is a shrewd suspicion that the Company can be more efficiently managed. One family is said to predominate in the articles of association; and the fact of blood relationship among all the Directors is adduced by some critics as prejudicial to efficient management. A recent discord between the two brothers regarding the Managing Directorship was settled only through reference to a Court of Law. Apart from these points, the Managing Director is being paid an unduly high percentage of the net profits. It is striking that this is pointed out as one of the dangers to be guarded against.

* Vide G.O. No. 858 Development, dated 26th June 1922.
by the Inspector-General of Joint Stock Companies, after a study of the causes of liquidation of 48 Companies during 1921-22. *

This Saurashtra Mill needs further extension since there is a keen local demand. A special Ginning Centre in the Cotton locality is worth the early attention of the Management. More spinning mills may be started in view of the Local demand for yarn; this point is also supported by the floating of a new Meenakshi Spinning Company where some Saurashtra have also taken shares.

CHAPTER V.

WEAVING.

It is a common sight to witness warps stretched in the streets and men, women, and children busy in them. Since much is gained by a systematic study of this industry, the initial processes prior to weaving need a passing mention. The mill-made yarn is to be sized, rolled on a plank, and arranged by reeds, before the process of weaving takes place.

At Madura, the sizing process is not done by the Saurashtras but by a separate community called the Pavukkara Naikkamars. The trade of this community consists in starching the warp given to them by the Saurashtras. It

* Vide G.O. No. 1594 Law (General) Department, dated 28th June 1922.
may be mentioned in passing that in Paramakudi (Ramanad District), this starching process is also taken up by the Saurashtras.

Preparing the warp is the first stage in the process of weaving. Women and children help appreciably in the earlier and easier process. Warping, it is striking, is not done through walking up and down a long line of sticks stuck in the ground and winding the thread off the spindle in and out of these; but the thread is wound on to "a series of iron pegs arranged on a square wooden frame". The advantages of this process are that work may be done indoors and during all weather.

For the past 10 years, a painstaking Saurashtra of the Bhava Ram family was making experiments on a warping machine. Success is said to have crowned his efforts at last. The difficulty is one of finance. The invention has not yet been patented. The many advantages of this labour-saving device over the process above described, result in increased output and cheapness of the process. If one were to work for eight hours in this machine, the individual can easily earn five rupees a day. The difficult process of warping is minimized. A wide yard for the starching process is not now necessary. Three to six pairs of persons for working at the starching process, are no longer required; and two workers are enough. Working in open streets is avoided; thus, the uncertain conditions of weather are no longer obstacles in the way; and the incidental
difficulty caused to passengers in public roads is avoided. Warping and starching are finished at the same time. A place 30' x 15' is sufficient; and warping of yarns from 10 counts to 160 counts can be taken up by this machine.

The process of weaving can be divided into two heads—plain weaving and inter-weaving. In the first case one worker is enough and two persons are required in the latter process. The second kind of weaving is called in the Saurashtra language, 

Sivi-Thith. Weaving of cotton cloths and sarees may be first taken into account.

Handlooms are still in use, though fly-shuttles are also being employed in increasing numbers. In handlooms, there are two types, viz., the elevated loom and the pit-loom. The former is very common but there is still a small number of pit-looms persisting in Madura. The latter involves the strain of a very inconvenient posture on the part of the worker. The worker with a handloom can finish one Thari of 30 yards' length of cloth in a month. A patent, modifying the country-loom through which figures are woven on the borders of cloth, is also in vogue.

The fly-shuttle is surely an improvement on the handloom. A convenient posture for the worker is ensured and the output per month is 50% to 100% more than that of the handloom. Some wastage which is not very common, recurs in the woofing process. The “Wheel Shuttles” supplied by the School of Arts at
Rs. 1-2-0 each, are to be used in increasing numbers. At Madura, in more than twenty
observed cases, the “wheel shuttles” from Madras do not fit in with the loom. This can
be easily rectified. A common complaint against the use of “fly shuttles” is that they
are apt to break the warp-threads in the case of the higher counts of yarn. A patent for an
entirely new kind of loom is in the stage of trial.

From ordinary towels and dhoties, to the finest upper cloths,—from 10 counts to 160 counts
(which is commonly termed 200 counts)—all sorts and varieties of cloth are produced at
Madura. The fabrics the Saurashtras make, are better woven and of more varied designs
than those of any other place in the district. These are exported in large quantities to
Madras and elsewhere. White cloths ornamented with borders of gold or silver thread
are specially famous.

Another and more important branch is that of silk-weaving. The raw material is imported
from Bombay and to a less extent from Calcutta, Kollegal and Mysore State. This in-
dustry is practically confined to Madura Town. The importance of Madura is evident from the
fact that it is one of the eight silk-weaving centres in India and Burma.

The first stage in silk-weaving is the twisting of Kora-silk. This is a staple industry of
Saurashtra women. As a class, they are well acquainted with rotating small charkhas.
Women are also used to work at big wheels
called *Rhettoes*. These *Rhettoes* are intended for making silk hanks. * During one rotation 14 to 30 hanks are made.

The second stage consists in the twisting of silk in the form of "∞". This new contrivance is called *Dheto*. This is very useful to silk-weavers. Silk has to be made only into warps and there is no sizing process as in the case of cotton.

The final stage is the weaving proper in looms, which is akin to the work of the looms already described in the case of cotton clothing. The Saurashtra women have a knowledge of silk-dyeing in parts other than Madura.

New patterns of weaving are being found out. Especially in embroidery and ornamental works, is this prominent. The ornamental work is done through pedalling itself. One big saree costing from one hundred rupees to Rs. 1,000 is finished in three months. Ordinary sarees are completed in fifteen to twenty days.

The beautiful silk brocades literally interspersed with metallic threads known as *Kincobs* for which Madura is famous, command a limited market even outside Madura. Madura cloths and turbans with gold or silver thread continue still in great demand.

---

* One hank is 840 yards collected into a small rotatory thread.

The weaving industry is an important local occupation of the Saurashtras. The Madura upper cloths and rich sarees command a market throughout the Madras Presidency. The Saurashtra male-workers have shown a remarkable inventing capacity as evident from their many discoveries of new patterns and looms and their warping machine hailed as the first of its kind. The community owns, among its first ranks, an expert who has had training in British Isles as well.

The handloom though it has got still a bright future as a cottage industry, needs the assistance of machinery. The fly-shuttle is still capable of further improvement thereby leading to greater output and saving of time. The “wheel shuttles” of the School of Arts have not yet been given sufficient trial. The inventor of the warping machine is in need of financial help; it has yet to be patented when only its accredited advantages can be tested and known to the outside world.

CHAPTER VI.

LACE WORK.

As a cottage industry lace-making was very popular at Madura in olden times. The local manufacture of the gold and silver thread still persists only among a few Muslims to meet the demands of Tinnevelly, Trichinopoly and Travancore. The local industry is best described in the words of the Compiler of the
Gazetteer. "The Mussalmans melt silver and lead in a clay crucible and cast the alloy into thin bars. These are hammered still thinner and then drawn through a series of holes of gradually diminishing size until they are transformed into exceedingly fine wire. The women then hammer this flat to make the thread. Gold thread is made in the same way, the silver bars being coated with gold before being ‘drawn’ into wire." * Madura laces are noted for a rare combination of fine texture and cheapness; and the coloured turbans find a market even in distant Bombay. The local weavers use exclusively the cheaper French and English thread; and the local lace has given way to cheaper foreign products. The Saurashtras, as a community, depend on the foreign thread for their borders of the expensive kinds of cloths and turbans.

The demand for lace in Madura is so intense that there is much field for indigenous manufacture itself. Every month, Madras Presidency alone imports 15 lakhs of rupees' worth of gold thread from France and other countries. The first concern in South India for the manufacture of lace with up-to-date machinery is the India Gold Thread Mills, Limited. Further, the recent import duty of 20 per cent on foreign gold thread is in a way also a protective measure against foreign competition.

A detailed study of the Saurashtra concern, the first of its kind in South India, is necessary.

The India Gold Thread Mills, Ltd., was registered on 13th April 1922. The capital invested in the concern is shown by the following figures:

<table>
<thead>
<tr>
<th></th>
<th>Rs. A. P.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nominal Capital</td>
<td>3,00,000 0 0</td>
</tr>
<tr>
<td>(Consisting of 3,000 shares of Rs. 100 each)</td>
<td></td>
</tr>
<tr>
<td>Subscribed Capital</td>
<td>1,67,500 0 0</td>
</tr>
<tr>
<td>Paid-up Capital</td>
<td>98,861 0 0</td>
</tr>
</tbody>
</table>

It is run by a Board of seven Saurashtra Directors who have already taken up 1,111 shares among themselves, and the qualification for each Director is ownership of 50 shares. 1,825 shares have already been allotted.

The chief objects of the concern are:

1. Carrying on at Perambur, Madras, and at such other places to be decided upon, all the usual industries connected with the manufacture of superior and inferior gold thread and lace out of silver, gold, copper, cotton yarn, silk yarn and other materials: and if deemed desirable, to carry on the industries connected with the manufacture of copper wires for electrical purposes and such other industries.

2. Making advances for purchase of gold, silver, copper and other machinery.

3. The purchase of the benefit of experience of N. K. Ramaswamier & Sons of Perambur by the allotment of 810 fully paid-up shares.

The concern is managed by the abovesaid N. K. Ramaswamier & Sons, who have got 40
years' experience and the benefit of training under a French Expert. Business has been begun in earnest from the start and in view of the great demand for the product, high profits are expected. Another lace company is to be started very soon at Madura.

Though there are already agents for foreign thread, in view of the reputation of Madura lace of old times, the future of lace industry is full of promise. The vigorous working of one company followed closely by another in a field where work on modern lines is begun for the first time, is yet another striking testimony redounding to the credit of the business instincts of the Saurashstras.

CHAPTER VII.

DYEING.

Apart from the starching of the warp and the warping process, the most prominent phenomena that strike a new visitor in Saurashtra Madura are gutters flowing in red colours. When it is remembered that except in Madura, nothing has been done in the whole district to improve dyeing processes or maintain the claims of the native vegetable pigments, the compelling importance of the dyeing process at Madura strikes the inquirer. It is necessary to guard one's self from the error that dyeing is done by a separate branch of the community; on the other hand, it is quite common to find the weaving, dyeing, and colour concerns in
one and the same firm. In Madura alone, dyeing operations on improved lines are carried on, on a large scale; here only, the vegetable products are employed for silk fabrics. Modern appliances are also being tried by the enlightened few.

The colours required for this process are supplied by three important German Syndicates, viz., Messrs. Badische, M. L. Breuning and Bayer. The following table will give an idea of the amount of trade carried on by these syndicates. Alizarine colours may first be taken into account.

<table>
<thead>
<tr>
<th>No.</th>
<th>Names of German Syndicates</th>
<th>Percentage of their trade at Madura</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Messrs. Badische</td>
<td>75% 50% 50%</td>
</tr>
<tr>
<td>2</td>
<td>M. L. Breuning</td>
<td>15% 40% 50%</td>
</tr>
<tr>
<td>3</td>
<td>Bayer</td>
<td>10% 10% Nil</td>
</tr>
</tbody>
</table>

The last-named firm has almost the whole transaction in aniline colours.

During the War, a British Dyeing Company, viz., Messrs. Best & Co., was making large profits and this continued till 1920. It may now be said that English alizarine has been thrust out of the market since Germany has re-established her connection. Local invention of new colours for dyeing purposes is said to have been successfully made during the War. This secret is not known widely as yet.

The chemicals are got from Messrs. K. H. Kabbur, Cursondas Tejpai, and also direct from Bombay.
There are ten big dyeing concerns at Madura. On the average 100 to 200 bales are dyed per month in each firm. Of these the Konda Factory is the biggest and its output is known for its quality. Rasayana Sala, Ramamoorthy & Co., and Madura Shanmuga Dye Works, Ltd., are next in importance. Konda Factory is provided with a bundling machine. There is a network of pipes which do not necessitate washing in the river. Twenty to thirty workers are engaged daily and the charges here are always 25% higher than elsewhere. Dyeing in this factory is noted for the lasting duration of the colour.

The Madura Shanmuga Dye Works is a limited concern registered on 14th February 1921. The sums invested are shown by the following figures:

- Authorized Capital .. Rs. 1,00,000
- Subscribed " .. " 1,00,000
- Paid-up " .. " 50,000

The gross profits of these big concerns range from Rs. 500 to Rs. 5,000 per mensem.

In addition to these ten big concerns, there are about fifty smaller dyers of whom ten are dyeing 50 bales each per mensem. The rest are finishing from 5 to 25 bales each.

The native dyes are always preferred to the foreign ones when durability is sought for. "Kamela powder" (collected from the surface glands of the capsules of the tree Mallotu...
Philippinensis) is used for yellow, lac for red, and indigo for blue.

Extensive grounds are necessary for drying yarns and big vats are equally essential for boiling purposes.

The dyeing process has to undergo plenty of minor processes. Washing the sized yarn, oiling, drying, colouring, washing again, bundling, and packing for sale,—these may be said to indicate the important minor processes. How the famous “Madura Red” is made, needs to be considered in detail.

The First Stage.

A bundle of grey yarn takes from 3 to 4 weeks to become the finished Red product ready for sale, the major portion of which time is spent in the mordanting yard. The yarn is steeped in the mordant which is compounded of groundnut oil, caustic and goat’s dung (which acts the part of a nitrate) for a minimum period of ten days, when the yarn is well pressed by the legs of coolies an hour a day, to make the liquor permeate every fabric of the thread. It is then taken out, washed in the clear spring water of the Vaigai River and allowed to dry thoroughly for nearly three or four days.

The Second Stage.

The second step consists in placing the mordanted yarn in the dye-tub in a mixture of alizarine paste and water to which is added
a quantity of leaves of a particular plant Kayam-Kolai (*Maincylon-edule*) which has the effect of deepening and bringing out to full advantage the colour of alicazine. Its chemical reaction is interesting. In this liquid, the yarn stands for a full day and night, after which a quantity of Turkey red powder is added in the cold stage, just to top it down with a beautiful shade; and the whole is boiled together under slow heat for a few hours after which the yarn is taken out, washed and dried. Cheap dyers are content to sell the yarn at this stage but those who produce lasting and best shades repeat this process a second and third time. Deeper shades are obtained by giving additional steepings in the dye-solution.

**A. Cost of Dyeing a Bundle of 10 lbs. of Grey Yarn.**

<table>
<thead>
<tr>
<th>Description</th>
<th>Rs.</th>
<th>A. P.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Price of 1 measure groundnut oil</td>
<td>0 12 0</td>
<td></td>
</tr>
<tr>
<td>&quot; the mordant (caustic)</td>
<td>0 12 0</td>
<td></td>
</tr>
<tr>
<td>&quot; Goat's refuse</td>
<td>0 1 0</td>
<td></td>
</tr>
<tr>
<td>Cooly. for treading yarn in caustic</td>
<td>0 8 0</td>
<td></td>
</tr>
<tr>
<td>&quot; for washing and drying</td>
<td>0 4 0</td>
<td></td>
</tr>
<tr>
<td>Cost of 20% alicazine 2 lbs.</td>
<td>3 0 0</td>
<td></td>
</tr>
<tr>
<td>&quot; Kayam-Kolai</td>
<td>0 1 0</td>
<td></td>
</tr>
<tr>
<td>Trading charges</td>
<td>0 2 0</td>
<td></td>
</tr>
<tr>
<td>Washing and drying</td>
<td>0 4 0</td>
<td></td>
</tr>
<tr>
<td>Cost of fuel</td>
<td>0 4 0</td>
<td></td>
</tr>
<tr>
<td>Turkey Red for topping</td>
<td>0 8 0</td>
<td></td>
</tr>
<tr>
<td>Knotting and bundling</td>
<td>0 2 0</td>
<td></td>
</tr>
<tr>
<td>Paper, boards and ticket</td>
<td>0 3 0</td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>6 13 0</strong></td>
<td></td>
</tr>
</tbody>
</table>

*Thanks are due to the local agent of Beardsell & Co., for supplying the present writer with much valuable information.*
B. **Shades Dyed.**

(1) Turkey Red \(\text{Rs. a. p.} \)

and (2) Indian Red or Chocolate (Costlier) \(0.80\)

Some obstacles in the way of modern improvements have come to the notice of observers. The conservative instincts of the people, their lack of education, lack of training to handle complicated machinery and the insuitability of modern machines also to a certain extent, are among the more important. In spite of these the superiority of the Madura Dye still continues a factor of great concern with some of the foreign Dyeing Companies. A foreign-dyed thread can be easily distinguished from a local-dyed one through the simple process of twisting the yarn. The grey colour persists in the fabric of the foreign yarn; while to the last fibre the Madura Red shines prominently.

The monopoly industry of Madura still remains to be described. The far-famed Chungudies have not merely a local reputation in the Presidency but even foreigners are fond to carry these red cloths out of curiosity. The Chungudies are woman's cloths, 12 to 20 cubits in length, with small white rings in a background of red or black. Hand-woven and mill-made cloths are dyed for this purpose. It is quite easy to turn out Chungudies by wax-printing but the Saurashtras choose to follow their laborious method.
The process of Chunyudy dyeing as it prevails to-day, is best described in the words of the Compiler of the "Guide to Madura". "The portions of the white cloth which represent the white rings in the finished article are first marked off and tied up into little knots and the cloth is then soaked in the dye. The knotted parts are not touched by the colour, while all the rest of the cloth is coloured. The Saurashtras show a great skill in mixing the colours and varying the designs and produce cloths of several patterns and varying prices."

This community has not got sufficient faith in wax-printing on the ground that this process spoils the cloth. A very small number of Saurashtras, about thirty persons, practise the art of wax-printing so extensively carried on at Kumbakonam, Conjeevaram, and Waltajabad. "This process consists" writes the Compiler of the Gazetteer, "in printing designs on the cloth in wax with metal blocks or drawing them by hand with a kind of iron pen provided with a ball of aloe fibre, to act as a reservoir for the wax. When the designs are finished, the fabric is immersed in the dye tub and then, while the body of it takes the dye, the design (being protected by the wax) remains unaffected and retains its original colour. The wax is then melted off by plunging the fabric into hot water and the design appears in white, on a coloured ground. If required,

the design itself can afterwards be separately dyed by putting the whole cloth into a tub of some other pigment.” The latter process is infinitely easier and deserves a better utilization.

The remarkable point with the process of Chungudy dyeing is the part played by women labour. The knotting and dotting process is the work of women. Rarely do Saurashtra women wear Chungudies dyed and dotted by them; they prefer the coarser variety.

Much inventive capacity has been displayed by the Saurashtra in the discovery of colours during the War, even as America was forced to set about discovering the secret of dye manufacture as a result of the English blockade of Germany. It has been seriously mentioned that a good substitute for German alizarine has been found by a few enterprising men. It is stated to be still in the stage of trial.

Closest secrecy is maintained in preserving the trade secrets. Even in the employment of non-Saurashtra labour in the dyeing process, this point is, as a rule, strictly followed. Only Saurashtra workmen are engaged in the steaming process. In fact, wherever an element of brain-work is wanted, the Saurashtra Maistries alone are welcomed. Perhaps, their historical aloofness from the non-Saurashtras has also much to do with this close preserve of trade secrets in their own community.
CHAPTER VIII.

MARKETING.

It is to this sphere that pointed attention has to be drawn. Marketing of finished products is a distinct branch which needs to be cared for by the Saurashtras. The existing methods are not the outcome of serious study; they are spasmodic, irregular, and unattractive.

Under a three-fold division the prevalent arrangements regarding marketing may be considered. The spasmodic retail-seller, the local shops, and branches abroad which undertake direct exports—these exhaust existing marketing facilities.

The Saurashtra with the bundle of Chungudies on his head is a familiar phenomenon to Madurians. These go further inland to places even hundred miles away. Since this is a monopoly industry with Madura, it commands a decent market throughout this Presidency. The net profit for every Chungudy cloth sold, amounts from Rs. 0-8-0 to 0-12-0 in the case of the coarser variety; while with finer cloths, it ranges from Rs. 1-0-0 to 1-8-0. The least profit is 10%. This percentage largely depends on the tact, energy and skill of the seller.

The local shops called Javali Kadais which dispose of the manufactured cloths, can be divided again into two divisions, wholesale and retail. The former have direct transactions with centres like Kumbakonam, Salem, Trichinopoly, Chidambaram, Shiyali, Mysore.
Malabar and Coimbatore; and their business is of the large scale type. The retail shops meet the local demand. It is instructive to study the range of business transacted by one of the wholesale shops. The capital invested is Rs. 50,000. The shop deals in rich sarees, petti-coats, Chungudies, rich upper cloths and lace turbans. Such shops lend money to the weavers for purchasing yarn at the prevailing market rate and supply them with lace. The only stipulation is that the weavers should supply the finished product within a fixed time. The yearly gross profits of this concern during 1921-22 amounted to 21%. In this connection the Saurashtra Co-operative Society, Ltd., also undertakes to dispose of the finished products supplied to them by the local weavers.

The avenue consists in the work of the branches of some local firms. These can be easily counted in one's fingers. The main branches are at Madras, Bombay, Kumarakonam and Salem. These branches also act as direct exporters to distant centres as the Malay Peninsula, Japan, China and America. The Madura lace clothes are in demand among Muslims as well.

After studying the existing methods of marketing, certain definite conclusions suggest themselves. Marketing needs more systematizing through greater advertisements, opening more branches and studying marketing as an art. A glimpse into the economics of advertisement in the advanced West, may
well serve a much-needed lesson to the Saurashtras at Madura.

The use of the improved methods and better machinery has tended to increase in output, and this has presented great difficulties. In America, England and other advanced industrial countries, new distribution systems have sprung up. The department stores, the mail-order houses, and the sales' department are among the most interesting of these systems. All these rely extensively on advertisement as a means of reaching the consumer.

Advertising is of many kinds. "It runs from the bill-board and poster, through newspaper and magazine advertisements to the circular letter. In reality it is nothing more than selling by means of the printed word instead of the spoken word."* It must perform two services to the consumer. It must educate him in regard to the goods and it must inform him how to satisfy the need which has been aroused. It serves the manufacturers and the distributors by enabling them to reach a larger market. In view of the importance of advertisement as enabling producers to keep production and consumption close together, greater and more organized attention needs to be devoted to this branch, by the Saurashtras.

The underlying idea of establishing branches at important trade-centres is to advertise

widely the goods wherever they are needed. The mail-order house in advanced countries has no counterpart in a separate department here; one of its most important functions can be discharged by these branches abroad. Further, the advantages of a personal contact of the management in distant centres are not widely appreciated by the Saurashtra community. The number of existing branches is easily counted. The fall in cloth business in 1921-22 though also accentuated by the general depression in trade, as well as the tightness of the money market, would not have been so marked if careful attention had been drawn to this branch of the business.

Perhaps no other subject has been so callously neglected to the detriment of the trade than the art of marketing. When more than a dozen of these merchants are questioned on the point, their reply is "Sir, there is no demand." If the point is pursued further, comes the ignorant answer, "Who is to spend the additional sum in a bad year?" This puts in a nutshell, their views on marketing. That the initial outlay spent in attractive advertisement, travelling agents and new branches is more than amply compensated by added profits in the long run, is yet to be understood by them.

At any rate, the existence of branches at Madura of K. H. Kabhurt & Co., Beardsell & Co., and Best & Co., not to mention the branches of Coimbatore Spinning Mills, and
Koilpatti Mills, ought itself to be a standing lesson to these Saurashtra merchants. The slipshod retail-dealer, and the asset of the far-famed Chungudies alone, are not sufficient in this era of wide advertisements.

On the other hand, a batch of students might be sent with profit to some centres in America and England to study marketing. When they return to Madura, they are sure to revolutionize the existing primitive stage of marketing of the finished goods.

CHAPTER IX.

OTHER MINOR OCCUPATIONS.

A marked sub-division of occupations has resulted owing to the great increase in population of the Saurashtras. Apart from their time-honoured trade of spinning and weaving, there are Purohits (priests), astrologers and a few native doctors. But striking departures from their trade have been made during the last fifty years.

The community now includes in its fold, jewellers, goldsmiths, stone-masons, house-masons and carpenters. The first workshop (Pattarai) of goldsmiths was established forty-five years ago; and there are more than forty houses engaged in these minor crafts. This is a striking testimony to the adjusting characteristics of this community.
A few minor crafts are also pursued by Saurashtra women. Some rich Saurashtra women are engaged in spinning gold coir and fixing precious stones for Padakakkam (a tight necklace worn by Brahmin ladies).

It has struck the present writer as a peculiar phenomenon that such an industrial community has no indigenous banks of its own. It is true that the richer folk have accounts with the Imperial Bank; and money-lending business is also prevalent. There are no hundy-transactions, nor is the levying of compound interest a common feature in the community. Advancing money on usufructuary mortgages and hypothecation bonds is common.

As in other important towns, rice and flour mills are being run by the Saurashtras since the past ten years. Fifteen rice mills are owned by the Saurashtras and a detailed study of one of their typical mills will give an idea of their range of business. The Padmanabha Vilas Rice Mill established in 1915 has a capital of Rs. 12,000. There are seven employees maintained by the Manager at the following salaries:

<table>
<thead>
<tr>
<th>No. of Employees</th>
<th>Salary per mensem.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Rs. 30 each</td>
</tr>
<tr>
<td>2</td>
<td>“ 20 ”</td>
</tr>
<tr>
<td>3</td>
<td>“ 15 ”</td>
</tr>
<tr>
<td>1</td>
<td>“ 7 ”</td>
</tr>
<tr>
<td>Total</td>
<td>132 Expenses of Establishment.</td>
</tr>
</tbody>
</table>
The rate for grinding 1 Kalam of paddy ranges from Re. 0-9-0 to 0-10-0. This rate is in accordance with the local rates. Coolies engaged by these Mills are paid as follows:

Male, Adult: .. Re. 0-6-0 to 0-8-0 a day
Female: .. " 0-4-0

This compares well with the average daily rate of wages for the Presidency in 1921 which runs thus:

<table>
<thead>
<tr>
<th>Average daily rate.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male, Adult: .. Re. 0 6 9</td>
</tr>
<tr>
<td>Female: .. &quot; 0 4 1</td>
</tr>
</tbody>
</table>

An entertainment company is also run by the Saurashtras called the Sri Meenakshi Cinema, Ltd. This was registered on 25th November 1921 with a nominal capital of Rs. 30,000.

| Subscribed Capital: .. Rs. 25,500 |
| Paid-up: .. " 24,275 |

It is divided into 60 shares of Rs. 500 each; only one Southern Brahman owns a single share though the Manager informs the present writer that it is open to the public. The Company entertains the following establishment:

<table>
<thead>
<tr>
<th>Salary per mensem.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Managing Director: .. Rs. 50</td>
</tr>
<tr>
<td>Clerk: .. &quot; 25</td>
</tr>
<tr>
<td>Hall Manager: .. &quot; 55</td>
</tr>
</tbody>
</table>
The Company has hired the Victoria Public Hall for its arena of activities. For a few months, the business was dull; but now it is making some profits. There is a lingering suspicion that the Company is capable of being better managed.

Not merely in his hereditary trades but also in new crafts and lines of activity has the Saurashtra tried with marked success. The Saurashtra is not influenced by any caste-prejudices against any new craft. How easily the crafts of carpentry and masonry have been taken up for the first time by the community, is abundant testimony to their instinct of adaptability.

CHAPTER X.

THEIR EDUCATION.

As one of the factors conducive to efficiency in modern business, education has a claim to be considered; yet it is a singular characteristic of this community that a purely literary education is not at all popular with them. The percentage of literacy of the community for the Presidency is as follows:

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Males</td>
<td>40.4%</td>
</tr>
<tr>
<td>Females</td>
<td>2.50%</td>
</tr>
</tbody>
</table>

It is an interesting question to probe into the causes which have brought about such a marked aversion towards higher education. Parents dissuade their young ones from going to school, since they are apprehensive about
in which a small subscription entitles one to membership, elects a council of 110 through a property qualification. This in turn elects a committee of 11 Saurashtras which manages directly the High School. There is a President as well as a Secretary to this committee who constitute the executive.

The present strength of the school is 1102 of whom 81% are returned as Saurashtra boys during 1921-22. The same proportion of distribution is likely to continue. The average attendance during 1921-22 is 84%. The strength is highest in the first form, it gradually goes on decreasing as we go to the higher classes till in the sixth form the non-Saurashtra seem to be more prominent. As the Headmaster remarks, when the boys are able to read and write, they have a marked tendency to return to their homes in order to help their parents’ business.

Besides these institutions, one of their caste-pupils has been recently admitted into the Rameswaram Devasthanam Sanskrit Patasala, hitherto considered a close preserve of the Southern Brahmins.

The Technical Institute established by the District Board in 1890 is giving instruction in Carpentry, Wood-Carving, Ivory-Carving, Metal work, Cabinet-making and manufacturing Chrome leather articles. It is not reported to be popular with the community. This is accounted for by the fact that no practical instruction in dyeing and weaving is given in this institution. Proper inducement is not
said to be afforded by this institute to the Saurashtras.

In a community almost 40,000 strong, the number of those engaged in the learned profession is very easily counted. The following table furnishes the relevant statistics:

<table>
<thead>
<tr>
<th>Degree</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>B.A., B.L.'s</td>
<td>5</td>
</tr>
<tr>
<td>Graduates</td>
<td></td>
</tr>
<tr>
<td>In the teaching line</td>
<td>2</td>
</tr>
<tr>
<td>A well-known broker</td>
<td>1</td>
</tr>
<tr>
<td>Doctor</td>
<td>1</td>
</tr>
<tr>
<td>Judicial Service</td>
<td>1</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>10</strong></td>
</tr>
</tbody>
</table>

Ten individuals in a community which includes at least 20,000 males is a negligible figure; and the impressions of the Headmaster of the Saurashtra High School do not encourage an enquirer to expect a higher ratio in the near future.

It is difficult to find a community so impervious to cultural appeals as the Saurashtras. The community is yet to realize that success in modern business bereft of cultural aspiration is quite likely to lead to waste of huge properties by young, half-educated, and misguided youths. The learned publications of classical works in the Saurashtra Alphabet so loudly hailed in their conferences, are reported to await liberal patronage to see the light of day. Such intellectual and philanthropic avenues can be supported only by a community with faith in true culture. Higher education should
be made to appeal to at least a few. This can be made possible only through liberal endowments and cultural appeals by the few intellectuals of the community.

CHAPTER XI.
COMMUNAL WORK.

The Saurashtras have a strong esprit de corps and this has stood them in good stead in their weaving and dyeing industries. How communally well organized these people are, will be evident from a close study of some of their caste-organizations.

The Saurashtra Sabha easily bears off the palm among such organizations. It was established in 1895 and its objects as evident from their Memorandum of Association and an intimate knowledge of some of their Institutions are as follows:

1. To manage a school to enable members of their community, to receive on moderate terms a sound, liberal, general and technical education. The Saurashtra High School is maintained by this Sabha.

2. To run the Sree Prasanna Venkateswara Swami's Temple and contribute towards its maintenance—making jewels, vehicles and other things necessary therefor and conducting the festivals thereof.

3. To found charitable Institutions such as choultries, poor houses, etc., for the good of the community.
4. To give, succour to the suffering poor and "the maimed, the lame and the blind" in the community.

5. To give pecuniary grants in aid of Upamanyamis (Thread marriages) to the indigent orphans.

6. To erect such works of public utility as bathing ghauts, wells, etc.

7. To promote the social, moral and intellectual advancement of the Saurashtras.

8. To fix and raise subscriptions known as "mahamais" in such manner as the Association may from time to time think of.

9. To sell, improve, manage, develop, lease, mortgage, turn to account or otherwise deal with all or any part of the property of the Association.

Of the above 9 objects which are elaborately drawn up, the School alone is managed efficiently.

For the fulfilment of the above objects, certain guild dues are being levied to add to the corpus of the funds. There are 2 classes of members—paying and non-paying. The paying members have on the sale proceeds contributed to the funds of the Association as stated below:

(a) Local manufacturers of cloths and dyers of foreign piece-goods through brokers—one pie per Rupee (Brokers shall also contribute at the above rate on the total Invoice amount).

(b) Dealers in cloths of Benares, Cashmere, Calcutta, Kumbakonam, Kornad, Conjeevaram, Salem, Tanjore, Swamimalai, Pilliyarpalayam
and other mofussil stations—per Rupee, half-a-pie.

(c) Dealers in Gold Thread—four pies per high standard marc.
(d) Dealers in Gold Thread—one pie per low standard marc.
(e) Wholesale dealers in cotton yarn and Foreign Piece-Goods—half-an-anna per Rs. 100 sale.
(f) Retail dealers in white cotton yarn—half-a-pie per bundle.
(g) Retail dealers in coloured cotton yarn—one pie per bundle.
(h) Dealers in locally dyed cotton yarn—half-a-pie per Rupee.
(i) Dealers in Alizarine dye stuffs—one anna per barrel.
(j) Dealers in Aniline colours—one anna per pound.
(k) Dealers in Dyed silk—4 pies per seer.
(l) Dealers in different oils—one anna per Rs. 100.
(m) Dealers in iron—one anna per Rs. 100.
(n) Dealers in different grains and other sundry articles of consumption—one anna per Rs. 100.
(o) Stake-holders in chits shall contribute a quarter of an anna per Rupee on the amount of the stake.

One has to remark with Professor R. Mukerjea* that this communal Sabha is loosely

*The present writer's attention, it should be gratefully admitted, was drawn to the study of economic subjects by this distinguished Professor.
co-ordinated, "including as it does the different classes of the Saurashtras, artisans, middlemen, traders in silk cloth as well as general merchants in the name of the same caste." 

Next in importance is the Madura Saurashtra Co-operative Society, Ltd., registered on 4th November 1918. It started work on the 8th. The object of the Society is the improvement of the economic condition of the weavers and dyers residing in Madura and Kanyakumari Districts. It shall be competent to,

1. raise the money required for the Society from weavers and others by issue of shares and by borrowing by way of deposits or otherwise;
2. purchase raw materials and appliances required for the industry and retail the same to the weaver members for cash or credit;
3. grant loans to members;
4. purchase improved appliances or let on hire the same;
5. receive for sale the finished products of the members' looms and sell them to best advantage; and
6. act as the agent for the joint purchase of domestic and other requirements.

It has more than 750 members on its rolls and its assets stand thus:—

Nominal Capital .. .. Rs. 1,00,000
Paid-up Capital .. .. ,, 23,000
Reserve Fund .. .. ,, 5,000

During 1919-20, it is reported to have worked at a loss; and a dividend for the year ending
30th June 1921, was 7½%. The services of a Government Co-operative Inspector have been lent to the Society for the past two years. The marketing business of this Society extends as far as Travancore and Pudukottah. It advances loans at 9⅔%. During 1921-22 a greater dividend was expected. A chit-fund is also conducted by the Society thus encouraging thrift among the weavers. It is popular with the locality and there is scope for branches of this Society in Madurai itself.

The Varnashrama Sabha engaged 70 volunteers of the community for persuading the Saurashtras not to drink. Unhappily this Society is not now in working order. The Madura Vidyashrama Sabha registered on 5th August 1921, a kindred Association whose object is mainly religious, has also started temperance activities as one of its objects. These two Sabhas are in need of active co-operation from the philanthropic workers of the community. Pious wishes never attack the problem; constant vigilant work can alone remedy the serious defect of drinking.

In August 1921, a free dispensary was established through the kind donations of a few members of the community. That the Hospital is well-equipped is the opinion of the doctor in charge of it. Here the poor alone are treated free.

The Saurashtras since they constitute about a third of the population of the City have successfully taken part in the management of local
affairs. On 1st September 1922, there were 10 Saurashtra Municipal Councillors out of 36; and 2 of their community have successfully acted as Chairman of the Municipality. The nomination of one Saurashtra to the Madura Devasthanam Committee in August 1922, has been pointed to be the first entry of a Saurashtra into the management of the Sacred Temple of Meenakshi during the last 300 years. One of their representatives is also a member of the local Legislative Council.

An organization of the Saurashtra weavers was started in 1921 under the name of the Asu Machine Sangham. It is holding its meetings regularly once a week. It has 110 members on the rolls. The objects of the Association run as follows:

1. To encourage the warping industry;
2. To find improved methods of sizing;
3. To find a market for sized yarn; and
4. To encourage new discoveries and inventions connected with the industry.

It is refreshing to note that a member of this Sangham has discovered a sizing machine—already mentioned in Chapter V—hailed as the first of its kind in South India. He has to get it patented. As usual with inventors, he is in need of finance to enable him to come out with his patent.

The movement of the Saurashtra Alphabet deserves a short notice since the community has expressed itself in favour of the Saurashtra alphabet—one of the four Prakrit dialects—in their fifth Saurashtra Brahmana Conference.
in 1920. It should be borne in mind that their spoken language, called Khatri, has got an admixture of Sauraseni, Vraja and Telugu words and phrases. This admixture is accounted by their migration to Madura after settling at Devagiri (Daulatabad) and Vijayanagar. About sixty years ago one Lakshmanachar invented an alphabet but Venkatasuri of Tanjore continued to write books in Telugu characters. His Bhagavatham, Balaramayam and Harischandra were all translated into this language. Rama Rai's two readers, subsequent to these, were written in an alphabet which had no resemblance to the two previous ones. Budha Alagiri Ayer of Salem wrote a grammar of the new alphabet. After the 1920 Resolution in favour of the Saurashtra alphabet in Devanagari characters, the Saurashtra Parishad has published in 1920 a Bala Bodhin in Devanagari. Standard translations of books in MSS. are ready and they are delayed in publication owing to want of funds.

There is also a weekly paper in Madura conducted for the benefit of this community among other objects. The history of the "Saurashtra" is briefly told. The paper was first started in Salem in 1916 as a Monthly. On invitation from Madura in 1919 the present editor started it as a monthly on the Vijaya Dasami Day in the same year. It was soon converted into a fortnightly. In 1919 it became a weekly and it is a bi-weekly from 30th September 1922. It is written in Tamil. One or two columns should, in the first
instance, be conducted in the Saurashtra language. Efforts may be taken to conduct it as a daily. It has a circulation of over 800.

A glimpse into their secret trade language is, in place, to bring out the strength of their communal ties. The number of terms and phrases borrowed from the craft is increasing every day. The few examples given below will bring out the force of this remark.* Thus a common characteristic of a trading class has well-nigh reached a high stage of development.

<table>
<thead>
<tr>
<th>No.</th>
<th>Terms Used</th>
<th>Lit. meaning</th>
<th>Spl. meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Rikhta-kandu</td>
<td>A spindle without yarn.</td>
<td>A man of no status.</td>
</tr>
<tr>
<td>2</td>
<td>Muddha</td>
<td>The name of a thick peg which holds one side of the roller.</td>
<td>A man of little sense.</td>
</tr>
<tr>
<td>3</td>
<td>Rhetto</td>
<td>The roller used for winding the thread upon the spindles which make a most unpleasant creaking noise.</td>
<td>A talkative person.</td>
</tr>
<tr>
<td>4</td>
<td>Kahmeki</td>
<td>A technical term used for cutting the loom off.</td>
<td>To make short work of an undesirable person.</td>
</tr>
</tbody>
</table>

*Through the courtesy of the ethnographical writer quoted by the Compiler of the "Madura Guide", p. 150.
Lest it be remarked that the educated Saurashtras have no common place of meeting each other, a Saurashtra Club was started in 1911. It has got 135 members on its rolls; and the average daily attendance is 24, 50% of whom belong to the younger generation. A few non-Saurashtras who reside in the locality are also members. The Club is managed by a committee of five assisted by two joint secretaries and one treasurer. It has no reserve fund; nor is it a registered concern. A visit to the Club forces on one the conclusion that vigorous exercise is not popular though there is provision laid for tennis. Though the Club gets 2 Dailies, there is no library at all. Wherever one tries to scratch the Saurashtra with or without notice, it is well-nigh impossible to trace the culture-nerve in him.

A close perusal of the communal organizations among Saurashtras forces on the enquirer the conclusion that they constitute one of the most well-organized castes in South India. Charity within their community and timely succour for the needy weaver are quite common. Yearning to hear Puranas and faith in Hindu religion and rituals are strong indeed. But here as elsewhere, ill weeds grow apace. The alarmingly high percentage of the habitually drunk in the community is a crying evil. Temperance work is at a standstill for the present. Too many Sabhas, with their dates of Registration and Memoranda of Association, are not sufficient for the purpose. A band of seven with high
character engaged in temperance work, is far better than seventy Sabbas. More pointed attention to this evil is deferred to another Chapter; and much spade work still remains to be done in this all-important line of reform. The Saurashtra Co-operative Society, which is already doing good work by encouraging thrift and helping the needy, may well take up the lesson of the Irish Co-operative movement. "Unless something more can be claimed for the co-operative movement than the improvement of the material conditions, unless it develops the potentialities of human character, it is of little real significance in the permanent reconstruction of Society."

The Co-operative Society may save the poor Saurashtra weaver from incurring debts; but if it is not a power for good in turning the community away from the tavern, it cannot be said to have contributed to the lasting welfare of this enterprising community.

CHAPTER XII.
LABOUR CONDITIONS.

When a tourist passes through the streets with terraced houses and gates with copper-plated sign-boards, the impression is one of prosperity. But the East End of Madura is elsewhere; the enquirer should go through

the narrow streets, lanes and bye-lanes leading to Thirumal Naik’s Palace; he should pass through the six Lakshmipuram lanes where the stinking smell emitted by the Anupanady gutter is abominable, and he should also have a sympathetic talk with the poor in Santhai- pettai Pudoor struggling in large numbers to get one pail of water from a \( \frac{1}{2} \) municipal pipe. Amidst such filthy surroundings, the Saurashtra labourers spend their lives. The effects of such an environment are accelerated by some of their habits to which pointed attention will be drawn in a subsequent Chapter.

The earnings of a Saurashtra labourer are best considered under different branches of Industry. After a fairly exhaustive enquiry into more than 25 cases, the following rate of wages is arrived at in the Silk Weaving Industry:

**A. Silk Weaving Industry.**

Adults: Males—Rs. 15 to 40 per mensem.
Females—
Silk-work Rs. 3 to Rs. 8 per mensem.
Rhetto-work Rs. 5 to Rs. 10 per mensem.

**B. Mill Workers.**

Among workers in the local Saurashtra Mill, the following rates are returned by the Managing Director which are also confirmed by the labourers themselves:

**Earnings per mensem.**

**Adults—**

<p>| | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>Rs. 18 12 0 to Rs. 37 8 0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>9 6 0 to 16 14 0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Children</td>
<td>7 8 0 to 16 0 0</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
C. Earnings of a Weaver.

The weaver at the primitive loom is able to earn from Rs. 15 to Rs. 25 per mensem. If he is highly efficient he may earn upto a maximum of Rs. 50, in which case, he hires employees for his other looms.

When fly-shuttles are engaged, the output is greater within a given time and his earnings are correspondingly higher. Besides the earnings from his fly-shuttle, he employs labourers to work in two or three other shuttles owned by him. In such a case the weaver’s earnings range from Rs. 30 to Rs. 60.

D. Dyeing Industry.

1. Dyeing and Steaming  Earnings per mensem.
   Adults, Male  .... Rs. 30 to Rs. 60
2. Mordanting
   Female  .... Rs. 7 to Rs. 15
3. Drying and Cleaning
   Female  .... Rs. 6 to Rs. 7
4. Packing and Bundling
   Female  .... Rs. 15 to Rs. 24

E. Chungudy Tying.

Adults: Female
   at As. 2 per 1000
      big dots  .... Rs. 7 8 0 to Rs. 9
   at As. 4 per 1000 fine
      dots  .... Rs. 15 to Rs. 18

In the case of male adults, the dyeing industry is the most paying, since it affords facilities for earning Rs. 60 per mensem. The Fly-Shuttle worker gets from Rs. 30 to Rs. 60 per mensem. The Mill worker comes next with his earning ranging from Rs. 18 to Rs. 37-8-0. The Silk weaver is able to earn
from Rs. 15 to Rs. 25, while the ordinary hand-loom weaver earns only Rs. 15 to Rs. 25.

For female adults the process of bundling the dyed yarn fetches from Rs. 15 to Rs. 24 per menam. Chungudy tying, their monopoly industry, brings in from Rs. 15 to Rs. 18 if it is of the finer type. Mill-work fetches them from Rs. 9-6-0 to Rs. 16-14-0. Other lines of work are comparatively less paying since their wages range from Rs. 3 to Rs. 7 per menam. Whether she be rich or poor the Saurashtra woman belongs to the productive class of workers; never does she idle away her time in vain talks or gossips like too many of her sisters in other communities. It may be mentioned in passing that the Saurashtra woman saves what she earns and keeps it separately. In times of urgency, she lends money to her husband only and that, for interest to be strictly paid back at the next possible occasion.

How the Saurashtra labourer spends his money, constitutes an important branch of investigation by itself. The results of the enquiry into ten typical families in almost all the important representative quarters, are stated below:

1. One family of Hand-loom Weaver in Lakshmipuram Lane No. 5.
### General Particulars | Income per month | Expenses | Savings
---|---|---|---
Total number in family: 1 Male, 1 Female & 1 Child. | | | 
Size of room: 10' x 8'. | | |  
Bathing facilities: No well. | | |  
Latrine: Nil. | | |  

**Remarks:** He is suffering from periodic ailments, and leading a hand-to-mouth existence with the help of rent from a portion of his house.

II. A Fly-Shuttle Worker's Family.

### General Particulars | Income per month | Expenses | Savings
---|---|---|---
Total number: 1 Male, 1 Female & 4 Children. | | |  
Size of bedroom: 10' x 12'. | | |  
Bathing facilities: A pipe near by. | | |  
Latrine: Nil. | | |  

V. A Hand-loom Weaver in Lakshmipuram Lane No. 6.

<table>
<thead>
<tr>
<th>General Particulars</th>
<th>Income per mensem</th>
<th>Expenses</th>
<th>Savings</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total number:</td>
<td>Property: a house worth Rs. 2,000.</td>
<td>Food 19 Rs.</td>
<td>Saving Rs. 1 in Chit.</td>
</tr>
<tr>
<td>1 Male,</td>
<td>Income Rs.</td>
<td>Rent Nil</td>
<td></td>
</tr>
<tr>
<td>1 Female &amp;</td>
<td>Food &amp; Clothing 2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2 Children.</td>
<td>Fuel &amp; light 2</td>
<td>Education 2</td>
<td></td>
</tr>
<tr>
<td>Size of the bed room:</td>
<td>Male 25 Rs.</td>
<td>Sundry 4</td>
<td></td>
</tr>
<tr>
<td>8' x 12'</td>
<td>Female 5 Education 2</td>
<td>Nil.</td>
<td></td>
</tr>
<tr>
<td>Bathing facilities:</td>
<td>Total Rs. 30</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Latrine: Nil</td>
<td>Total Rs. 29</td>
<td></td>
<td>Net savings Rs. 1.</td>
</tr>
</tbody>
</table>

Remarks:—The expense under sundries is remarkable. Accommodation is quite insufficient. The hand-loom is also worked in the same room used for bedding.
VI. Another Weaver in Kan Palayam.

<table>
<thead>
<tr>
<th>General Particulars</th>
<th>Income per Mensem</th>
<th>Expenses</th>
<th>Savings</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total number:</td>
<td>Property: Nil</td>
<td>Rs.</td>
<td>Saving</td>
</tr>
<tr>
<td>1 Male,</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 Female &amp;</td>
<td>Income</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2 Children.</td>
<td>Rs. Male 30</td>
<td>Food 22</td>
<td>Rs. 6 in</td>
</tr>
<tr>
<td>Size of bed room:</td>
<td>Female 10</td>
<td>Rent 2</td>
<td></td>
</tr>
<tr>
<td>8’ x 8’</td>
<td>Total Rs. 40</td>
<td>Clothing 4</td>
<td></td>
</tr>
<tr>
<td>Bathing facilities:</td>
<td></td>
<td>Fuel &amp;</td>
<td>Indebted-</td>
</tr>
<tr>
<td>A pipe near by.</td>
<td></td>
<td>light 3-8</td>
<td>ness</td>
</tr>
<tr>
<td>Latrine: Nil</td>
<td></td>
<td>Education 1</td>
<td>Nil.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Sundries 1-8</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Total Rs. 34</td>
<td>Net sav-</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Rs.</td>
<td>ting Rs.6.</td>
</tr>
</tbody>
</table>

Remarks:—The savings which appear to be considerable in this case are due to the active co-operation of the female worker. A dirty ill-ventilated room is their lodging.
VII. A Silk Weaver in Lakshmipuram Lane
No. 4.

<table>
<thead>
<tr>
<th>General Particulars</th>
<th>Income per mensem</th>
<th>Expenses</th>
<th>Savings</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total number: 1 Male, 1 Female &amp; 3 Children.</td>
<td>Property: Nil</td>
<td>Food 18</td>
<td>Saving Nil.</td>
</tr>
<tr>
<td></td>
<td>Income</td>
<td>Rent 2</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Male 20</td>
<td>Clothing 1</td>
<td>Indebtedness Nil.</td>
</tr>
<tr>
<td></td>
<td>Female 5</td>
<td>Fuel &amp; light 2</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total Rs. 25</td>
<td>Education 1</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Sundries 1</td>
<td>Net saving Nil.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Total Rs. 25</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Size of bed room: 9' x 10'.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bathing facilities: A pipe near by.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Latrine: Nil</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Remarks:—This is the case of a very poor family. They are having only 2 meals a day. During certain months the family is also reported to incur debts; but owing to the thrifty household management they are able to lead this hand-to-mouth existence.
VIII. A Weaver in Santhaipettai Pudoor.

<table>
<thead>
<tr>
<th>General Particulars</th>
<th>Income per mensem</th>
<th>Expenses</th>
<th>Savings</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total number:</td>
<td>Property: Nil</td>
<td>Food 22</td>
<td>Rs. 2 in</td>
</tr>
<tr>
<td>1 Male,</td>
<td>Income Rs.</td>
<td>Rent 3</td>
<td>Chit.</td>
</tr>
<tr>
<td>2 Females &amp;</td>
<td>Males 20</td>
<td>Clothing 4</td>
<td></td>
</tr>
<tr>
<td>2 Children.</td>
<td>Females 7 &amp; 10</td>
<td>Fuel &amp; light 3</td>
<td>Indebtedness</td>
</tr>
<tr>
<td>Size of bed room:</td>
<td>Total Rs. 37</td>
<td>Education 2</td>
<td>Nil.</td>
</tr>
<tr>
<td>8' x 8'.</td>
<td>Total Rs. 35</td>
<td>Sundries 1</td>
<td>Net saving Rs. 2.</td>
</tr>
<tr>
<td>Bathing facilities:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pipe near by.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Latrine : Nil</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Remarks:—It should be noted that the earning of his widowed sister is helping him to run the household. The thrifty management of the house is remarkable.
### IX. A Chungudy Dyer near Mariammam Tank.

<table>
<thead>
<tr>
<th>General Particulars</th>
<th>Income per mensem</th>
<th>Expenses</th>
<th>Savings</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total number:</td>
<td>Property: Nil</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 Male,</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 Female &amp;</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3 Children.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Size of bed room :</td>
<td>Income Rs.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7’ x 8’.</td>
<td>Male 30</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Female 9</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bathing facilities :</td>
<td>Total Rs. 39</td>
<td></td>
<td></td>
</tr>
<tr>
<td>A well near by.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Latrine: Nil</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

|                     | Food 22            |          | Saving Rs. 2 in Chit. |
|                     | Rent 2             |          |                      |
|                     | Clothing 2         |          | Indebtedness Nil.     |
|                     | Fuel & light 3     |          |                      |
|                     | Education 3        |          |                      |
|                     | Sundries 5         |          |                      |
|                     | Total Rs. 37       |          | Net saving Rs. 2.     |

**Remarks:** The increase under sundries is to be noted. The earning female worker, through “Chungudy dyeing”, is helping the family considerably.
X. A Dye-Worker on the Southern Side of the Thirumala Naik's Mal.

<table>
<thead>
<tr>
<th>General Particulars</th>
<th>Income per mensem</th>
<th>Expenses</th>
<th>Savings</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total number :</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2 Males,</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 Female &amp; 1 Child.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Property :</td>
<td>A house worth Rs. 1,500.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Income</td>
<td>Male Rs. 40</td>
<td>Food Rs. 2-8</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Female Rs. 17</td>
<td>Rent Nil</td>
<td></td>
</tr>
<tr>
<td>Size of room</td>
<td>10' x 12'</td>
<td>Clothing 4</td>
<td>Indebtedness Rs. 2,000</td>
</tr>
<tr>
<td>Bathing facilities :</td>
<td>A family debt of Rs. 2,000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>A pipe 10 yards off.</td>
<td>Total Rs. 47</td>
<td>Education 2</td>
<td></td>
</tr>
<tr>
<td>Latrine : An apology for one.</td>
<td>Total Rs. 47</td>
<td>Interest 15</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Sundries 1</td>
<td></td>
</tr>
</tbody>
</table>

Remarks:—This is an interesting family. The old father is aged 75 and he has left for the son a debt of Rs. 2,000. The interest alone by way of Rs. 15 per mensem takes away 37½% of his earnings. When he will repay the capital is a problem.

Certain general observations suggest themselves from this study which, though only fairly exhaustive, is typical. Its scientific value is enhanced by confirmation from more than 30 representative men of the community.

So far as accommodation is concerned most of their lodgings are provided with one room which is at once the safe room, the hand-loom
work room, and the bedding room. There is
another room bound by curtains which is
used as a store, kitchen, and dining room.
Invariably, there is no latrine or only an
apology for the same which is difficult for a
bulky human being to enter even. This is a
serious sanitary and moral defect. If a pointed
question is put to them the reply is that 'there
are open plots'. Comment is needless. Nor
is there proper bathing facility for the class
of poor weavers. The number of pipes is not
sufficient, nor are there good wells to fill up
the gaps in their needy places.

The weavers and dyers generally do not
have considerable property; the only family
asset is a house in 5 out of 10 cases. The
female workers are indispensable. In 9 out
of 10 cases, their earnings alone save the family
from running into debts, not to mention the
monthly chits of a few Rupees. The case of the
first 2 families where the females earn only Rs.3
each, is explained by the fact that domestic
business and the initial help rendered to the
husband in the warping process leave them
little time to turn to Chungudy dyeing.

More cases are necessary to arrive at the
proportion of expenses under different heads.
Since the last 3 decades, the item of education
is a permanent avenue of expenditure in their
family budget. Among the dye workers the
disproportionately high sums under "sundries"
constitute not merely a striking figure; with
the help of a Saurashtra gentleman respected
by their community, the admission has been
got from these three families, that it is due to the drinking habit. Further the proportion of drunkards among the dyers is decidedly higher than among the weavers. He who runs may read into these 10 tables, a thrifty management of their household by the Saurashtra women.

It should be noted that no provision has been made for periodic ailments by these families. It is also relevant to remember that cholera and fever claim a heavy toll from the Saurashtra community. The saving of Rs. 2 has thus to be discounted at its true economic value to a community which does not lay by anything for bad times. 7 cases out of 10 may be taken to lead only a hand-to-mouth existence. When the proportion of saving to the gross earnings is gone into, 10% to 16% characterize the 3 passable families. Finally the indebtedness of No. X family where 37 1/2% of the family's earnings is necessary to repay the interest alone, is a very unfortunate case and strikes the present writer as an exceptional instance. The bearing of these observations on the problem of "inequality" will be taken up in the next Chapter.

CHAPTER XIII.

INEQUALITY—YET ANOTHER ILLUSTRATION.

"The overshadowing fact in the distribution of property and income is inequality."* A

With the aid of calculations in pre-war Prussia where the best tax statistics were available, one may also try to arrive at the proportion of middle classes. It was supposed in Prussia that one-half of the persons who are not assessed, had yet an income as large as the taxable minimum. The mainly industrial character of the Saurashtra community, it is hoped, will warrant a comparison with Prussia. That means 3,258 families, i.e., \( \frac{1}{2} \) of \((6,528-647)\) \(+318\) \((2,940-318)\) may be brought under what Charles Booth calls the “Comfortable working” class. About 52% of the families come under the middle class. Excluding the 5% of the well-to-do class, one arrives at 43% of the community who are leading a hand-to-mouth existence.

Oral enquiry with reference to the percentage of the last class goes up to 60% of the community. Having the calculations on the Prussian example as the barrier on the optimistic side, a safe conclusion will be that 43% to 60% of the community are leading a hand-to-mouth existence.

CHAPTER XIV.

STRIKING SHORTCOMINGS.

Under communal organizations the temperance work started by the Varnashrama Dharma Sabha and Brahma Vidyashrama Sabha was noted. The enormity of the evil which these Sabhas undertook to root out, is still not
sufficiently realized by even the enlightened few of the community.

Enquiries among more than 20 representative men of the community bring into full light different percentages of this evil. One dye-worker gave the information that only a small percentage of the working classes resorts to drink. In support of this, he brought in the influence of the 3 cinemas and their inherited habits of working in the dye-tubs. It turned out in the end that this witness was in a mood to protect the fair name of the community at the expense of truth.

The drink evil, though slightly affected for good by the temperance work of the political propagandists, is very serious indeed; among the rich it is in the form of fashionable resorts to Spencer's, the local branch of which is conveniently situated in the heart of Saurashtra Madura. The working classes resort to the toddy shops. It is apprehended not without reason that even Saurashtra women-workers are getting addicted to this vicious habit. Forty percent of the rich are believed to resort to the fashionable ways of drinking; 30% of the middle class frequent the tavern in the evenings; and above 66% of the working classes go to the toddy shops. It is but poor consolation to mention that these people never drink to excess.

How to account for such a high percentage of drinking? How is it that the evil is more prevalent among the dyers than among the
weavers? The bleaching and mordanting processes in dyeing, especially the oppressing work in caustic lime, are so enervating that a substantial meal and the temporary effects of drink are believed to contribute to sustained work. This was accepted by more than 12 witnesses questioned in different localities. It is highly regrettable that a not negligible portion of this community understand the substantial meal to mean meat. Though the number of working individuals is very high, the percentage of drink is highest among this class. The middle class, as everywhere else, constitutes the sober section. The rich delude themselves into the comfortable satisfaction that they do not resort to the tavern. If a few annas are spent by their poorer brethren, bills in invariably two digits are debited every day at Spencer’s against their accounts.

The good work done by the volunteers of the Saurashtra Varnashrama Sabha needs to be urgently revived. In such spheres of moral reform, only men of character and high repute can achieve tangible success. The Saurashtra Sabha, which has more than three lakhs of Rupees to its credit, should take up this question urgently since the evil can be rooted out only through the formation of effective public opinion against this pernicious habit.

Through the heart of the Saurashtra quarters flows the Anuppanadi gutter. It runs through the Lakshmiipuram and Kompalayam, along both sides of which there are houses of weavers and dyers. Besides this abominable stink
emitted by this channel, the habit of this community forces on one the conclusion that it has no sanitary conscience.

The epidemic of cholera is a recurring factor in the city while fever with its high claims is only a bad second. The following years are noted for the prevalence of cholera at Madura: 1815, 1818, 1819, 1820, 1831 to 1837, 1839, 1843, 1850 to 1852, 1858, 1859, 1861, 1864 and 1865. The worst years have been 1875, 1877, 1891, 1897, 1900. Till 1912 figures are available. The present writer knows personally that from 1916 to 1922 not one year was free from the raging of this dire disease. Further, during 1920-1921, Madura had 772 deaths due to Plague out of a total Municipal plague mortality* of 4971 in the Presidency. The highest tolls have always been from the Saurashtra quarter. Even a lay man is able to attribute this mostly to congestion and bad habits of lack of cleanliness. Among the ten workers' families examined, 8 are provided with no latrines; and there is an apology for the same in 2 others. Apart from the sanitary aspect of this state of things, the moral impression it leaves on one's mind is the more regrettable.

Further during festivals, the Saurashttras move in whole families to distant places like Alagarkoil†. They take their meals in the open and spend a few days and nights in such

† A place of Pilgrimage, 10 miles north of Madura.
It is rare to come across any other community where the number of idlers and wastrels is almost a negligible quantity. One will not be surprised if less than one per cent turn out to be idlers. *Every man, his business and business to every man*—may well be written as the motto of this community.

The inventive capacity of the Saurashtra worker in the dyeing and warping processes is not an accident. It is the result of the accumulated skill of ages, transmitted through the unbroken chain of heredity. Their close secrecy and imbibed aloofness from the Non-Saurashtra have enabled the community to retain their trade secrets among themselves.

The remarkable powers of adaptability in the Saurashtras are of value in an age when an one-sided education has not laid stress on the industrial side. How within five decades a community of weavers and dyers has attained a working capacity, if not proficiency, in goldsmithy, carpentry, house-masonry and blacksmithy, is full of lessons to caste-ridden communities.

Industrial efficiency alone is not everything. It will be difficult to find any other community so impervious to cultural appeals as the Saurashtras. Apart from translations of the Sanskrit epics, the community has no lasting literature to boast of in their language.

The results of this vital drawback are reflected in the enormity of the vice of drink. This is a serious blot in the community; the
fact of not drinking to excess can never stand even as a palliative against this internationally accepted blemish. No amount of sincere philanthropic work will be too much to wipe out of existence this fashionable vice.

Wanted a hygienic conscience,—may well be writ on the door of every Saurashtra household. The heavy toll of precious human lives for the three diseases of cholera, fever and small-pox is a high price that a businesslike community pays for ignorance.

Over 300 years and more have elapsed since the Saurashtras sought Madura as their refuge; and though language, customs and traditions continue to act as unduly severe barriers, the broad-minded and intelligent in the community should seriously endeavour to arrive at better understanding with the other communities. The world is above all cemented together by the bond of mutual dependence.
THE
Mysore Economic Journal
A Periodical devoted to Economic Topics
The only Journal of its kind in India, Burma & Ceylon

SOME OPINIONS

Sir Roper Lethbridge writes—"Most admirable journal."

The Indian Patriot—"The Economic Journal is a monthly message to all to be up and doing, and the editorial notes, month after month, keep up the ideal that the Journal has set before itself."

The Bombay Chronicle—"The Journal deserves to be widely read by the increasing class of educated Indians who are interested in the economic development of their country."

The Daily Post—"The Mysore Economic Journal is a paper that grows more full of interesting matter each month. It is moreover very clearly printed on good paper and contains much useful data on commercial enterprises and possibilities."

The Englishman—The Mysore Economic Journal contains a number of interesting articles."

The Educational Review—"The Mysore Economic Journal is one of the most useful journals in India."

The West Coast Reformer—"All very instructive contributions from learned writers."

SAMPLE COPY—RUPEE ONE IN STAMPS

Address: Editor, "M. E. J."
Siddicutta, Bangalore City.
Books at Reduced Rates

Kings and Queens I have known.—By H. Vacanesco
   Rs. A. ... 9 0

Small Talks on Big Subjects.—By Lady Randolph Churchill
   ... 2 0

A Century of British Foreign Policy.—By G. P. Gooch & G. H. B. Masterman. 8 8

Social and Industrial Reform.—By Sir Charles Macara
   ... 6 0

Sir Charles Macara, Bart., a Biography.
   By W. H. Mills ... 6 0

And many other Books on Economics and Industries.

Apply to:

MANAGER,
Mysore Economic Journal,
Siddicutta, Bangalore City.

Agents for Mysore Government Publications.
<table>
<thead>
<tr>
<th>Title</th>
<th>Author</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>Papers on Current Finance</td>
<td>H. S. Foxwell, M.A., F.B.A.</td>
<td>10 8</td>
</tr>
<tr>
<td>Instinct in Industry</td>
<td>Ordway Tead</td>
<td>4 8</td>
</tr>
<tr>
<td>Inflation</td>
<td>J. S. Nicholson, M.A., D.Sc., LL.D., Professor of Political Economy in the University of Edinburgh</td>
<td>3 12</td>
</tr>
<tr>
<td>Currency Reform in India</td>
<td>V. G. Kale, Professor of Economics, Fergusson College, Poona</td>
<td>3 0</td>
</tr>
<tr>
<td>Human Industrial Efficiency</td>
<td>Henry Chel-llew, M.A., Ph.D., D.Sc., Lecturer, London School of Economics, with a preface by the Rt. Hon. Lord Sydenham, F.R.S.</td>
<td>2 12</td>
</tr>
<tr>
<td>The Foundations of Indian Economies</td>
<td>Radhakamal Mukherjee, with an introduction by Professor Patrick Geddes</td>
<td>6 12</td>
</tr>
<tr>
<td>The New Economic Menace to India</td>
<td>Beepin Chandra Pal</td>
<td>2 8</td>
</tr>
<tr>
<td>Introduction to Economics</td>
<td>J. R. Turner, Ph.D., Professor of Economics and Dean of Washington Square College, New York University</td>
<td>11 4</td>
</tr>
<tr>
<td>The Real Wealth of Nations</td>
<td>J. S. Heath, F.K. Econ.S.</td>
<td>11 4</td>
</tr>
</tbody>
</table>

Apply to:

MANAGER,

Mysore Economic Journal,
Gundopunt Buildings,
BANGALORE CITY P.O.
BUDDHISM
The Religion of Compassion and Enlightenment.

AN OUTLINE OF THE FUNDAMENTAL TEACHING OF THE BUDDHA.

B.E. 2473
C.E. 1929

BUDDHIST MISSION IN ENGLAND,
41, GLOUCESTER ROAD, REGENTS PARK
LONDON, N.W.1
SABBADANAM DHAMMA DANAM JINATI

THE GIFT OF TRUTH EXCELS ALL OTHER GIFTS.
Honour to the Blessed One, the Holy One, All-wise!

Oh, Light of Asia, lighten our dark West
With Wisdom garnered from Thy Holy Quest,
Show us the Path which leads to Sorrow's Cure,
The Sorrows that all living things endure,
Thy gentle Teaching in our minds instil,
That none can prosper who treat others ill.
But he who cherishes goodwill to all
Earth's living creatures, whether great or small,
Through their content his sufferings shall cease,
And he shall walk the path of perfect peace.

—G. LYSER.
"This venerable religion (Buddhism) has in it the eternity of an universal hope, the immortality of a boundless love; an element of faith in final good and the proudest assertion ever made of human freedom."

—Sir Edwin Arnold.
“Go ye, O Bhikkhus, and wander forth for the gain of the many, for the welfare of the many, in compassion for the world, for the good, for the gain, for the welfare of gods and men. Proclaim, O Bhikkhus, the Doctrine Glorious, preach ye a life of holiness, perfect and pure.” —

—Mahavagga Vinaya Pitaka.
MANY A HOUSE OF LIFE
HATH HELD ME—SEEKING EVER HIM WHO
WROUGHT
THESE PRISONS OF THE SENSES, SORROW—
FROUGHT;
SORE WAS MY CEASELESS STRIFE!
BUT NOW,
THOU BUILDER OF THIS TABERNACLE—THOU!
I KNOW THEE! NEVER SHALT THOU BUILD
AGAIN
THESE WALLS OF PAIN,
NOR RAISE THE ROOF TREE OF DECEITS, NOR LAY
FRESH RAFTERS ON THE CLAY;
BROKEN THY HOUSE IS, AND THE RIDGE-POLE
SPLIT!
DELUSION FASHIONED IT!
SAFE PASS I THENCE—DELIVERANCE TO OBTAIN.
THE WEST NEEDS BUDDHISM.

Westerners should be attracted to Buddhism because of its striking appeal to reason and common sense, and because it offers a logical and scientific system of ethics and culture that is based on sound philosophical principles.

Other religions have presented excellent moral codes that were well adapted to the conditions that existed at the time they were given out. But there have been vast changes in the world and in the human race since the days of Jesus, for example, and the religious systems have failed to adapt themselves to these changes. They have lacked elasticity. This is because they are based upon revelation and make no claim to conform to natural law. They must be taken on faith, and people to-day demand something more definite and tangible as the basis of their philosophy of life.

But Buddhism, though an older system than Christianity, is based upon fundamental cosmic realities and its elements readily adapt themselves to natural changes, to progress and evolution. It offers no elaborate theories, demands no special exercise of faith, makes no pretensions to divine revelation, and does not insist that it has an exclusive monopoly of Truth.

Buddhism contains nothing that is at variance with the facts of modern science. It conforms to the very best thought embodied in all the great philosophies. Its teachings and its doctrine offer the best guide to rational conduct that has ever been formulated.

Western nations could profit greatly by a sincere study of the principles of Buddhism, for they offer a solution to the problems that are now confronting
modern civilization. People can find in Buddhism either a religion, a philosophy, a moral code or a system of self-culture and discipline that will be perfectly adapted to modern conditions.

The great lesson that Buddhism has to teach the West is that of direct, individual responsibility. Buddhism offers no loophole through which one can evade the consequences of his acts. It teaches that each alone is responsible and must pay the price for every violation of the natural law, either in the physical or the moral fields. It teaches that only by correct understanding of and conformity with the law can one gain progress and unfoldment, and that the result of such correct adjustment is an increased measure of happiness, culminating in a final perfect state of ideal enlightenment that frees one completely from the sorrow and pain that is the inevitable accompaniment of ignorance.

Buddhism is simple and easily understood, and its teachings offer no obstacles that must be surmounted by closing the eyes and leaping forward in the dark! And it covers a field that is broad enough to include every variation of human mind that is honestly seeking the Truth. It is tolerant enough to concede to each one his right to his own opinion, and it builds no barriers of prejudice or of bigotry to hold its brotherhood together.

Mankind is now too wise to be longer fooled by fairy stories or frightened by goblins. People are seeking for Truth, but they want it in a form that they can understand and explain. They can find that Truth in Buddhism, if they will investigate its teachings and study its system of religion, philosophy and ethics.

—G. W. WRIGHT.
INTRODUCTION.

I have been asked to write a short introduction to this elementary manual of Buddhism, written by my old friend and revered teacher, Mr. J. F. M’Kechnie, the bhikkhu Silacara. Twenty-one years ago, I remember reading, in the dim light of a railway station, his golden book, Lotus Blossoms, and I realised that here at last was a man who really understood and lived the Teaching of the Master. Gems, taken from many Buddhist books, showed what a rich literature lay unknown to Europe in those sacred books, found from Ceylon to Japan, and how precious such teaching could be made as a help for us here in our troubles. Used to a creed which for centuries has demanded unquestioning faith in things which reason, knowledge and science are daily showing not to be true, a large body of our people, though anxious to do good, has come to look upon all religion as useless if not dangerous; they have lost all sense of the need for a reasoned guide of life. Life has indeed many troubles. Death, sickness and disappointment wait upon us all, and it is just because no one can escape these ills that religion of some kind is necessary. It is the chart and compass across the stormy sea of life to the haven of happiness.

There is one religion, and one only, which ignores all revelations and wonders, and calls upon each man and woman to judge for themselves, and follow that path which their reason and love of truth point out to them. The Buddha was not pleased with the interminable arguments about God and creation which Indians of his time indulged in, for he saw that the good life was forgotten and people were...
satisfied with mere hair-splitting dialectics. Cutting through this jungle, he looked at our problems. We are unhappy; why? His discovery is that we are greedy, grasping, overbearing and ambitious.

Break down this grasping and happiness ensues. And how shall we do it?—by the Noble Eightfold Path, the finest summary of good conduct humanity has ever devised.

The Buddha refused to consider the world as the outcome of the caprice of some over-ruling being. It is a vast chain of causes and effects; everything that exists arises from a cause; every effect in turn gives rise to something more. He found the cause of sorrow and the remedy was easy.

He was a great philosopher; with Heraclitus of Greece, he perceived that transience is the badge of all our tribe—everything flows; there is no being but only becoming; no stop nor stay but only change. It is this change, this transience which makes all our sorrow, which, in its origin, gives rise to the whole world order where all things die and fade away. Happiness therefore must come to those who square their lives with the order of nature. They can practice goodness only, because badness is just living contrary to nature, and giving rise to that friction we call sorrow. If everything is fleeting, how foolish it is to attempt to grasp it, for it slips from our hands the very moment we clutch it. And self, that poison of all good things, that devil that makes hell for us, is but the illusion of enduring personality in a world of change. There is no room in the religion of the Buddha for selfishness; all life is one, and a wrong done to the meanest is a wrong to all.
And the Buddhist cardinal virtue—compassion. The Buddha came to break down sorrow, how
dare we inflict it? Causation reigns, we reap as
we sow, joy and beauty alone can come from in-
finite love. It is not hard to be kind; we have just
to realise that all living things seek happiness, and,
with a wide democracy, a large freedom, let us do
to other living things, not merely men and women, as
we would have them do to us.

There is a creed for Europe and America. No
credulity, no belief in miracles, no hell, damnation;
threats, nor burning, but sweet and gentle reason,
love, respect, sympathy, thought for others. No
inspired word is needed, no command of an angry
god, no revelation, no contradiction of scientific
truth, no violation of reason is found in the
religion of the Buddha. He is the flower of our
race, the finest blossom of humanity, the greatest
philosopher that ever lived, and we shall do right
in following him.

Some say his creed promises no heaven, that
Nirvana means extinction; what greater heaven,
what fuller life can we have if we do as he tells
us? Be good, be kind, be pure and thoughtful, and
it shall follow as the night the day that happiness
shall surely come.

When we look round upon our boasted pro-
gress and realise the hideous suffering hidden away
in slaughter-houses, prisons, asylums and hospitals
upon which it is based, we find it not hard to see
why twelve million of our sons were uselessly sacri-
ficed in a wicked quarrel. We have reaped as we
sowed and, unless we change our hearts, the same
thing will happen again; Buddhism alone can save us, for we can all believe it and no one dares to contradict its statements.

All good people must love the Buddha when they know him. The Christian lamenting the neglect of the Gospel, the Freethinker enraged at the unreason around him, the Social Reformer heartbroken by the cry of the poor—all of them will find Buddhism a friend and no enemy; we believe that it is the one thing we all need at this very time.

FRANCIS J. PAYNE.
Buddhism for the Beginner.

BY

THE BHIKKHU SILACARA.

Sabba papassa aharanan
Kusalassa upasampada
Sacittapariyodapanan
Etan Buddhahanasasanan.

To cease from all evil, to do good and to purify one's mind.—Such is the teaching of the Buddha.

The actual name of the founder of what is called in the West, Buddhism*, was Siddhattha Gotama—Siddhattha being his own individual name, and Gotama that of the clan or family to which he belonged. The word "Buddha"* means "Awakened," or "Enlightened"; hence the full name of the Buddha, in English, was "Siddhattha Gotama, the Enlightened One." How this Siddhattha Gotama came to be called "Enlightened," we are now going to tell.

It will be noticed that we do not say "Buddha" but "the Buddha." This is because the word "Buddha" is not a name like Jones

* Buddhism—pronounced Bood-hism.
the Buddha—pronounced Bood-ha.
or Atkinson, but a title like "the Conqueror" attached to the name of the first King William of England.

Prince Siddhattha was born about twenty-five hundred years ago as the son of the king of a small country in the north of India, somewhere about where Southern Nepal is now. At the time of his birth the wise men of the country said that all the signs showed that if he followed in his father's footsteps as king of the country he would become a very great ruler, or else, if he abandoned his claim to his father's throne and took to the religious life, then he would become a very great religious teacher. His father naturally wished to have his own son follow him on the throne, so he set about educating and training him in such a way as to make sure, so far as he could, that he would not become a man of religion but an ordinary man of the world.

To this end he gave him a good education in all manly exercises and sports, and also in all the book learning of the time, with the result that his son grew up a splendid, handsome, manly youth, able to hold his own with all comers in archery, wrestling and horsemanship, and was more skilled in arithmetic, grammar and philosophy than his instructors.

In his anxiety to keep his son's mind turned towards worldly, instead of religious life, the father did even more. He provided his son liberally with the means of enjoying all those pleasures of life such as young men everywhere delight in, and also tried to arrange
that his son should never see anything of an unpleasant nature that might set him thinking seriously about the world and life. So far as he could, he tried to arrange matters so that his son should never set eyes on any ugly, or ill, or decrepit, or old people, or ever see or hear of a corpse. Naturally he did not succeed. In the course of his movements about his father's city, in spite of all the precautions taken by that father, notwithstanding the strict orders given that no sick or lame or old people were to show themselves on the streets of the city on the days when his son went out for a drive, that son encountered the unpleasant sights which his father tried to keep from his knowledge, and was much astonished and shocked at the sight.

He began to ask many questions about what he had seen, and soon realised that the world at large was full of such unhappy, stricken people as he had chanced to see on the streets of his father's city. He began to think deeply about it, and to ask himself if there was no way of bringing such an unhappy state of affairs to an end, if there might not possibly be some way of curing men for ever of their liability to sickness and old age and, after that, death. For in one of his drives through the city he had also for the first time met a funeral procession. And this was the final shock that made him resolve to give up his right to his father's throne, and go out into the wide world as a wandering mendicant, of whom there were many in his day (and still are to-day), visiting all the religious teachers.
he could hear of, becoming their disciple, and trying to learn from them, if perchance they knew, how to bring to an end all the unhappiness from which, as he now knew, so many men suffered.

So one midnight, when his mind was made up, he rose from his bed, telling no one about it but one faithful body-servant, took a last look at his sleeping wife and child and, stripping off all his royal attire and jewellery, put on the rags of a beggar and went out into the world, a homeless wanderer.

He now spent a number of years wandering about, visiting, and becoming the obedient pupil of one religious teacher after another, trying to find out if any of them knew the way to getting rid of sickness, old age and death; but all without success. In following this course he subjected his body to great privations, reduced his food to the smallest possible quantity and on one occasion would have died of very weakness if a shepherd boy had not found him when he lay in a faint of exhaustion brought on by lack of proper nourishment, and forced into his mouth some milk from the goats he was tending. Then Siddhattha Gotama, the prince-beggar, resolved to take enough food into his body as would keep it in moderate health, to give up listening to what any teacher told him to do, and henceforth to rely only on himself and his own effort to find out what he was seeking.

In the course of his wanderings about the country he came to a pleasant, suitable looking place by the banks of a broad river where
is now the village of Buddha Gaya in Northern Bengal (present Behar), and there took up his quarters under a tall fig tree, begging what food he required in the village near by. Under this tree he sat thinking hard, pondering deeply and long, on all the ills of one kind and another that men had to endure, and trying also to see what is the fundamental cause why they have to suffer these ills, and how this cause might be brought to an end, abolished.

At last, one night, he saw what he had been searching for, the cause and the cure of unhappiness, of suffering. He obtained light at last on the problem that had tormented his mind for years. His mind was enlightened as to the cause of men's unhappiness, and as to how that cause might be removed. From that night onward he was no longer just Siddhattha Gotama; he was the Enlightened One, or, in his own native language, Gotama the Buddha.

After a few days of consideration of his great discovery, he went forth into the country round about, teaching and preaching wherever he went, about unhappiness and how it is to be got rid of. And this he kept up continually for the next forty-five years, till at length at the ripe old age of eighty, he died in the little town in Northern India to which he had wandered on foot only a short time before.

What was it, exactly, that he told people in the course of these forty-five years of wandering about on foot among them?

Like all the other teachers of his day and
time, he put what he wanted to say in a methodical, logical form; for the people of his country in those days were accustomed to have things put that way. They were clever, intelligent, thoughtful people who did not object to be given teaching which demanded some exertion on their part to seize and understand.

Well, this new teacher who had just begun to be a teacher himself after having been a pupil of others for more than seven years, began his teaching by saying that men are subject to unhappiness, to suffering, by the very fact that they are born. To be born, he said, is suffering. To live, he said, is suffering; for we do not always get what we want in life; or we get it, and it is taken away from us again; or else, we have forced upon us what we do not want but actually hate and loathe.

"But why do men who are born, suffer?" he next asked. And the answer he gave to this question, the answer he found out during his night of hard thought and meditation under the fig tree at Gaya, was this: men suffer, are unhappy, because they have desires, longings, attachments, for things that cannot lastingly satisfy these desires because they are always passing away. They are unhappy because they desire the things of this world which have no real, lasting substance in them.

So then, he went on to tell people, the only way to get rid of suffering and unhappiness and sorrow is to stop wanting and desiring these things that, just because they are tran-
sent and unsubstantial, cannot permanently satisfy our desires.

And lastly, he told how they could set about ceasing to desire these unsatisfying things of the world. He told them of the way he had found for bringing these pain-producing desires to an end. This last, of course, was really what he had spent so many years in search of, and what the people whom he talked to were most interested to learn, so that his Teaching was, and is, nearly always spoken of as a Way or Path. Moreover, it is generally called an Eightfold Path, because it has eight different divisions, or sections, or parts, which go to make up the whole.

The first division of this eightfold Way or Path to the ending of unhappiness and suffering and all ill conditions was, by the Buddha, called Right, or Correct, or Perfect, Understanding or Seeing. This Right Understanding, this Correct Seeing, means to see, to understand, what has just been said about unhappiness or suffering, namely, that there is unhappiness in the world, that it is caused by wanting what cannot permanently satisfy our wants, that it can only be removed by ceasing to want these unsatisfying things, and that there is a way—just the Way we are now considering—to bring that wanting of unsatisfying things to an end, and therefore to bring to an end the unhappiness caused by such wanting. These four things which the Buddha wanted men to understand or see are generally called “The Four Noble, or Superior Truths.”
The second division of the Buddha's way to end unhappiness we may call Right Mindedness, or a right attitude of mind towards life, an attitude of separation from it, of letting it go in our thoughts, of not clinging to it, such an attitude as naturally follows in any one who has clearly seen that it is full of what is transient and unsubstantial. This second section of the way to end unhappiness also means an attitude of good-will towards all other living beings (which includes every creature alive without any exception), and a desire to help, and never to harm, them.

The third division of the Buddha's great Way or Path is called Right Speech, and this means, the practice of speech that is true, and kindly, and courteous, and sensible, not frivolous.

The fourth division of the Buddha's Way is Right Action, and means that the person who follows it abstains from taking the life of any living being or creature, from stealing in any shape or form, from unlawful gratification of the sexual impulse, and from partaking of intoxicating or stupifying liquors or drugs.

The fifth division of the Path is called Right Effort. This is a section of the way which now means controlling the motions of the mind in addition to the deeds of the body. The man who follows, or tries to pursue, this part of the Buddha's way of abolishing unhappiness, has to make effort to prevent evil thoughts from obtaining lodgment in his mind, try to expel from his mind such evil thoughts as unhappily may already have found lodgment
there, endeavour to cause good thoughts to arise in his mind, and exert himself to increase and strengthen such good thoughts as happily may there be present already.

The seventh section of the Buddha's Path is what is called Right Recollectedness. This also, like the last section, is a right directing or using of the mind. It means, during the time that we are practising it, the fixing of one's whole attention upon what is happening in our bodies or in our minds, so that we know exactly what is taking place and pay attention to nothing else, and thus obtain a true, perfectly correct notion or mental picture of what is happening, see, perceive, that these happenings have no real, solid basis behind them but are just what they are called—happenings, events, occurrences, following one upon another in ceaseless procession, through the natural course of things, through the constant operation of the law of cause and effect.

The practice of this Right Recollectedness is considered very important for making successful progress on the path to the removal of unhappiness, for, if one practices it earnestly and assiduously, so as to gain what it is meant to bring to us, a deep, indelible conviction of the empty nature of all the happenings of our life, their emptiness of all that is worthy of being attached to, then, of necessity our minds cease to be attached to these things, and there follows that deliverance from suffering, from unhappiness, which we all wish to obtain. We obtain that deliverance which is the very thing the Buddha seeks to
show us how to obtain in showing us his whole Eightfold Path.

The eighth and last section of that Path is called Right Concentration. Again, this is a mental practice, and one that can only safely be practised by a person who has retired from worldly life and can devote all his strength to it in bringing his mind to a state where it turns itself entirely to the consideration of just one idea to the exclusion of everything else whatsoever. When this is done perfectly, the mind then slips into a state which is like nothing we experience in ordinary life, and so cannot be adequately described in any words that will give a correct idea of it to any one who has not himself experienced it. The essence of it, however, lies in this, that the man who reaches it, realises and knows beyond any manner of doubt that Mind is all that there is, that everything is made of mind; and knowing and realising this, he sees that when he has delivered the mind from suffering, he has delivered all from suffering. There is nothing more to do; he has reached Nibbana.

For this Nibbana—or, as it is sometimes called, Nirvana—is, in its true nature, nothing else but the final, total, complete ending of suffering or ill, such that it can never possibly arise again for the individual concerned. Hence, any man who has so completely got rid of all attachment of his mind to anything this world can give that he is simply no longer a self, even though he still lives on in his physical body,—such a man has Nibbana,
here and now. He is delivered from unhappiness for ever. He cannot be unhappy in his mind even though his body may be hurt. And after the death of his body, there comes what is called Pari-Nibbana; but what that is, it is useless to enquire. We can form no idea of what it is like any more than a fish can have any idea of what a bird's life is like, this latter being so unlike anything a creature that lives and breathes and has its being in water, can possibly know. It was to this Pari-Nibbana that the Buddha passed when his body died, and to which all who attain the Nibbana state of mind among us (if there are any), will pass when they die. But those of us who do not attain this Nibbana state of mind will be born into the world again and again, many times, until we do attain it, that is, until we learn to act and to speak and to control our minds by Right Effort and Recollectedness and Concentration to such a degree that we are able to loose them from all attachment to anything in this or in any other world. For, when at last we do that, then Nibbana comes of itself, as naturally and simply as when, if one empties to a state of vacuum a tube immersed in the sea, the sea forthwith rushes in and fills it with its own element. For Nibbana may quite correctly be thought of as a great sea surrounding us all, not far away, but quite near, touching us all the time like the air all about us, and only needing that we should empty ourselves of all that is contrary to its nature, of all that resists its entrance into us, whereupon, in it
BUDDHISM.

will come, in it will flow, and we shall actually BE Nibbana.

Perhaps the reader has been a trifle surprised and, it may be, even startled by a phrase that was used a few pages ago to the effect that men are born into this world again and again. Perhaps he never heard of such an idea before, and would be glad to hear a little more about it, would like to have some explanation of what it means.

It is the belief of all Buddhists and Hindus in the East, and has been an idea looked upon with favour by many eminent men in the West from Plato and Pythagoras in Ancient Greece down to Emerson and Whitman and Thoreau in America, and Browning, Wordsworth and Rossetti, the English poets, among many others less eminent in modern days, that our present birth is not our first one, but that, as Wordsworth expresses it in his great Ode on Intimations of Immortality, "our life's star hath had elsewhere its setting, and cometh from afar," or, in plain prose, that we have lived on earth before, and shall live on it again many times before we have finally finished our evolution and reached the threshold of our final departure from earth.

There are many reasons why people believe this doctrine of re-birth, as it is generally called, but here we may mention just two of them.

First: We find in the world many different kinds of men, of all stages of development and culture, from the lowest savage up to the most highly evolved men of the Aryan races of
East and West. It is clear that the savage cannot learn all he has to learn in order to become a civilised man such as is the average man of India or China or Europe, in his present lifetime; therefore it seems necessary that if he is to get the full benefit of all that this school of the world has to teach him, he should come back to it again a good many times, in the same way that a boy attending school has to return to it again through many days (and not to attend it for one day only), in order to learn all it can teach him, and in this way pass through all its classes before finally leaving it for a higher school, or for another sort of life altogether out in the broad world.

Second: We see that men are born with very widely different characters, and very various natural, inborn aptitudes. There must be a cause for this; it cannot just be chance. There is no such thing as chance in this world; everything has a cause. What is the cause of this?

Buddhists, and others who think like them, say it is because in previous lives on earth we have all developed to some extent the different characters we now bring with us into the world; and have practised and to some degree developed in former lives the native aptitudes for music or painting or poetry or mathematics, or whatever it may be (even if only a very ordinary faculty) of which we now find ourselves possessed without having done anything particular in this life to get them. Heredity does not explain this in-
born character and aptitude, because we are not, any of us, just a repetition of the characters and aptitudes of our fathers and mothers, but very often totally different, as is most strikingly evident in the history of great artists and thinkers, who in hardly any cases have great artists and thinkers for their progenitors. Neither does environment explain it. For such geniuses always show what is born in them (as also do lesser men), even in very unfavourable environments. They triumph over their environment, rise above it, when they are born with qualities of character and native aptitudes which do not find full scope in such environment.

"But if we have been born before, why do we not remember it?" is the question that immediately rises in everyone's mind when first he hears about this idea of re-birth.

The reply to this very natural question is, that our memory is not a very good one. We cannot remember everything with it. We cannot remember ever having been born yet we have been born; we can't deny it! We cannot remember our first attempts to absorb liquid nutriment, yet we certainly did make such attempts and succeeded, in those early days of our tender babyhood, else we should not be here now! And as our memory is not perfect enough in its working to recall these first happenings of this lifetime, so also it is not good enough in its working to recall the happenings of events in other lifetimes before this one. But, it is possible to improve its working so that it will recall those early days of
our present lifetime which we usually cannot remember, and also the events of previous lifetimes. The Buddha so developed his memory as to be able to do this; it was one of the things He did on the great night under the fig tree at Gaya when He became enlightened. And the same has been done by many other persons far, far below his stage of evolution and development, even by people now alive today. And so, one day, we shall all be able to do, when our spiritual evolution has gone far enough, as a simple, natural outcome of that evolution.

A further feature that may have surprised a little the reader of pages like these, introducing to his notice a religion, may be the absence of any reference to "God." But this omission does not mean that the Buddha denied the existence of beings possessed of greater powers of one kind and another than are human beings. It only means that He saw no reason to expect any efficient help from such beings in his task of finding freedom from unhappiness and suffering. He regarded all gods, even the very highest placed—named among his own countrymen, Mahābrāhma—as ultimately standing in as much need of obtaining deliverance from suffering as any human being. For He saw that their exalted positions of happiness and bliss were impermanent. He saw that however long they might last, they yet, some day, must come to an end, and that this ending would spell unhappiness, suffering. To the Buddha the gods were but fellow voyagers over life's sea, temporarily in
BUDDHISM.

a happy condition, but actually as far away from the shore of Nibbana, of lasting weal, as any mortal man, and needing to be instructed in the way to reach that shore quite as much as the humblest human being. That instruction He sought to give to them as well as to men; and accordingly one of his titles is "Teacher of gods and men."

Such—of necessity very briefly put—are the leading teachings of what is called Buddhism. The reader is not asked to believe them under penalty that if he refuse to do so, he will incur a horrible fate of never-ending torture after death. He is only asked to give them the fair, candid, unprejudiced consideration of his mind; and if, after such consideration, he finds that they are reasonable and, acted upon, are likely to make for his own and others' welfare, then he is asked to accept them and follow them in practical life, and so secure for himself and others the benefit which such following brings, here and now, and in whatever future may lie before him in this or in any other world.
SALUTATION TO THE BUDDHA, THE REFUGES AND THE FIVE PRECEPTS.

First part of the Buddhist Service in Pali and in its English equivalent.

Namo Tassa Bhagavato Arahato Samma Samuddhassa.
Namo Tassa Bhagavato Arahato Samma Samuddhassa.
Namo Tassa Bhagavato Arahato Samma Samuddhassa.
Honour to the Blessed One, the Holy One, All-wise!
Honour to the Blessed One, the Holy One, All-wise!
Honour to the Blessed One, the Holy One, All-wise!

Buddham saranam gacchami:
Dhammam saranam gacchami:
Sangham saranam gacchami:
Dutiyaṃ pī Buddhāṃ saranam gacchāmi:
Dutiyaṃ pī Dhammāṃ saranam gacchāmi:
Dutiyaṃ pī Sanghāṃ saranam gacchāmi:
Tatiyam pī Buddhāṃ saranam gacchāmi:
Tatiyam pī Dhammāṃ saranam gacchāmi:
Tatiyam pī Sanghāṃ saranam gacchāmi:

To the Buddha for Refuge I go:
To the Teaching for Refuge I go:
To the Order for Refuge I go.
Again, to the Buddha for Refuge I go:
Again, to the Teaching for Refuge I go:
Again, to the Order for Refuge I go.
Thirdly, to the Buddha for Refuge I go:
Thirdly, to the Teaching for Refuge I go:
Thirdly, to the Order for Refuge I go.

Pāriyāpāta veramani sikkhāpadam samādiyami.
Adinnadana veramani sikkhāpadam samādiyami.
Kamesu michchacara veramani sikkhāpadam samādiyami.
Musavada veramani sikkhāpadam samādiyami.
Sura-merra~maajja-pamadathana veramani sikkhāpadam samādiyami.

I undertake the precept from Killing to abstain:
I undertake the precept from Stealing to abstain:
I undertake the precept to abstain from Wicked Love:
I undertake the precept to abstain from Lying Words:
I undertake the precept to abstain from sloth-producing spirits, liquors, drink.
Inquirers would perhaps like to know how to obtain a good knowledge of Buddhism. The surest way is to read translations of the Sacred Books, as most handbooks in English are written by those who are either hostile or cold.

The Pali Scriptures of Ceylon, Burma and Siam contain the oldest, fullest and earliest account of the Teaching, and include hundreds of conversations of the Master himself. Translations from them are found in ten volumes of the Sacred Books of the East and the Sacred Books of the Buddhists, both series being published by the Oxford University Press. They are Vinaya Texts 3 vols., Buddhist Suttas, The Dhammapada and Sutta Nipata, and four volumes of Dialogues of the Buddha containing full versions of the 180 and more dialogues to be found in the so-called Digha and Majjhima (Longer and Medium Length) Nikayas.


Dr. Paul Carus’s Gospel of the Buddha, a cheap and delightful book, should be read by all, and no tract by Silācāra should be missed—they are many.

The late Professor Rhys Davids had the right rationalist view of Buddhism and was in the forefront of advanced Europeans. His Hibbert Lectures 1881 were a revelation; Buddhism,
S.P.C.K., the American Lectures, 1896, Buddhist India, 1902, and Early Buddhism, are all delightful reading; the last is cheap and good.

There is one book, The Questions of King Milinda, 2 vols., Sacred Books of the East, translated by Professor Rhys Davids, which is great. It was written about 100 B.C., to answer all queries about the Teaching.

The greatest Buddhist Commentator is Buddhaghosa, and his Path of Virtue is being issued by the Pali Text Society; it is the key to the philosophy.

Messrs. Kegan Paul's "Trubner's Oriental Series," contains several beautiful books such as Bigandet's Life of the Buddha, written in Burma, and Dr. Beal's translation of the Tibetan Udanavarga, similar to the Pali Dhammapada or Path of Virtue. Dr. Beal has compiled several books on Buddhism, especially of the Chinese School; they are all good, and his Catena or Chain of Scriptures from the Chinese is valuable and rare.

Dr. Dahlke's "Buddhist Essays" and "Buddhism and Science," translated by Mr. M'Kechnie, are of the right brand. Dr. Oldenberg's Buddha, His Life, Doctrine and Order, is sound and honest, and full of good translations. Alabaster's Wheel of the Law, very rare, gives a true account of Buddhism in Siam; Professor Narasu's Essence of Buddhism is just what an advanced British reader needs; The Wisdom of the Aryas, by the Bhikkhu Ananda Metteyya, is a work that gives a correct interpretation of the fundamental Teaching of the
Master. For the beginner the following books are recommended: Sir Edwin Arnold's immortal work *The Light of Asia*; *The Message of Buddhism* by Bhikkhu Subhadra; *Buddha and His Doctrine* by C. T. Strauss; and *The Soul of a People* by Fielding Hall.

Our revered director, the Anagarika Dhammapala, has published numerous tracts, and has run the Mahabodhi Journal for over 30 years. All his writings are capable and good.

Such of these works as are in print can be ordered through the Buddhist Book Agency, 41, Gloucester Road, Regents Park, London, N.W.1.
THE RELIGION OF REASON AND COMMON SENSE.

BUDDHIST MISSION IN ENGLAND.

THE BRITISH MAHA BODHI SOCIETY.

Annual Subscription, Five Shillings.
Life Membership, £5.

Bhikkhus in Charge:
The Ven. P. VAJIRANANA.
The Ven. H. NANDASARA.
The Ven. D. PANNASARA.

Patrons:
The Venerable the ANAGARIKA DHARMAPALA (Director General of the Mission).
Mrs. Mary E. FOSTER (of Honolulu).

President (Vacant).
Vice-Presidents:
Francis J. PAYNE, Esq.
B. L. BROUGHTON, Esq., M.A. (Oxon).
Dr. A. P. de ZOYSA, B.A., Ph.D. (Lond.).

Treasurer and Manager of the Buddhist Mission:
DEVAPRIYA WALISINHA, Esq.

General Secretary: Dr. E. M. WIJERAMA.

THE BRITISH MAHA BODHI SOCIETY has for its objects the extension of the knowledge of the tenets of Buddhism and the promotion of the study of Pali, in which the original Buddhist Scriptures are written.

MEMBERSHIP OF THE SOCIETY is open to all who accept its objects, but all who are interested in Buddhism are welcome at its meetings, which are held every Sunday evening at 5.30 p.m., at its headquarters at 41, Gloucester Road, Regent's Park, London, N.W.1.
STUDENTS' BUDDHIST ASSOCIATION OF GREAT BRITAIN AND IRELAND.

A meeting place for Buddhist Students and others interested in the Buddha Dhamma.

ANNUAL SUBSCRIPTION: 5 SHILLINGS.

For enrolment forms please apply:

The Secretary, Students' Buddhist Association,
41, Gloucester Road, Regents Park,

THE MAHA BODHI SOCIETY OF AMERICA,
148, West 49th Street, New York, U.S.A.

The Hon Secretary: K. Y. Kira, Esq.
THE RELIGION OF FREEDOM AND TOLERANCE.

THE MAHA BODHI SOCIETY OF CEYLON.

The oldest and most influential Buddhist Society of an international character.

Founder and President:
The VEN. THE ANAGARIKA DHARMAPALA.

General Secretary: E. S. JAYASINHA, ESQ.

Establishments:
Mahabodhi Mandira (Headquarters of the Society), Colombo, Ceylon.

Foster-Robinson Free Hospital, Colombo.

Mahabodhi College, Colombo.

Foster Buddhist Seminary, Kandy.

"SINHALA BUDDHAYA," the most powerful Sinhalese weekly, the organ of the Society. The best medium of advertising in Ceylon. For rates, apply to the Manager, "SINHALA BUDDAYA," P.O. Box No. 250; Colombo, Ceylon.
MAHA BODHI SOCIETY OF INDIA.

(Incorporated with the Mahabodhi Society of Ceylon).

Headquarters:
Sri Dharmarajika Vihara, 4a, College Square, Calcutta, India.

Founder:
The Ven. Anagarika Dharmapala.

President:
The Hon. Mr. Justice Mammatha Nath Mukherji, M.A., B.L.

Secretary: P. P. Siriwardene, Esq.

The Society desires the co-operation of Buddhists of all countries in completing the great building project of the Society—Mulagandhakuti Vihara, at Saranath, India. The Vihara is to be built on the spot where the Lord Buddha preached his first sermon. The estimated cost of the building is Rs.100,000.
THE MAHA BODHI.

The Journal of the Maha Bodhi Society, published at 4A, College Square, Calcutta, India.

The oldest Buddhist English monthly. News of Buddhist activities all over the world is a special feature of the magazine.

Annual Subscription:

India, Ceylon and Burma ........ Rs4
Europe ......................... 6s.
America ....................... 2s.
Japan and Far East .......... 4 yen

The Wesak Number, which will be issued in May, will contain several important articles by some of the most eminent Buddhist writers.

Price 1/6.

Copies may be obtained at the Buddhist Book Agency, 41, Gloucester Road, Regent's Park, London, N.W.1.
THE BUDDHIST SERVICE.—In the original Pali and in its English equivalent... 6d.

What Did the Lord Buddha Teach?—By the Anagarika Dharmapala... 4d.

Psychology of Progress.—By the Anagarika Dharmapala... 4d.

The Relation between Buddhism and Hinduism.—By the Anagarika Dharmapala... 4d.

The Repenting God of Horeb.—By the Anagarika Dharmapala... 4d.

Kamma.—By Bhikkhu Silacara... 6d.

Jataka Stories for Children.—By Miss A. C. Albers... 4d.

The Life of the Buddha for Children.—By Miss A. C. Albers... 4d.

Lure of the Cross.—By S. Haldar... 1/6
THE RELIGION OF REASON AND COMMON SENSE.

THE

BRITISH BUDDHIST

Monthly.

The Organ of the British Maha Bodhi Society.

Director:

THE VENERABLE THE ANAGARIKA DHARMAPALA.

Joint Editors:

MR. B. L. BROUGHTON and
MR. D. R. JAYAWARDENE.

A Journal of Buddhist brotherhood devoted to the Buddha Dhamma. It also contains articles of a general nature pertaining to History, Ethics, Archaeology, Philosophy and Literature.

Annual Subscription - 6 shillings.
Single Copy - - - 6 pence.
Some Truths About Opium

BY

HERBERT A. GILES, M.A.,
LL.D. (Aberd.)

Professor of Chinese in the
University of Cambridge

CAMBRIDGE
W. HEFFER & SONS LTD.

1923
LONDON AGENTS:—
SIMPKIN, MARSHALL, HAMILTON,
KENT & Co. Ltd.

Printed in Great Britain
Some Truths About Opium

[The following article was forwarded early in April to The Times for publication. I cannot say that I expected The Times to publish it, being as it is diametrically opposed to the policy advocated in that paper, though I thought there might be a chance of admission for the views of an opponent who lived many years in China and has perhaps made a more special study of Chinese social life than any member of the Conference. The editor, however, was good enough to return the article promptly, leaving me with no sense of grievance whatever.

Then, remembering that Sir James Knowles, for whom I had formerly written a number of articles of various kinds, was in the habit of giving both sides of a question, I sent along my paper to The XIX Century and After. The editor kept it for six weeks, until the Conference which I had hoped it would anticipate was well under way, and then returned it, too late for any other monthly, with regrets that he could not make use of my “interesting article”—
probably meant as editorial solatium—on the ground of too many contributions already in hand.]

The Opium Question being now once more to the front in the form of another Conference, it may not be unprofitable to recapitulate certain known facts and to bring out a few other important points which do not so far appear to have been noticed.

It is generally supposed that the vice of opium-smoking was introduced into China by the British East India Company, and was later on forced upon the Chinese people by the strength of the British empire. This view has lately been put forward in The Chinese Student for November, 1922, an excellent publication issued by young Chinese who are being educated in this country, and who are probably as unaware of the real history of opium in China as the ingenuous philanthropist who sends his guinea to swell the funds of the Anti-Opium Society. Thus it comes about that The Chinese Student boldly declares that "China has been far more sinned against than sinning," than which nothing could be further from the truth.
The "sleep-compelling poppy" (*Papaver somniferum*, L.) is called by the Chinese *ying-su jar-maize*; the first word referring to the shape of the capsule, the second to the seeds contained in it, and not, as stated below, to the slenderness of the stalk. There are several other ancient fancy-names, such as "rice-bag," "Imperial rice," and "grain-like." This poppy is not a native of Asia. It is said by Sir Ray Lankester to be a cultivated variety of *P. setigerum*, and to have been carried to the Far East from the Levant. It is not one of the eleven flowering plants recorded in the pre-Confucian Odes.

1.—The *ying-su* was first mentioned in Chinese literature by Kuo T'o-t'o, whose exact date is uncertain but may fairly be assigned, at the latest, to the 8th century of our era. He published a work *On Planting* in which there is a chapter headed "On Planting the Poppy." We are there told that "the poppy should be planted by night at the mid-autumn festival, in order to secure large flowers with capsules full of seeds."—What for?

2.—The next mention of the poppy comes from a writer, named Yung T'ao, with whom we are on firmer ground, for we know that he
graduated in A.D. 834. His contribution is in verse, and runs literally as follows:

The wanderer under distant skies
is quit of sorrow's gloom,
When on ahead he first descries
the poppy-flowers abloom.

It must be obvious that "poppy flowers" here stands for "poppy-fields."—Again, what for?

3.—In 973, the first Emperor of the Sung dynasty gave orders for the preparation of a new Herbarium, in which the poppy was inserted as a cure for dysentery.

4.—In the 11th century, Su Tung-p'o, the famous statesman and poet who flourished A.D. 1036–1101, wrote the following lines, which are here translated for the first time and are important as providing the earliest recognition of the narcotic value of the poppy.

PLANTING SHOOTS OF THE DRUG (sic)
I built a small house to the west of the city,
And stored it with pictures and books;
Around and about the window-frames
The pine and the bamboo spread out their shade.
I pulled up the thorns and cleared the ground,
In order to make good vegetables grow;
SOME TRUTHS ABOUT OPIUM

But my gardener said to me,
"The poppy is the plant to grow here.
Ying means small like a jar,
Su means slender like maize (see above).
It may be planted with wheat,
Or it will ripen with millet.
Its shoots do for a spring vegetable,
Its fruit may be compared with autumn grain.
Mashed to the consistency of cow's-milk,
Boiled to a divine gruel,
'Tis good for the weakness of old age,
When appetite for food and drink fails,
When meat cannot be digested,
And when vegetables lose their flavour.
Use a willow pestle and a stone bowl,
Mix with liquid honey, and simmer,
And it will be pleasant to the taste and good for
the throat,
Soothing the lungs and nourishing the stomach."
Then for three years I barred my door,
Having no occasion to go home.
There was an old Buddhist hermit,
And we used sit silent together
But when we had drunk a single cup of this gruel,
We would burst into happy laughter.
So that my visit to Ying-chou
Was just like a pleasure trip to Mt Lu.
SOME TRUTHS ABOUT OPIUM

In another poem by the same author, "The Poppy," a Buddhist priest advised a decoction of some species of thyme, adding that his boy could prepare a bowl of poppy-broth.

5.—The next mention of the poppy occurs in the poems of Hsieh K'o, whose date is circa A.D. 1120. One extract runs thus:

In our garden we crush the poppy-seeds,  
And make a broth which is better if mixed with honey;  
It is an elixir for want of appetite in middle-life;  
Why worry over cooking wretched rice-gruel?

6.—Another poet of the Sung dynasty A.D. 960–1260, Yang Wên-li, has some lines headed "The Poppy-Flower," referring to its seeds:

Birds twitter, bees hum, and butterflies flitter around,  
Vieing with one another in announcing God's summons to the Ruler of Flowers.  
The myrmidons of the Sun-God have no offerings to make,  
So they seek to borrow from the spring wind ten days' allowance of grain.

It is in a botanical work of the 12th century that we first hear of hashish, which however is only dealt with as a medicine. A romantic
novel of the 13th century has an account of a famous doctor (d. A.D. 220) who performed surgical operations on patients under the influence of hashish as an anaesthetic; and although there is no real evidence forthcoming of such achievements, the mere existence of the story makes it clear that at an early date the narcotic properties of hashish were well known in China.

7.—The poppy-flower is also mentioned by a wild spirit, named Feng Tzu-ch’èn, who flourished under the Mongol dynasty *circa* 1280:

Either with a frosted chrysanthemum in my cap,

Or a flaming poppy as a hat-pin.

8.—Under the Ming dynasty we have the famous eunuch, Cheng Ho, who conducted several naval expeditions, in 1412–15 reaching Ceylon where he set up a *stèle* which has recently been unearthed. The practice of opium-smoking is said to have been introduced by him, but this seems to be only a tradition.

9.—Lin Hung, *circa* A.D. 1426, has a note "On Poppy-juice Fish," which is prepared by carefully washing the seeds, straining and warming the juice, sprinkling it with vinegar,
forming it into lumps, and then cutting these up into flakes like fish-scales. Unfortunately, we are left to guess what is to be done with these scales when ready.

io.—Wang Shih-mou, who graduated in 1559, wrote among a number of other works Notes on Flowers in which after remarking that the poppy is second only to the white peony in luxuriance of bloom, remarks that it must be carefully cultivated (obviously for commercial purposes), and is beautiful only at a distance. He adds a point which was recorded, from hearsay only, by the present writer in 1875, and which was much disputed at the time, viz. that "the seeds of the poppy are liable to deprive a man of his virility," which can only mean that the poppy was well-known as a narcotic.

II.—We now come to the great Chinese Materia Medica, by Li Shih-chên, which was completed in 1578 and published towards the end of the 16th century. The author deals first with the plant (ying su), its colours, the shape of the capsule, its seeds, its various names, its medicinal properties, etc., of which the following are examples:—"Its tender shoots make a very tasty vegetable."—"The fine white seeds in the
capsule may be boiled and eaten with rice, or mashed with water may be strained and eaten with bean-curd.”—It is recommended for diabetes, cough and dysentery; “but though its efficacy is quickly felt, unless taken with caution it will kill a man as though with a sword.”—“It will cure dysentery like a god, but is very constipating, and will cause vomiting, on which account people are afraid to take it.”

Li Shih-chên deals separately with “opium,” properly so called, under the name of A-fu-yung, the first character of which, by a slight change of sound, he explains as “our,” the fu-yung being the hibiscus mutabilis; q.d. “our hisbiscus,” which he says was introduced from T’ien-fang, “the holy square,” the Kaaba at Mecca, now used for Arabia. But a-fu-yung is the Chinese equivalent of the Arabic afiyun opium. He also gives the name a-p’ien or ya-p’ien, which he is unable to explain. It is in use at the present day and is likewise regarded as a corruption of afiyun.

He goes on to describe the pricking and scraping the capsule, and gives a number of prescriptions for its use medically. “For dysentery or diarrhœa, take ⅔ part each of an ounce of opium, of putchuk, of coptis teeta, and
I2 SOME TRUTHS ABOUT OPIUM

of pai shu (not identified). Mash these and make with rice into pills about as big as a small bean, one to be given to an adult and half a one to old people or children.” — “Too frequent use for dysentery or blind piles will deprive a man of his virility.” He also notes that opium in the form of pills is largely sold at the capital as an aphrodisiac, but declares that this is only a trick of the quack doctor. This belief, however, is still prevalent.

12.—Two more writers of the Ming dynasty mention the poppy; Kao Lien of the 17th century as a beautiful flower, and Wang Hsiang-chin, circa 1640, as himself a cultivator of the plant. They do not use the term opium.

The reader is now fairly well in control of all the chief facts recorded about opium down to the beginning of the Manchu dynasty, A.D. 1644, and we may pass on to the British East India Company, the establishment of which in China cannot be assigned to any exact date, but the exclusive rights of which came to an end in 1834. However, it was in 1773 that the Company began to deal in small parcels of opium, the import of which had previously been in the hands of Portuguese merchants. In 1796 this trade was forbidden by the Chinese
Government; but prohibitions under the Manchus were always regarded by the people as matters of form (chū wên) rather than matters of law. Down to quite recent years, if not under the Republic, every incoming territorial magistrate made a point of issuing a stereotyped proclamation threatening the severest punishments to all scoundrels who might venture to open gambling-houses, opium dens, disorderly houses, etc., etc. Yet nothing ever happened, except transference of bullion or notes.

By 1820 the import of the drug had considerably increased, and in 1838 a more serious attempt was made to check the trade; not because of its immorality, but because of the larger and larger export of silver which began to alarm the authorities.

In 1839 a great patriot but a poor statesman, Lin Tse-hstü, was sent as Commissioner to Canton, with full powers and strict orders to bring the trade to an end. Lin opened his administration by the harmless policy of writing a long letter to Queen Victoria, in which he stated that “the ways of God are without partiality, and there is no sanction for injuring others in order to benefit oneself.” He went on to say that “as regards rhubarb, tea, the fine
raw silk of Chehkiang, and similar rich and valuable products of China, should foreign nations be deprived of them, they would be without the means of continuing life.” He then pointed out that “considering the powerful sway of the Celestial Court over its own subjects and barbarians alike, there would be no difficulty in at once taking the lives of offenders.” He would be satisfied with admonition only, provided the Queen would “immediately issue a mandate for the collection of all the opium, that the whole of it may be cast into the depths of the sea.” Then peace and prosperity for everybody.

Lin’s next step was to seize all the opium he could lay his hands on, to the amount of 20,291 chests. This he destroyed in public, on the 16th of June, by mixing it with water in large trenches dug for the purpose. Lin’s action was not an original idea of his own, nor the first attempt of the kind. In February, 1835, large quantities of opium had been seized under orders from the Viceroy and Governor, and instructions were given that it should be burnt on the Military Parade-ground. The burning, however, was not carried out in public; and all persons concerned, Chinese and foreigners alike, were well aware that the whole thing was a sham.
except for the profits reaped by the authorities concerned.

The so-called "Opium War" followed Lin’s action; not primarily *propter hoc*, as it has pleased many to assert, but *post hoc*, and also *post* and *propter* a long series of arbitrary and offensively tyrannical acts against the lives and properties of British merchants.

By the Treaty of Nanking, 1842, a fine of twenty-one millions of dollars in all was imposed on the Chinese Government; but the opium question was left in a state of flux, and so remained until England, this time with France, was forced into another war, ending with the capture of Peking in 1860 and the ratification of the Treaty of 1858, wherein the import of opium was legalized.

This legalization, the soundest step ever taken, and now again wisely put forward by Sir Francis Aglen, soon called into existence an anti-opium movement among a number of no doubt well-meaning persons, who however would have been much better employed in regularizing the drink question in their own country. It was led by a periodical called *The Friend of China* which in spite of the honesty of purpose of its supporters from a purely religious point of view, may now,
by the light of subsequent events, be regarded as perhaps the worst enemy that China has ever had.

Opium-smoking continued to be carried on, as always, under the nominal ban of the government and equally always with the connivance of officials, many of whom were habitual smokers, some in moderation and some to excess, just as we see in the case of alcohol. In fact, China which for many centuries had been an excessively drunken nation, had turned voluntarily to the quieter and much more harmless pleasures of opium. Against the exaggerated *ad captandum* statements of the Anti-Opium Society, based upon reports by missionaries, may be set the testimony of many distinguished men, diplomats, physicians, Consular officers, and others, who failed to see in the consumption of opium a curse as great as that of alcohol in England and America, and whose remarks on the subject are still available:—Sir R. Alcock, Sir E. Hornby, Dr. Ayres, Dr. P. Smith, Dr. Osgood, Sir John Davis, Editors of *Hongkong Daily Press*, *Shanghai Courier*, *N.-C. Daily News*, C. T. Gardner, C.M.G., Edward Yeates, F.R.C.S.I., Sir R. Hart, C. C. Clements, and many others.
Dr. James Watson, Customs Medical Officer at Newchang and an old resident in China, writes in his Report, 1877, which covers two years, about the various Chinese patients who have passed under his hands, as follows:—"All of them have been smoking opium for many years, but with the exception of ten per cent., the amount consumed was not greatly, occasionally not at all, increased from year to year. They were able to attend to their duties, were healthy and active, and enjoyed a good appetite. In reference to these, the ninety per cent, the conclusion I have come to is that opium, so far as I could see, did them no good, but it did not manifestly injure them."

One more opinion from a missionary. The Rev. F. Galpin refused in 1882 to sign the petition to the House of Commons against the importation of Indian opium into China and expressed his "disbelief of many of the statements contained therein." He said, "I beg to express my hearty dissent from the idea that the Chinese people or Government are really anxious to remove the abuse of opium. The remedy has always been, as it is now, in their own hands. Neither do I believe that if the importation of Indian opium ceased at once, the
Chinese Government would set about destroying a very fruitful means of revenue. On the contrary, I feel sure that the growth of Chinese opium would be increased forthwith.’’ And such indeed was the case.

In 1908, the Manchus made what purported to be a serious attempt to get rid of opium altogether. Anti-opium pills, which of course, contained morphia, were put on the market, with deadly effect; so that by 1909 we read in *The Daily Telegraph* (Jan. 1) of a “Cure worse than the Disease.” Also in the *London and China Telegraph* that “the Opium Abolition was, for a time, entirely genuine. The reform at present in the Capital is nothing but a farce.” Meanwhile, the Singapore Commission came to the sensible conclusion that “the question should be dealt with by increased control, and not by prohibition;” and at the same time Mr. R. Willis, Consul-General at Moukden drew attention to the increased use of morphia by subcutaneous injections, which threatened to become a worse evil than the disease it was intended to cure. It is curious to be able to note here that so far back as 1837 a missionary, no doubt with strictly honest intentions, actually suggested that “morphia
SOME TRUTHS ABOUT OPIUM

should be introduced as a substitute for crude opium.”

In 1910, a temple at Foochow was lent as a hospital for the cure of opium victims. Dr. G. Wilkinson says, in his March report, “Our oldest man was 78, and it might perhaps be remarked that there was not much point in his giving up the small quantity of opium that he had taken for 40 years.” Again, in The London and China Telegraph of 3 October, we read, “In this country the belief is almost general that every Chinaman is a confirmed opium-smoker, that opium dens, pestilent hotbeds of vice and depravity, are found thicker than our public-houses, whereas the truth is that not 3 per cent of the population ever smoke opium at all.”

In 1912, the newly-established Chinese Republic made a vigorous attempt to stop not only the import of opium but also opium-growing in China. There was a Conference of Powers at the Hague, initiated by the United States; and the wisest of all the Powers invited seems to have been Turkey, who flatly declined to attend. In wisdom, at any rate, this country came a good second; for we read in The Times of 11 Dec., 1911, that “the British
Government, in accepting the invitation, expressed its conviction that the illicit traffic in morphine and cocaine in India, China, and other Far Eastern countries is becoming an evil worse than opium-smoking, and that this evil is certain to increase as restrictions on the production and use of opium in India and China become more stringent."

There is no doubt that under the Republic a great effort was made, but by extremely violent measures, which never succeed in the long run. Mr Choy Loy, Official Interpreter, Central Criminal Court, London, declared that "Dr Sun Yat sen, the first President to be elected, made the taking of opium an offence punishable with death. And since then thousands have gone to their last account. The form of death in such cases is shooting, and often, in Canton, I have seen victims of the curse placed against the wall and shot by a firing-party."

At a meeting on 19 April, 1917, the archbishop of Canterbury was sanguine enough to say in a letter, "One hears on all sides expressions of genuine thankfulness for what has been accomplished. A burden of anxiety, and to some extent of national self-reproach, has now been rolled away." But against the archbishop's
most unjust accusation of national reproach may be set the facts here given, while against his premature exultation there rises up always the well-worn Horatian tag: "You may drive out nature with a pitchfork, yet she will always come back."—And she has.

In December, 1918, "Indian opium to the value of $16,000 was seized on board the Chinese Customs Revenue cruiser on which Sir Francis [Inspector-General of Maritime Customs] and Lady Aglen were returning to Shanghai from a visit of inspection to the southern ports (Times, 3 Jan. 1919)." In the same issue we read, "Recent revelations show that the Japanese, ever since Great Britain abolished the export of Indian opium to China, have been driving a roaring trade in the drug. Opium is also extensively cultivated in Korea. Meanwhile cultivation in China is increasing by leaps and bounds in most of the provinces. In Kweichow the Provincial Assembly officially permits cultivation (see below)."

The import of opium through the Japanese-controlled ports of Dairen and Tsingtao fell from 333 piculs in 1918 to 156 piculs in 1919; and in the former year 1200 chests of Indian opium, valued at 24,000,000 taels, are said to
have been publicly burnt by the Chinese Government, while the poppy flourished over large tracts of the country and the trade in and the use of the drug showed every sign of reviving (Maritime Customs Report).

In April, 1919, Dr Wu Lien-teh, the eminent physician, openly stated at an anti-opium meeting in Peking that no less than eighteen tons of morphia was coming annually into China (28 tons in 1919), most of it to be distributed by Japanese agents. The Peking correspondent of The Times in the issue of 27 March, 1920, says, "Official records show that during the first 10 months of 1919 there was imported into America 250 tons of crude opium, which represents 35 tons of morphia, and other noxious drugs;" and one ton being "sufficient for the annual medicinal needs of all the Americans from Alaska to Patagonia, it is notorious that practically the whole of the opium entering America reaches China in one form or another." The International Anti-Opium Association placed the total importation of morphia into China during 1919 at 1,000,000 ounces. Meanwhile, the Provincial Government of the Province of Kweichow had publicly authorized the cultivation of opium for the
year 1919, the revenue of the previous year having amounted to no less than $1,700,000.

"In the spring of 1919 the writer travelled for days through districts in Western Szechuan, where the cultivation of opium had previously been completely eradicated, without ever being out of sight of the countless fields of red and white poppy in full bloom (E. Teichman's Travels of a Consular Officer in North-West China)." During this same year, according to a statement made by Mr Basil Mathews and published by the League of Nations Union, enough morphine was smuggled into China to give at least three hypodermic injections to every man, woman and child of China's 400,000,000 population.

In October, 1922, the Contemporary Review published a striking article by "A Wandering Naturalist," a few extracts from which will not be out of place. This is how prohibition is described.—"A tyrant Government, having issued its decree, gave no further warning; China from the sea to Tibet, trembled and obeyed. Woe to that man who did not! Crops were uprooted and trampled on; men were beaten senseless by the roadside in the midst of their ruined fields; the job was done with a
savage thoroughness which defies parallel." It was magnificent, said "A Wandering Naturalist," but it was not statesmanship. In this connexion may be mentioned the telegram from K'ai-yüan Fu which reported that "sixty persons were killed and many more injured as the result of a collision between the military and farmers in the province of Shansi, arising out of the drastic measures taken by the Chinese Government to prevent the recultivation of opium." The Wanderer continues: "Opium had scarcely been suppressed when conditions for its reintroduction were firmly established. They all smoke now—the merchant, the scholar, the mandarin, the farmer, the muleteer—every one. The relapse is complete." Also this: "There are millions of people in Asia who demand opium, and until individual persons can be taught to see the folly of their own vice there will always be other people to supply it—for a consideration."

On December 30, 1922, the general secretary of the International Anti-Opium Association is said to have witnessed the destruction by fire, at the Temple of Agriculture, Peking, of opium, morphia, pipes, lamps, etc., to a huge amount, greatly exceeding all previous burnings of the
year, and valued at over $200,000. And now comes the deadly fact that the amount of opium therein was small, and that the great bulk of the stuff consisted of morphia, morphia pills, heroin, etc., in consequence of which no fewer than 1856 persons were arrested.

Now morphia is admittedly several times more noxious than opium, and cocaine many times more noxious than either; so that it may be logically concluded that this present state of China is worse than the first, especially as no one who has any real acquaintance with China and the Chinese will believe for a moment that prohibition is ever likely to succeed.

The following last straw may perhaps break a back that is even more obstinate than the camel's.

1923. Dr. Aspland, secretary of the International Anti-Opium Society of Peking, reports that the growth of the poppy is rapidly increasing in all directions. "Little or nothing is being done to limit production, despite Government protestations on the subject." He goes on to state that the Chinese Government is now contemplating an opium monopoly, as the only means of raising funds, disbanding the large provincial armies, and saving the country.
Bribery is rampant. "A member of the Maritime Customs service was recently offered $100,000 to connive at a big deal, and a few weeks ago a Chinese tidewaiter, on refusing to pass opium, had his twelve-year-old boy kidnapped; and only by the Customs paying a big ransom was the child's life saved." Further, "in the province of Fukien, a province which last year was practically free from poppy, taxes are now levied on poppy cultivation and fine collected from those who refuse to plant."

Archdeacon Phillips, of Kienning, says that "opium is now unblushingly sowed everywhere," and that inside a building "I noticed a number of people smoking, although the outside of the building had a proclamation recently posted forbidding it."

The Foochow branch of the International Anti-Opium Association stated to the foreign Consuls that from "two districts in southern Fukien, the military authorities plan to raise no less than fifteen million dollars from opium taxes alone. It is also a matter of common knowledge that the five hospitals for 'curing the opium habit' which have recently been established in Foochow by the head of the
Opium Suppression Bureau are really facilitating the sale and consumption of opium.”

At a meeting of the Central Asian Society on March 8, Mr A. Jelf, a member of the F.M.S. Civil Service, who had worked in British Malaya and claimed to understand the Chinese, said that he did not agree with many of the present-day remarks about opium. Nearly all the Chinese he knew smoked opium, and he would prefer an opium-smoking Chinaman to a brandy- or stout-drinking one.

A correspondent in China of The China Express and Telegraph (March 15) writes as follows: “The opium situation demonstrates the absurdity of convening a conference to discuss the abolition of Consular jurisdiction. The only persons violating opium laws who are prosecuted under the stringent Criminal Code are the hapless Russians (amenable to Chinese jurisdiction), the whole of the Chinese militarists dealing in the drug by the ton.”

[Sir John Jordan now writes in The Times, as follows:—“Prohibition and State regulation of opium are both ineffective under present conditions in China. The only effective remedy lies in the elimination of militarism, which is responsible for the revival of the cultivation.” But this
“elimination” implies nothing less than the reduction of the independent Tu-chuns and the unification once more of China. Who is to accomplish these feats? The only suggestion given is that “Chinese chambers of commerce have already started a movement for the removal of this incubus, and have solicited the co-operation of their foreign friends in the attainment of several items in their programme.” Any more shadowy plan of action it is difficult to conceive.

Nor does the Conference, so far as it has gone, seem to have achieved anything more practicable or even more definite.

“Bishop Brent, the U.S. delegate, strongly attacked India’s policy respecting opium”—a stick which has often been applied before to the rump of the British Lion—and proceeded to show how well things have been done since 1898 in the Philippines. He completely gave his case away when he went on to say that “the measures adopted by the U.S. Government against opium-smoking were still in operation, but that it would be necessary to come to some agreement with other countries in order to suppress the traffic entirely.” If America can fail in an insignificant dominion, how can this
Conference be expected to succeed in a country as big as Europe to which her rule does not extend? The bishop further received an awkward blow from Sir John Campbell, the Indian delegate, who "drew attention to figures" in the report, showing that while India in 1920 exported 8,000 kilos of raw opium to Formosa, 88,000 kilos reached Formosa from the United States," a fact which Bishop Brent had to admit.

In The China Express and Telegraph (June 7), we read that Sir Malcolm Delevingne suggested the following:—

(1) Suppression of the system of leases and the constitution of a monopoly; (2) Sale of opium in the warehouses of the State; (3) Limitation of the quantities of prepared opium offered for sale; (4) Examination of the registration and licensing régime already introduced in certain colonies in the Far East; (5) Unification of the price of opium; (6) Unification of penalties for infraction of the opium laws; (7) An international agreement for the application of the above measures; (8) A periodical study of the situation.

Does anyone who knows China believe for a moment that these proposals could be carried out?

Here is another extract, not the only one
which shows that unanimity is by no means the rule of the Conference:—

Acting on the proposal of M. Bourgeois, French representative, the Commission rejected by 4 votes (Germany, China, France, Holland) to three (Great Britain, India, Japan) Article 3, which runs as follow: "It is recognised that it is for the Government of each State to decide what is and what is not to be regarded as medicinal or scientific employment of these drugs within its own borders."

The discussion was then adjourned at the request of Sir Malcolm DeJevingue, who desired an opportunity of considering the situation, as the vote on Article 3 had changed the sense of his motion.

The ultimate outcome of this Conference, no matter what measures may be adopted, or with what penalties for infraction, it is not difficult to foresee. Meanwhile, the net results up to the present moment of Chinese and foreign efforts to deliver China from the greatly exaggerated curse of opium have been (1) to increase enormously the area of poppy-growing in the various provinces concerned—see last mail’s advices:—

A huge opium harvest is reported between Wanhsien and Chungking. There will be a tremendous export this spring from Szechuan. And (2) to flood the country with morphia, cocaine, heroin, etc., which are admittedly more deadly still. Thus, all the money collected and
spent by the Anti-Opium Society since its foundation about fifty years ago might as well have been thrown into the sea. Just now, it would be lamentable to see further sums expended in this direction when so much remains to be done at home for starving ex-officers, for housing the poor, for the care of the deaf and dumb and blind, for prevention of cruelty to children and animals, and even for matters of lesser importance, the preservation of the "Victory" and of our ancient buildings, etc., etc.

From The China Express and Telegraph (June 14):—

The former Chinese Premier, Wang Chung-hui, speaking to Reuter's correspondent in Paris, said that China's attitude, as upheld at Geneva by Mr. Chu, was that, though China fully shared in the desire of the Western Powers to suppress the illegitimate production and consumption of the drug, such suppression was an internal question with which China should deal herself. International interference would be misinterpreted by public opinion in China. The provinces where the poppy was cultivated were those outside the Central Government's control. As soon as all China was united under the Central Government (Dr. Wang is optimistic enough to speak of union as within the bounds of practical politics) the suppression of the drug throughout the country would follow.
Mr. Campbell explained the difficulties created by the position of China, where opium is being grown to a wholly unprecedented extent. Turkey and Persia, he said, must be brought within The Hague Convention, or the attempt to control the supply of raw opium must inevitably fail. Similarly it was essential that Switzerland should join the Convention, seeing that that country is one of the most important centres in the world of the drug traffic. "If," he said, in conclusion, "The Hague Convention is honestly and efficiently enforced today, the opium problem will be solved to-morrow."

Sir John Jordan, interviewed, said: "India used to export about 100,000 chests a year, mostly to China; now her exports are 8,000 chests, almost exclusively to the East Indies. She is prepared to reduce this if there is a reduced consumption; and if a progressive reduction over a period of ten or twenty years is provided for we have in view the disappearance of the Indian side of the problem. China is producing hundreds of tons of opium, and it looks almost as though she were going back to the old, bad state of affairs before the suppression of opium by agreement with India was brought about."

Surely, then, in the matter of narcotics or intoxicants, judging from past experience, it would have been and would still be better to leave China to work out her own salvation, which she has always been able to do to her own complete satisfaction for so many centuries past. If she prohibits or regularizes the
importation of any drug, it is for her and not for us to take the necessary measures against smuggling. That course, at any rate, would leave leisure to well-meaning but misguided philanthropists to devote more attention and funds to the needs and regeneration of their own fellow-countrymen.
Opium Smoking

[From The Shanghai Evening Gazette, 14 Jan., 1875, and republished in Chinese Sketches, 1876. Written after seven years in China.]

Many writers on Chinese topics delight to dwell upon the slow but sure destruction of morals, manners, and men, which is being gradually effected throughout the Empire by the terrible agency of opium. Harrowing pictures are drawn of once well-to-do and happy districts which have been reduced to know the miseries of disease and poverty by indulgence in the fatal drug. The plague itself could not decimate so quickly, or war leave half the desolation in its track, as we are told is the immediate result of forgetting for a few short moments the cares of life in the enjoyment of a pipe of opium. To such an extent is this language used, that strangers arriving in China expect to see nothing less than the stern reality of all the horrors they have heard described; and they are astonished at the busy, noisy sight of a Chinese town, the contented, peaceful look of China's villagers, and the rich crops which are so readily yielded to her husbandmen by many an acre of
incomparable soil. Where, then, is this scourge of which men speak? Evidently not in the highways, the haunts of commerce, or in the quiet repose of far-off agricultural hamlets. Bent on search, and probably determined to discover something, our seeker after truth is finally conducted to an opium den, one of those miserable hells upon earth common to every large city on the globe. Here he beholds the vice in all its hideousness; the gambler, the thief, the beggar, and such outcasts from the social circle, meet here to worship the god who grants a short nepenthe from suffering and woe. This, then, is China, and travellers' tales are but too true. A great nation has fallen a prey to the insidious drug, and her utter annihilation is but an affair of time!

We confess, however, we have looked for these signs in vain; but our patience has been rewarded by the elucidation of facts which have led us to brighter conclusions than those so generally accepted. We have not judged China as a nation from the inspection of a few low opium-shops, or from the half-dozen extreme cases of which we may have been personally cognisant, or which we may have gleaned from the reports of medical missionaries.
in charge of hospitals for native patients. We do not deny that opium is a curse, in so far as a large number of persons would be better without it; but comparing its use as a stimulant with that of alcoholic liquors in the West, we are bound to admit that the comparison is very much to the disadvantage of the latter. Where opium kills its hundreds, gin counts its victims by thousands; and the appalling scenes of drunkenness so common to a European city are of the rarest occurrence in China. In a country where the power of corporal punishment is placed by law in the hands of the husband, wife-beating is unknown; and in a country where an ardent spirit can be supplied to the people at a low price, delirium tremens is an untranslatable term. Who ever sees in China a tipsy man reeling about a crowded thoroughfare, or lying with his head in a ditch by the side of some country road? The Chinese people are naturally sober, peaceful, and industrious; they fly from intoxicating, quarrelsome sam-shoo, to the more congenial opium-pipe, which soothes the weary brain, induces sleep, and invigorates the tired body.

In point of fact, we have failed to find but a tithe of that real vice which cuts short so many
brilliant careers among men who, with all the advantages of education and refinement, are euphemistically spoken of as addicted to the habit of “lifting their little fingers.” Few Chinamen seem really to love wine, and opium, by its very price, is beyond the reach of the blue-coated masses. In some parts, especially in Formosa, a great quantity is smoked by the well-paid chair-coolies, to enable them to perform the prodigies of endurance so often required of them. Two of these fellows will carry an ordinary Chinaman, with his box of clothes, thirty miles in from eight to ten hours on the hottest days in summer. They travel between five and six miles an hour, and on coming to a stage, pass without a moment’s delay to the place where food and opium are awaiting their arrival. After smoking their allowance and snatching as much rest as the traveller will permit, they start once more upon the road; and the occupant of the chair cannot fail to perceive the lightness and elasticity of their tread, as compared with the dull, tired gait of half an hour before. They die early, of course; but we have trades in civilised England in which a man thirty-six years of age is pointed at as a patriarch.
It is also commonly stated that a man who has once begun opium can never leave it off. This is an entire fallacy. There is a certain point up to which a smoker may go with impunity, and beyond which he becomes a lost man in so far as he is unable ever to give up the practice. Chinamen ask if an opium-smoker has the yin or not; meaning thereby, has he gradually increased his doses of opium until he has established a craving for the drug, or is he still a free man to give it up without endangering his health. Hundreds and thousands stop short of the yin; a few, leaving it far behind them in their suicidal career, hurry on to premature old age and death. Further, from one point of view, opium-smoking is a more self-regarding vice than drunkenness, which entails gout and other evils upon the third and fourth generation. Posterity can suffer little or nothing at the hands of the opium-smoker, for to the inveterate smoker all chance of posterity is denied. This very important result will always act as an efficient check upon an inordinately extensive use of the drug in China, where children are regarded as the greatest treasures life has to give, and blessed is he that has his quiver full.
Indulgence in opium is, moreover, supposed to blunt the moral feelings of those who indulge; and to a certain extent this is true. If your servant smokes opium, dismiss him with as little compunction as you would a drunken coachman; for he can no longer be trusted. His wages being probably insufficient to supply him with his pipe and leave a balance for family expenses, he will be driven to squeeze more than usual, and probably to steal. But to get rid of a writer or a clerk merely because he is a smoker, however moderate, would be much the same as dismissing an employé for the heinous offence of drinking two glasses of beer and a glass of sherry at his dinner-time. An opium-smoker may be a man of exemplary habits, never even fuddled, still less stupefied. He may take his pipe because he likes it, or because it agrees with him; but it does not follow that he must necessarily make himself, even for the time being, incapable of doing business. Wine and moonlight were formerly considered indispensables by Chinese bards; without them, no inspiration, no poetic fire. The modern poetaster who pens a chaste ode to his mistress's eyebrow, seeks in the opium-pipe that flow of burning thoughts which his forefathers drained from the
wine-cup. We cannot see that he does wrong. We believe firmly that a moderate use of the drug is attended with no dangerous results; and that moderation in all kinds of eating, drinking, and smoking, is just as common a virtue in China as in England or anywhere else.

[In the above view I had not wavered when I left China at the end of 1892, after many years of free intercourse with the people, as well as with officials.]
A SHORT HISTORY
OF THE
BRITISH EMPIRE
A Magazine for Worker Students

THE PLEBS

Edited by J. F. HORRABIN
and J. P. M. MILLAR.

Articles on historical and geographical subjects,
and on current working-class problems.
Book Reviews, &c.

Monthly, 4d. (post paid, 5d.)
12 months' Postal Sub., 5/-

N.C.L.C. PUBLISHING SOCIETY,
15 South Hill Park Gardens,
London, N.W.3.
A SHORT HISTORY
OF THE
BRITISH
EMPIRE

By
J. F. HORRABIN,
Author of "An Outline of Economic Geography,"

N.C.L.C. PUBLISHING SOCIETY
(Incorporating Plebs Publications),
15 SOUTH HILL PARK GARDENS, HAMPSTEAD,
LONDON, N.W.3.
AUTHOR'S NOTE

I AM indebted to the members of the N.C.L.C. Publications' Committee for many suggestions as to the treatment and detail of this book; and especially to my friends F. J. Adkins, M.A., and T. A. Jackson for valuable help with the earlier chapters.

It is hoped to follow up this little book with one dealing with the outstanding problems of the Empire to-day.

J. F. H.
CONTENTS

CHAP. PAGE

I  THE ADVENTURERS  (1400-1600)  9
II  TRADERS AND COLONISTS  (1600-1680)  26
III  EXPANSION BY CONQUEST  (1680-1788)  40
IV  CONSOLIDATION  (1788-1880)  56
V  THE NEW IMPERIALISM  (1880-1929)  74

Notes on Reading  ...  ...  ...  ...  89
Chronological Table  ...  ...  ...  ...  90

MAPS

First English Overseas Voyages  ...  ...  20
British Acquisitions by end of 17th Century  37
British Gains in India under Clive  ...  ...  44
The British Empire, 1815-1919  ...  ...  67
The Scramble for Africa: Britain’s Gains  ...  81
A SHORT HISTORY OF THE
BRITISH EMPIRE

CHAPTER I

THE ADVENTURERS*

(A.D. 1400-1600)

The lot is fallen unto me in a fair ground;
yea, I have a goodly heritage.
Psalm XVI.

BRITISH workers, worried by wage-cuts, short time or the fear of unemployment, are ever and anon reminded by a kindly Press that they are citizens of the mightiest Empire the world has ever seen. This, of course, is a very great consolation. Unfortunately, only a few workers derive all the comfort possible from this consideration, because the great majority too seldom give a thought to the Empire—what exactly it is, and how it has grown up; and they are therefore unable to realise to the full how fortunate they are to be, even in a humble way, connected with it.

It is to try and remedy this state of affairs that this book has been written. You cannot enjoy to the full the pride and privileges of citizenship without some knowledge of the history of the State, or family of States, of which you are a citizen. Still less can

---

*Adventurer. One who seeks adventure; soldier of fortune; speculator. (Oxford Dictionary).
you exercise any of the rights of citizenship, including
the right to insist that this, that or the other thing
should be "done about it."

This book, then, traces shortly and simply the
history of the growth of the British Empire, down
to the present day; with a view to providing for
British workers, in a not too bulky form, the essential
facts about their goodly heritage.

Great moral results sometimes have their origins
in quite material things. There might never have
been a British Empire, with all that that Empire
means to black, brown and yellow peoples in other
parts of the world, had not (i) the English Crown
needed money, and (ii) the money-lenders and mer­
chants of certain growing English towns wanted to
secure for themselves the trade previously carried
on in England by foreigners. (Workers especially
should note these facts, in order to realise the debt
of gratitude they owe to other classes).

Civilisation is some 7000 years old. Yet less
than 400 years ago there was no British Empire.
So the first fact to note about the Empire is that its
origins and its growth are matters of comparatively
recent history.

Five centuries ago Britain, like other countries of
Western Europe, was undergoing a series of social
changes—a more or less peaceful revolution, in fact.
The old feudal order of society was giving place to
one of a more modern kind. The power of the
lords (land lords) was being challenged by the burghers
of the towns.* The monarchs, who had felt their

* For a full description of this process, read Chapter I.
of An Outline of European History. (Plebs Textbooks,
N.C.L.C., 2/6).
own power threatened by that of the lords, favoured the burghers—granted them charters and so forth, and borrowed their money. These burghers, beginning as small master-handicraftsmen—weavers, etc.—had grown to be wealthy merchants; themselves doing business with the master-weavers who in their turn exploited (i.e., found employment for) their workmen and apprentices.

A.D. 1400-1500

Now, before the year 1400, this process had gone a great deal further on the continent, especially in Flanders and the Netherlands, than it had done in England. The Dutch, Flemish, and North German merchants had banded themselves together into a Hansa, a League for foreign trade, and had set up trading-posts all over Northern Europe, from Novgorod in Russia to London in the British Isles. England at this time, so far from being the mistress of an Empire, was herself a sort of colonial possession of these foreign merchants—a source of raw materials, especially wool, and a market for certain commodities. But as English merchants, backed by their kings, grew more powerful, they set themselves to secure this trade for themselves. There was no Empire Marketing Board in those days, and no printing; or English towns might have been made gay with posters urging the people to "Buy from English Merchants" or "Support Home Traders." But though they had not modern methods of publicity to help them, the English merchants succeeded eventually not only in pushing the merchants of the Hansa out of Britain, but in challenging the Hansa's monopoly abroad, in the trade of the whole North Sea area.

In 1407 a national company was formed, under the title of the Merchant Adventurers. The members
of this Company were the pioneers in that long struggle for foreign trade out of which grew the British Empire. The Crown itself increasingly depended on this and similar Companies, by way both of loans and taxes, for the money without which even kings cannot carry on efficiently. All through the fourteen-hundreds the merchants went on building and sending out ships to the Mediterranean and the Baltic. Before the century ended, the destruction of the power of the old feudal nobles had been finally registered by the accession to the throne of the first of the Tudors, the family of monarchs which relied for its support upon the new merchant class.

Geographical Factors

Other events, of even greater importance both to the world in general and Britain in particular, had happened before the close of this same century—the opening-up of the ocean route to Asia, and the discovery of America. A Portuguese explorer, Vasco da Gama, had (1498) "rounded the Cape"; that is, discovered that there was a sea-way round the southern end of Africa to India and the East. (Before the voyages of the Portuguese sailors, who had for half-a-century previously been creeping further and further down the West Coast of Africa, the southern edge of the world was the Sahara Desert). Five years earlier, the Genoese sailor, Christopher Columbus, subsidised by the King of Spain,* had sailed westward across the Atlantic in an attempt to reach the Indies by "the other way round"; and

*Some historians say that Columbus first offered his services, through his brother, to King Henry VII of England, but that Henry, who was not of a speculative disposition, turned down the proposal. According to other versions "the offer miscarried."
THE ADVENTURERS

had discovered the islands which were named the West Indies.

These two voyages opened a new chapter in the history of the world.* Previously, civilisation had centred chiefly around the Mediterranean, and had only gradually spread northwards and westwards to the outlying parts of Europe. Now it was discovered that sea-ways lay open to the farthest parts of the globe. And the countries of Northern and Western Europe—Spain, Portugal, France, the Netherlands and England—found themselves in a position of geographical advantage, with coasts and ports on the open ocean which led to the new worlds overseas.

Hitherto, England had lain on the outer edge of civilisation, far removed from the chief centres of art and industry, trade and commerce (much, say, as Australia is situated to-day). She had always been linked with the continent of Europe—by Roman or barbarian invasions, Norman conquests, semi-French kings with estates in France, or merchant-traders carrying her wool to the markets of Flanders. Till Tudor times indeed, as Professor Mackinder has pointed out, London and the south of England were much more closely linked with Flanders and the cities of the Hansa than with Scotland, Wales or Ireland. But Britain's internal history had been a very local affair, and her importance in the world was small. Not indeed until Portuguese and Genoese sailors opened the way for them could her merchants get on with their historic mission of carrying Christian civilisation to the ends of the earth. We see, therefore, that even "foreigners" have their place in the great scheme of things.

* For fuller discussion of their importance read Chapter IV of An Outline of Economic Geography. (Plebs Textbooks, N.C.L.C., 2/6).
First Ocean Voyages

The English merchants were not slow to see and to use the opportunity which the opening of the ocean routes gave them. Very quickly the power and prestige of the Hansa began to fade. The trade of the Baltic and North Sea area was insignificant compared with the possibilities of the new routes East and West. Already, before da Gama had reached the Cape of Good Hope, English merchants had planned a voyage, on the heels of the Portuguese explorers, to Guinea, on the West African coast, but their plans were blocked by Portugal's opposition. Four years after Columbus' first voyage—and while men still thought his islands to be outlying parts of Asia, knowing nothing of the great continents of North and South America lying between the Atlantic and the further ocean—John Cabot, of Bristol (but of Genoese birth and a Venetian citizen) obtained for himself and his three sons a licence from King Henry VII of England, first of the Tudors, empowering him "to discover unknown lands under the King's banner," his Majesty to take a fifth of the profits. The expedition, in fact, was typical of the new social order. It was planned and financed by merchants "upon their own proper costs and charges." The King gave his sanction and permitted the use of the Royal flag, in return for a share of the proceeds. We thus have an early example of the friendly relations between the Crown and private capitalist enterprise which was to have such important results for Britain and the rest of the world.

Cabot sailed from Bristol in 1497 on the first British transatlantic voyage, sighting in June of that year some part of the North American coast—probably Newfoundland or Cape Breton. A second voyage followed a year later. The British, therefore, had "discovered" North America. But it should be noted
THE ADVENTURERS

that they did it under the leadership of a seaman trained in the old Mediterranean school. The English "natural genius" for seamanship had still to be developed.

Now already, before Cabot sailed, the Pope of Rome—to avoid trouble between his two most powerful supporters—had divided all the world-to-be-discovered between Portugal and Spain; west of a certain line all was to go to Spain, east of it to Portugal. Cabot's voyage, therefore, was definitely a challenge to the monopoly rights of these two Powers. He sailed well to the north of the route taken by Columbus, but with the same objective—a direct sea passage to the "Indies," i.e., to Eastern Asia. The way was barred—by an unknown continent. But enough soon came to be known about the riches of that New World to make it clear to British monarchs and merchants that the way to wealth henceforth lay on the sea. It was close on a hundred years after Cabot's voyage that the defeat of the Spanish Armada by Elizabeth's fleet (1588) marked the first emergence of England as a sea power.

**Beginnings of Sea-Power**

During that hundred years, King Henry VII's son and successor, Henry VIII, and Henry VIII's daughter, Elizabeth, set themselves, with the help of their loyal merchants and "enterprisers," to building up the naval power which was essential to the successful challenging of foreign rivals. The Great Naval Race—still the fruitful cause of Pacts and Conferences—had begun.

Henry VII had himself ordained that commodities imported from abroad must be carried in British ships, thus changing the older English policy, as Bacon put it, "from consideration of plenty to consideration of power." Henry VIII both built ships
and bought them from abroad—e.g., the Jesus, a vessel of 700 tons purchased by the King from the merchants of Lubeck, one of the Hansa cities; the Hansa, you see, was selling out. (We shall hear again of the Jesus later).

It is important to note, too, that these new ships were of a different type, better suited to ocean voyaging than the older vessels which had been built for use in the land-locked Mediterranean. Spain still stuck for the most part to the older type of vessel, so that when the great trial of strength with the Armada came in 1588, the Spanish expedition was out-maneuvered and out-gunned by a fleet superior in numbers (English 197 ships, Spanish 132), vastly handier, and manned and commanded by seamen who had gained their experience, not in the restricted waters of the Mediterranean, but on the ocean highways of the world.*

But not only did King Henry VIII establish a British Navy and found Woolwich dockyard. What was equally important, from the point of view of increasing English overseas trade, he broke with the Pope. The needs of the merchant classes and the interests of true religion coincided. (The nominal reason given for the rupture with Rome was the King's desire to divorce his first wife—a Spaniard. As his second wife he took the daughter of a family of Merchant Adventurers). And so—happy omen!—the Reformed Church of England dates its beginnings from that same period which saw the first beginnings of the Navy and the Empire.

**Piracy and Loot**

The Merchant Adventurers, whose overseas enterprises were steadily increasing, were now spoken of

* Kermack, *The Expansion of Britain*, p. 16.
as "the English nation beyond the sea." Plymouth and Southampton merchants were in 1540 carrying on trade with the coast of Brazil, and a little later a syndicate of London merchants began a regular trade with the Guinea Coast of West Africa.

But sea-going activity was not confined to "regular trade." The Reformation brought about a Counter-Reformation. Spain, the pre-eminent Catholic power, was hanging and burning Protestant heretics, particularly in Flanders and the Netherlands. Spanish ships sailed down the English Channel between Antwerp and Cadiz or Lisbon. So sturdy Protestant English merchants fitted out privateers to harry the Papists. By this means (the privateers not being officially countenanced) the power of Spain could be weakened without England incurring the risks involved in a formal declaration of war. Channel piracy became a lucrative industry.

Elizabeth's minister, William Cecil, protested against this irregular warfare . . . but the Queen decided to ignore what she could with difficulty prevent. So English and Huguenot (i.e., French Protestant) corsairs swept the Channel and the Bay of Biscay.*

A good many years had to pass before English overseas trade was sufficiently well established for buccaneering to be changed "from an heroic virtue into a crime which had to be suppressed." Thus do material circumstances affect moral points of view.

The famous sea-captains of Elizabeth's time—Drake, Hawkins, Raleigh—were, in Thorold Rogers' words "on the lookout, not so much for opportunities of trade or for the foundation of colonies, as for plunder." From the Channel they sailed forth to capture Spanish treasure-ships and sack Spanish settlements in the West Indies and on the coasts of

Central America. Burning a town was called "singeing the King of Spain's beard."

Religious zeal and economic necessity urged the gallant fellows on. There was an acute shortage of the precious metals in Europe—in Catholic and Protestant countries alike. In England the coinage had been so debased as to be almost worthless. The bullion taken from the Spanish ships returning laden from the silver mines of the New World was therefore doubly valuable. It provided the basis for a new currency, minted in the early years of Elizabeth's reign, which could be used for transactions between merchants, while the workers could still be paid with the old debased coins. (But of course this all happened a long time ago).

Drake's great voyage (1577-80) was the most glorious achievement of all. He had sailed to the "Main" before (i.e., to the coasts of the Caribbean Sea). This time, realising that the Spaniards would be lying in wait for him, he sailed south, through the Straits of Magellan, and up the western coast of South America to the Spanish provinces on the Pacific side. Here he was able to plunder at will—ships lying in harbour, storehouses packed with gold and silver bullion ashore, and finally a great treasure-ship sailing from Callao to Panama with a year's output of the Peru mines. To avoid being intercepted on the return journey, he carried on northwards, hoping to find a passage round the north of America. But this proving fruitless, he turned westward again and sailed across the Pacific, doing good trade at the Spice Islands (the Moluccas), and thence, still west-

*An important feature, from the workers' point of view, of the influx of silver from Mexico and Peru into Europe was that prices rose by leaps and bounds; wages, as usual, lagging far behind. See figures quoted in final paragraphs of this chapter.
ward, round the Cape of Good Hope and so home. He landed at Plymouth after a three years' voyage, the first English captain to sail round the world.* His ship was literally ballasted with silver, the net profit of his trip being equivalent to between two and three million pounds sterling in modern money. Well was his little vessel named the *Golden Hind*!

**Human Merchandize**

It was not all piracy. In one branch of legitimate trade the Elizabethan captains were pioneers. Voyages to the Guinea coast had acquainted them with the fact that the inhabitants of Africa were ignorant and poorly-armed people; and in the course of their raiding operations in Spanish America they learned that "negroes were very good merchandise in Hispaniola" (the American natives who had provided the original labour supply having already practically died out under Spanish treatment).

So John Hawkins sailed with a cargo of black captives from Sierra Leone, carried them across the Atlantic to San Domingo, and returned laden with hides, sugar, ginger and pearls. The slave trade developed. Queen Elizabeth (grand-daughter of the Merchant Adventurer's family) knighted Hawkins,† and lent him the royal ship, *Jesus* (above mentioned) to help in the good work; and his sailing orders to his men included the direction that they should "serve God daily, love one another, preserve your victuals, beware of fire and keep good companie."‡

It is saddening to reflect that this profitable trade,

---

* The Spanish Expedition, led by Magellan (a Portuguese), had made the same voyage in 1519-22.
‡ Quoted by Basil Williams, *The British Empire*, p. 28.
Chief objectives of the first English overseas voyages:
so beneficial in its results to British Empire-builders, should have had such deplorable effects on its "commodities"—the Africans. In the historical introduction to his book on Kenya, Dr. Norman Leys writes that the slavers "created an ever-widening circle of cruelty and destruction that at length wrecked African civilisation nearly everywhere." He goes on:

The smaller and less warlike tribes were either enslaved wholesale or dispersed into forests and mountains. The larger were compelled to subordinate everything to defence. . . . The West Africa that at a later time first explorers of the interior made known to Europe was a region inhabited by the survivors of two and a half centuries of massacre and anarchy, relieved only by inevitable tyranny. The pictures of society we get from Mungo Park, Denham and others, the stockades surmounted by human skulls, the holocausts to demon Gods, are of a savagery compounded of primitive ignorance and fear with cruelties and terrors, the creation, however unwittingly, of Europeans. Eight million Africans, at the lowest computation, were sold in America, and five times as many persons perished in the slave wars, on the way from the interior to the African coast, and in the Atlantic passage.

But honest Sir John Hawkins and his contemporaries and successors could, of course, foresee neither these regrettable occurrences, nor the peck of trouble they were laying up for the Empire builders and administrators of a later century, when the territories of these luckless Africans in turn came into British possession.*

Chartered Companies

Despite the "big profits and quick returns" to be won by selling slaves or seizing treasure-ships,
the English merchants had never lost sight of the main objective of all the early voyages—the discovery of a short sea route to Asia (the Indies). The Portuguese had discovered, and established a practical monopoly in, the South-East passage, by the Cape of Good Hope. The Spaniards had opened up (and Drake afterwards followed) the South-Western route round the foot of South America; but this was at once too long and too difficult. So the search for alternative routes—North-West, round North America and North-East, along the north coast of Russia—went on.

In 1553, Sebastian Cabot (son of John) had been made “Grand Pilot of England” and Governor of the “Mystery and Company of the Merchant Adventurers for the discovery of Regions, Dominions, Islands and Places unknown.” He immediately gave directions for an expedition by the North-East route. The Arctic ice, however, was too big an obstacle. But the voyage is notable, in that it resulted in the beginnings of trade (through Archangel) between England and Russia, and led to the formation of the first of a series of companies organised for foreign trade in particular areas, which were gradually to take the place of the parent body, the Merchant Adventurers. This was the Muscovy Company, and it marked a new stage in English capitalist enterprise. The members of the Adventurers had traded each at his own risk and on his own resources. The Muscovy Company, like the many similar ones which succeeded it, adopted joint-stock methods, and traded as a single corporate body.* They were not State ventures, but they were granted Royal Charters, which gave them a monopoly against rivals at home, and the Crown shared in the profits of their activities.

Thus early did capitalists discover the advantage of co-operation.

In 1579, the Eastland (Baltic) Company was formed, to trade with Scandinavia, Poland and Prussia; in 1581, the Levant Company, to trade in the Mediterranean, and so challenge the Venetians on their own ground; in 1588, the year of the defeat of the Armada, the first African Company was incorporated, to trade in the territory near the Senegal and Gambia rivers. On the last day of the 16th century was founded the greatest of all the chartered companies—the East India Company: “the grain of mustard seed,” as one historian* proudly declares, “which was to grow into the great tree of the British Indian Empire.” Drake’s reports of the vast natural riches of the East Indies seemed to the solid merchants of London to promise better and more permanent business than the raiding of the Spanish treasure-ships for bullion. Henceforth the Spanish and Portuguese monopolies were to be challenged East as well as West.

These new trading companies sent out large squadrons of merchant-men, well armed for defence either against pirates or “natives.” They established “factories” (i.e., depots) in foreign ports for the common use of all their members. “And if, as in Russia, the Levant and India, they thought it advisable to have a royal ambassador to speak for them at a ruler’s Court, they were required by the Queen to pay his salary.” England was thus early represented by commercial travellers.

First Attempts at Colonisation

Meantime (to complete our brief survey of the many activities of this crowded century) two

* Sir C. Lucas.
attempts at actual colonisation had been made by Britishers; the first by Humphrey Gilbert, who, in 1578, obtained a patent from Queen Elizabeth "for the inhabiting and planting of our people in America." Five years later he sailed for Newfoundland, and formally took possession of it for the Crown of England. (It was not actually settled until 1610). His half-brother, Walter Raleigh, sent out an expedition in 1584 to the coasts of what is now the United States, and formally took possession of an area of territory to which the name Virginia was given, in honour of the Virgin Queen. But attempts at actual settlement failed, and the colonists were later brought back to England by Drake on one of his return voyages from the Spanish Main. The era of successful colonisation was to come later. These earlier attempts were inspired by a desire for quick treasure-finding rather than laborious development. As Michael Drayton put it in his poem, *The Virginian Voyage*:

You brave heroique minds,
Worthie your countrie's name,
That honour still pursue,
Go, and subdue,
Whilst loyt'ring hinds
Lurke here at home with shame....

And cheerfully at sea
Success you still entice,
To get the pearl and gold,
And ours to hold
Virginia,
Earth's only paradise.

**Summary**

The end of the 16th century, then, saw this new Britain, made up of an alliance between Crown and merchants, under a monarch with mercantile blood in her veins, already on the way to becoming a sea-trading power, and victorious after a war with Spain
itself; her trading companies operating East and West; and two territories in North America, though not yet settled, annexed to the British Crown.

At home, the position of the great mass of the people, the workers, was not visibly improved by all these glorious achievements.

At the beginning of the century an artisan in the country earned 3s a week when wheat was 4s 0½d the quarter. In 1533 he could earn 4s a week, but wheat was 7s 8d. In 1564 his wages had risen to 9d a day, but wheat was 19s 9½d the quarter; by 1610 his wages were 10d a day and wheat 40s 4½d the quarter. The case of the unskilled labourer [the 'loyt'ring hinds' of Drayton's poem] was worse. Rogers has estimated that while in 1495 fifteen weeks' work would provision his household for one year, by 1610 not even in fifty-two weeks, working every day except Sunday, would he achieve the same result.¹

"The brilliant age which begins with Elizabeth gleams against a background of social squalor and misery. The descendant of the illiterate bloody-minded baron who was muzzled by Henry VII becomes a courteous gentleman who rhapsodises in verse at the Court of Gloriana (Elizabeth). But all that the peasants know is that his land-agents are harsher."¹

Still, there must be shadows as well as gleaming colours in every picture. The great historic fact to be remembered is that the treasure-raids of Drake and the rest provided English merchants with that "original accumulation" of capital which, so the orthodox textbooks teach us, is due to the exercise of "thrift" and "abstinence" on the part of individual capitalists.

¹ Waters, An Economic History of England, p. 188.
¹ Tawney, The Agrarian Problem in the 16th Century, p. 199.
YOU cannot win an Empire without war. Other nations, blind to the loftiness of your motives and deaf to your explanations about your civilising mission, insist on trying to create Empires for themselves out of the very lands you are trying to rescue from barbarism. We have noted in our first chapter how at the very outset the efforts of English merchants to secure their share of foreign trade entailed a war with the dominant power of Spain. In this and the next chapter we shall see that the continuation of the story is, regrettably, very largely on account of wars with other rivals—Portugal, Holland, and France. Fortunately we—that is the British trading class—won those wars. So the story is not so saddening as it otherwise might have been.

It is fair to note that, during this second stage of British expansion overseas, the merchants were perfectly frank about their motives. Drake and his fellows had plundered and burned to the glory of God. Even Hawkins and the slavers felt that they were saving black souls for Christ when they sold the bodies belonging to those souls into slavery in America.

But the merchant companies of the 17th century had their eyes fixed strictly on business*; and

* All sorts of people, it may be noted, were now patriotically helping to subscribe the capital for these overseas enterprises. "In 1617 a joint-stock subscription of over a million and a
religion was reserved for discussion—serious discussion, ending frequently in persecution—at home. Later, it is true, strategic considerations began to count in their overseas policy—places of vantage had to be seized and held against rivals, "key-points" fortified, or territories annexed in order to check the greed of other Powers.

This was due, however, to the unfortunate fact that the other Power had so often, and in so many areas, got there first. Just as pre-war Germany, finding every sphere of influence north and south of the Equator closed to her by the 'prior possession' of other Powers, had no choice but to challenge their dominance by armed force, so the British 17th century traders, peace-loving men though they were, found it necessary to fight for their rightful share in the riches of the farther parts of the globe. Consider, for example, what happened in the case of the East India Company during the early sixteenth-hundreds. We have already remarked that trade with the Indies (i.e., with the East Indian "spice" islands) was the original objective of all the ocean-going voyagers; though this was overshadowed for a time by the treasure of the New World.

Spices—and 1000 per cent.

Now, when the British Company set out to trade in the Indies, it was aware that it was "trespassing" on Portuguese preserves. The Portuguese had been carrying on business with the islands for the better part of a century—during the period when, as we have seen, English sailors and English ships were, so to speak, getting into training. When, therefore,
the Company fitted out an expedition to the East Indian Islands in 1601, it had perforce to send armed ships. After all, the Portuguese had no right to a monopoly of trade with the islands, other than the patent given them by the Pope, whose authority the English, for material and spiritual reasons, no longer recognised.

This armed expedition accordingly sailed to Sumatra and Java and, avoiding serious trouble with either Portuguese or natives, returned two years later with cargoes of pepper, cloves, silks and other valuable merchandise. It was a good journey; the cloves showed a thousand per cent. profit.* A second voyage followed next year. But this time the expedition found other competitors in the field. The power of Holland had been growing steadily during generations of war against Spain. The Dutchmen had been amongst the first to take advantage of the all-sea route to the Indies, and now the English traders found that the Dutch East India Company’s men had forestalled them—and the Dutch Company’s fleet of twelve vessels, fully armed and manned, ready to fight either Portuguese or English. The English vessels returned again with good cargoes, but with gloomy reports of future prospects.

These pessimistic forebodings were justified. During the next few years the Dutch carried on open war with the ‘peaceable’ English traders, sinking English merchant-ships or carrying them into port as prizes. Within twenty years of that first voyage, the English were barred out from trade east of the Strait of Malacca. This, to say the least, was ungrateful of the Dutch, since English blows at the Spanish naval power had helped to give the Hollanders their first

* Woodward, p. 73.
real chance. But of course sentiment has no place in business.

India

For another generation the Dutch Company kept the lead in the East. England had to bide her time—and prepare. Then, in 1652 and again ten years later, she declared war and succeeded to a certain extent in crippling these dangerous rivals. But the Dutch kept—and still hold—the East Indian islands (where now oil and rubber have put spices into the shade). By that time, however, the British Company had found consolation in India itself.

Previously they had passed India by. Now, debarred from the islands (and 1000%) they turned their attention to the great peninsula. Here, too, the Portuguese had established a prior claim. An expedition to Surat, near Bombay (1608), found it impossible to open trade, owing to the Portuguese agent on the spot persuading the native authorities that the English were pirates. It was time for determined action if Britain were not to be squeezed out everywhere. A second expedition, "comprising four strongly-manned and armed vessels, under Captain Best, a fighting sailor," sailed for Surat in February, 1612. The Indians were disposed to be friendly, when suddenly a Portuguese fleet appeared.

Best seized his opportunity. The Portuguese had hitherto succeeded in maintaining their monopoly of trade . . . by dint of bluster, misrepresentation and intrigue. The naval fight which now ensued astonished the native authorities, for the victory of the English vessels—insignificant in size and armament by the side of the great vessels of the enemy—was overwhelming. The battle in the Swally Roads, and Downton's victory in 1614 in the same waters, were of decisive importance in the history of our position in the East, and from a naval point of view have hardly less interest than the
far better known events of the heroic time of the Elizabethan War with Spain.*

The immediate fruit of the victory was the establishment (1613) of a British trading-station at Surat, the most important port of the Mogul Empire. The British had entered India.

"Digging-in."

Nine years later a second "factory" was set up at Masulipatam, on the further (east) coast of the peninsula; in 1633, one was established on the Hoogli (i.e., at the sea-entrance to Bengal); in 1639 Madras was purchased. The three "Presidencies" into which India was later divided had their roots in these three stations:—Bombay (from Surat and, later, Bombay itself), Bengal (from the Hoogli) and Madras (from Masulipatam and Madras). A subsidiary station at Gambroon, on the Persian Gulf, was set up in 1632. From then on, the grip of both Portuguese and Dutch on the trade of India began to relax, and the British consolidated their position.

There was a bad time when the Civil War in Britain divided the Company's shareholders into Royalists and Parliament men; and some anxious moments when the power of the Mogul Emperors, who had granted the Company their privileges in India, began to break up. But the first ended with the Restoration. Charles II, who had signalised the peace with Portugal by marrying a Portuguese princess, received Bombay as part of the lady's dowry. He leased it to the Company (1668) and so thenceforth had a personal interest in its fortunes. The Company had considerable trouble at this time with "interlopers," poaching traders who encroached on its monopoly; but as a recent writer tells us, "it could always rely

---

* Woodward, p. 78.
on the royal protection and the favourable judgments of such judges as Jeffreys, who unblushingly identified the Company's interests with the King's.*

Bombay was particularly valuable in view of the threats to the Company's security made by the rebellions of the Mahrattas and other local chieftains against the Moguls. It was an island, and therefore more easily fortified and defended against attack; and it was large enough (30 miles by 8) to admit of considerable development. Apart from one episode—when the Company's Governor tried to compel native authorities to grant trading privileges by force, and the Mogul Emperor, Aurungzebe, ordered the expulsion of the English from the entire peninsula, an edict rescinded only after humble submission and indemnities in cash—the Company avoided intervention in Indian affairs and stuck to business.

And good business they did† until the coming of a new set of rivals, the French, compelled them to adopt stern measures in defence of their profits.

But that story belongs to the next chapter.

Tobacco and Sugar

We must turn to the other side of the globe, to North America, where sugar and tobacco had been found to be commodities only second in value to spices; and where, moreover, the small numbers and low level of development of the native inhabitants made trade, unless preceded by actual colonisation, impossible, or at any rate unprofitable. The cultivation of sugar and tobacco was to result in the establishment of the first permanent British overseas

---

* Williams, p. 65.

† "In 1676 they were enabled to double their capital out of accumulated profits, and the stock rose to 245 per cent." (Tipper, England's Attainment of Commercial Supremacy).
settlements, as distinct from mere trading "factories."
The land was taken without further ado from its original occupants, the Red Indians. The labour was supplied by negro slaves, and by white convicts and exiles of various sorts.

As we saw in Chapter I, earlier attempts to establish English settlements in Virginia had ended in failure. The colonists were one and all dominated by the idea of "treasure," and when once they realised that wealth could be won only by the slow process of tilling the soil, they promptly threw up the sponge and waited for relief ships to fetch them home.

In 1606 a Company was formed to attempt again the colonisation of Virginia. (A second charter, granted in 1609, greatly strengthened the Company's position).

The Colonists

By this date, the political antagonisms between the Royalist-Anglicans and the extreme Puritans had become so acute as to have made considerable numbers of men quite ready to exchange persecution and imprisonment at home for the comparatively tolerable hardships of settlement abroad. Willing colonists were thus easily found—as they were for the similar "plantation" of Ulster at this same period. But it should be noted that these persecuted 'dissenters' went out mainly as indentured labourers for the wealthy and aristocratic proprietors of the Plantations.

Tobacco-growing was quickly found to be profitable. Cattle were imported and thrrove, and very soon the colony was, as regards food, self-supporting. The only cloud in the sky was the incorrigible unwillingness of the native Red Indians to acquiesce in the situation. But an outbreak by the Redskins in 1622 was followed by "a punishment so severe that
no similar danger was afterwards experienced."* Tobacco cultivation grew so profitable that the British Crown perceived in it (and in the import duties on it) a valuable source of revenue. This led in 1625 to the cancellation of the original charter, which had made the incorporated proprietors the virtual owners of all the land they could dominate, and the substitution of self-government under a Crown Governor, which transferred this privilege to the settlers and the Crown jointly.

Here is a description of the social constitution of the colony as it steadily developed into security:—

The discovery that tobacco was the crop which Virginia could most profitably produce conduced to the establishment of the planter system, under which an estate of 100 or 1000 acres was devoted to one crop cultivated by indentured servants or negro slaves. . . . Society fell thus into three classes. At the head stood the planter aristocracy, who claimed the Royal Governor as their social equal, and who administered the functions of English quarter sessions through the unit of the parish and the county. Below them came the indentured servants; these were mostly English agricultural labourers or farmer's sons, some were orphan and destitute children, a few wastrels or respite prisoners. All were bound for varying terms of years, at the end of which they became citizens and in many cases owners of land. The best of them were merged by degrees into the lower grade of planters, or became overseers on large estates. The worst formed the class of "mean whites," despised alike by planter and by negro. Last came the negro slave, a small class down to the Restoration.

* Woodward, p. 94. We may perhaps quote at this point an instruction of the British General Amherst to a subordinate in 1732 (a century later) as indicative of the official attitude to the red man:—"You will do well to try to inoculate the Indians by means of blankets in which smallpox patients have slept, as well as by every other method that can serve to extirpate this execrable race. I should be very glad if your scheme of hunting them down by dogs could take effect." (Quoted in Hendrik Van Loon's America).
(1660), but after that date rapidly increasing in proportion to the white population.* Meantime other settlements, chiefly of Puritan exiles, were made further north. In 1620 the Virginia Company was approached by a group since known to fame as the Pilgrim Fathers for a concession, and the "Mayflower" carried a hundred and two of them to a spot near Cape Cod, which formed the nucleus of the New England colonies. The Pilgrim Fathers were followed a few years later by another group of ardent Puritans, who formed the Massachusetts Company, and became the ancestors of that superior race which now inhabits Boston, Mass.

Between these later comers and Virginia proper lay the settlements of the Dutch—for they had sailed West as well as East—on the Hudson River. Here these hated rivals had established a township on what proved to be the finest site for a port, with communications to the interior, on the entire coast. They called it New Amsterdam. But when the second war with Holland came in 1663, the Dutch lost all their territories in North America, and by the Treaty of Breda (1667) the British were owners of the entire coast-line, from just north of Florida to Nova Scotia. New Amsterdam became New York.

The West Indies

To the south of this coast-line the Spanish "sphere of influence" in the West Indies had already been invaded by the British. These islands were of especial importance because of their geographical position. Not only would they serve as useful bases for attacks on Spanish possessions, but they were the natural "junction" on the main sea route from Europe

to America, which followed the trade winds. Vessels sailed a course which took them to the West Indies, and thence they headed north or south along the American coast.*

Soon after the formation of the Virginia Company, Barbados, the Bermudas, and the Bahamas were taken possession of for the British Crown. A little later (1655) Cromwell sent out an expedition to punish the Spaniards “for repeated outrages in West Indian waters.” Such outrages were of course intolerable, particularly in view of the spotless record of the British. The expedition captured the island of Jamaica—the first British possession to be actually taken by armed force from its previous “owners” (not counting mere natives).

The Spaniards, we are informed, had “done little or nothing to turn to account the great fertility of this island;” whereas the English planters (largely Royalist country gentlemen) had turned Barbados into “one great garden, a rival in fertility to the Dutch Spice Islands.”

These West Indian islands meant—sugar. At first indentured white labour was tried—mostly political prisoners “transported to the plantations,” as, later, convicts were transported to Botany Bay. Cromwell tackled this problem of labour supply by deporting tens of thousands of Irish to Barbados and the Indies; while after the battle of Sedgemoor the same fate befell many of the Duke of Monmouth's luckless followers. When the supply of “rebels,” political prisoners, or gaolbirds flagged, kidnapping in the larger English towns helped to provide white slaves for the plantations.†

---

* Cf. Plebs Outline of Economic Geography, p. 86.
† Woodward, p. 115.
A Lucrative Trade

But it was early discovered that black slave labour, if the price was not too high, was most profitable of all; and negro slavery became "the most important economic factor in the development of the West Indies." Accordingly, British traders took steps to get the trade in blacks into their own hands; for in this, too, Dutch and Portuguese had forestalled them. British trading settlements at the mouth of the Gambia river, on the West African coast, and on the Gold Coast, provided centres for the collection and embarkation of the slaves to America. The Royal African Company quickly "made good," and the Portuguese were left behind in the race. The second Dutch War (1663) sprang directly from the incursion of the English traders into the Dutch slave markets.

In 1680 "our to five thousand negroes were imported yearly into English plantations; in 1700 the yearly number was perhaps 25,000. The monopoly of the African Company was, in the interests of planters and shipowners alike, abrogated in 1689, and the trade thrown open by Parliament to all British subjects.*

By the Peace of Utrecht (1713) Britain obtained the exclusive right to supply negroes to the Spanish Indies. That monopoly made Liverpool one of the richest cities of the world.

The slave trade, all economic historians are agreed, was one of the most lucrative of all the forms of commerce practised by the English. It was conducted on a strictly commercial basis. The coast tribes were supplied with guns and powder and encouraged to make war on their defenceless neighbours inland. We have noted already (p. 21) the effect of all this on African civilisation. "It was a horrible

TRADERS AND COLONISTS

BRITISH ACQUISITIONS
(underlined)
at the end of the
17th century
trade, horribly carried out,” writes a recent Empire historian, “for the profits were so great and the negro cargoes so cheaply procured, that no precautions were taken to avoid excessive mortality during the ‘middle passage’ to America.”* And the most pious of merchants engaged in it. McGregor Ross reminds us that the well-known hymn, “How sweet the name of Jesus sounds,” was composed by an English slaver, “as he waited, on the African coast, for a three-masted horror to come up over the horizon and take away, from the land of their birth, a herd of miserable African captives whom he had acquired from the interior.”†

On the other hand, historians assure us that without negro slavery the tropical regions of America could have produced neither the coffee, sugar, nor cotton which the rest of the world wanted, nor profits for the English planters and merchants. Some sacrifices have to be made that Empires may grow. One cannot, of course, expect the enslaved negroes to see the matter from the same point of view as those who grew rich by their exploitation.

Summary

We have seen in this chapter the expansion of the Empire during the first 60 or 70 years of the 17th century, in the East (India), to the West (Virginia and the North American colonies, and the West Indies); and noted how the development of these latter necessitated a footing, too, on the West Coast of Africa, in order that an adequate labour supply should be assured. This expansion unhappily entailed wars with other Powers, particularly Holland; and the

---

* Williams, p. 120.
defeat of this sea-trading nation marks the definite emergence of Britain as a sea-power of the first rank.

We have next to trace the history of a period of which commercial wars and a deliberate policy of expansion by conquest are even more the dominant features.
CHAPTER III

EXPANSION BY CONQUEST
(1680 - 1788)

WE have seen in our first two chapters how it was the enterprise and initiative of English traders which led to the planting of the English flag in distant corners of the earth. England had become "commercially conscious" soon after the discovery of the ocean routes, and her own favourable geographical position quickly gave those traders a wonderful opportunity. They took the opportunity, and laid, solid and deep, the foundations of British capitalism. It was they, as we have noted, who "at their own charges" fitted out the first overseas expeditions and established the first trading-stations. Their growing power and influence (during the 17th century, remember, they executed one king and expelled another) enabled them to get the State to fight their battles for them when armed force against foreign rivals became necessary. But their overseas operations were for the most part carried on as private trading ventures, for private profit—with a share in these profits, in the shape of revenues from tobacco, etc., for the Crown.

Now, during the 18th century, the period dealt with in this present chapter, the power and force of the British State was used more and more frequently and directly in the interests of the traders. There were a number of obvious reasons for this. For one thing, now that the power of the Crown had been limited, the State itself had come to have an interest in those revenues which had previously been the perquisites of the monarch. For another, the politicians
and the soldiers were beginning to turn their eyes abroad, realising that military "glory" overseas may divert the attention of loyal citizens from more pressing problems at home. For a third, competition abroad had grown even more acute than previously; especially in the case of one new and highly organised rival—France—which now basely set itself to make friends with the native peoples of lands in which Britain had established herself, and to enlist them as allies in a struggle to overthrow British ascendancy.

The 18th century, accordingly, was a century of war.

Most of the many colonies and dependencies acquired in this age were the fruits of war, conquered from or ceded by other European nations. We took toll from France and Spain, from Holland and Denmark.*

By the end of the century—even though by that time she had lost one belt of important possessions—Britain was established as the leading colonial power of the world.

The wars of the 18th century, in fact, though there were various "nominal" reasons for them (like 'Spanish successions' and so forth) were very definitely wars for supremacy in Asia and America; and were actually very largely fought out in those continents—indeed, fighting was frequently going on in both when there was, officially, peace in Europe.† For the sake of lucidity we shall trace the course of events in these two areas, East and West, separately; but we must remember as we do so that the struggle was going on simultaneously in both.

---

* Sir Chas. Lucas, The British Empire, p. 83. The "toll" was really taken from native Asiatic and American peoples, but they, of course, do not count.

† The 'Spanish Succession,' of course, had a real economic significance, since Louis XIV of France, by putting his grandson on the Spanish throne, aimed at bringing the Spanish Empire in America into a tributary position to France.
The French in India

We left the British East India Company, in our last chapter, firmly established at each of the three principal "sea gates" into India—at Bombay, on the west coast; at Madras, on the east coast; and on the Hoogli river, at the sea entrance to Bengal. These ports, selected originally for their commercial advantages, came to be of great strategic importance when, in the struggle ahead, sea-power proved to be a deciding factor.

The French arrived in India half-a-century later than the British—at about the same time as the British established their first actual territorial settlement, at Bombay. The French Compagnie des Indes was founded in 1664, and within a few years it had got a footing on the very doorstep of the three British stations—at Mahé (south of Bombay), at Pondicherry (just south of Madras), and at Chandernagore (on the Hoogli). At first the French were mainly engaged in fighting the Dutch, so that the British were able to look on complacently while the power of these earlier rivals was finally broken for them by someone else. From the Dutch, the French acquired the islands of Mauritius and Réunion (on the route between the Cape and India), useful sea bases for the forthcoming contest with Britain; the nearest British base being the island of St. Helena, on the farther side of Africa.

Intervention

The real struggle between French and British began when the break-up of the Mogul Empire* (already

---

* The "Moguls" were Mongol invaders of India, the first of whom, Baber, set up his Empire at Delhi in 1525. His successors made themselves masters of practically the entire peninsula.
noted in our last chapter) became more and more complete. The Great Mogul still ruled as overlord from his capital at Delhi, but north, east, south and west rebel princes and chieftains were claiming, and maintaining, practical independence. New invaders from Afghanistan completed the ruin of the power which for nearly two centuries had held all India in its grip, and the situation was thus ideal for foreign intervention.*

The British East India Company, it is said, would never have "taken sides" in these internal struggles had not the French begun it. But it had to defend its interests once these were threatened. (Its capital at this time (1740) was some £3,000,000 sterling, and it had been paying a 7% dividend for some years).†

When, therefore, under a very able leader, Dupleix, the French began a carefully planned policy of intervention in Indian political affairs—of assisting this or that native ruler in return for promises of concessions later, and so building up a system of French domination all through the country—the British Company took alarm.

War

It declared war in 1744. The war lasted, with a nominal break, for seventeen years. At the end of that time the British were the dominant power in India, with a puppet Great Mogul as their agent.

The first round went against Britain. It centred in the south, in the Carnatic. Madras was captured by the French, the British were defeated at sea, and their attempt to take Pondicherry was beaten off.

They proceeded to back a rival claimant to the one installed by the French as ruler of the Carnatic.

---

* Cf. China in our own day.
† Woodward, p. 181.
A young leader named Clive gained brilliant victories on land, and the British candidate was installed in power. The Nizam, north of the Carnatic, followed next, the British bringing about a successful alliance with the ruler, and securing the expulsion of the French. The British were dominant in the south and east.

A British fleet invested Mahé, on the west coast, and captured it. Exit the French from this area also.

Clive moved north—to the Hoogli. Here the Nawab of Bengal provided ample excuse for direct British intervention by seizing Calcutta, the British station, and throwing 146 English prisoners into a "Black Hole," in which 123 of them died in a night. Clive first attacked and took the French station, Chandernagore. He then set up a new claimant as Nawab, marched against the forces of the old ruler, and completely defeated them at Plassey, thereby gaining for the British effective control of the densely-populated province of Bengal. The new Nawab was installed, and paid over an immense treasure to the Company, its army and officials, the Company also becoming actual owners of large areas of land around Calcutta. The Great Mogul intervened, claiming Bengal as his own sphere, but his army was in turn quickly beaten. Henceforth he was a tool in British hands. Britain was now paramount in the north also.

The Fruits of Victory

By the Peace of Paris (1763) the French were allowed to retain their factories, but were debarred from keeping a single armed man in India. They were never again serious rivals of the British power, though again before the end of the century they took advantage of the wars with native rulers in which
Britain became increasingly involved, to send an army of invasion and make one more effort to regain their lost prestige. It failed.

But the British could not now stand still. The status quo was too uncertain. Having entered on the path of intervention there was no choice for them but to go on intervening. They had won their trade monopoly. To keep it they must gain political supremacy too. And this involved—right on into the middle of the 19th century—a series of wars with native rulers; in Bengal, Mysore, Oudh, with the Mahrattas, etc., etc. The path of the Empire builder is hard.

It has—or had in these closing years of the 18th century at all events—its compensations. The years immediately following the expulsion of the French saw traders, soldiers and officials alike "feathering their own nests" at a rate which recalled—and probably exceeded—the golden days of the Elizabethan buccaneers. The bribes and indemnities paid by native rulers, and the loot and plunder of unending wars represented a mass of wealth even greater than that 'lifted' from the Spanish treasure-ships two centuries before.

So shameless was the whole business that at length there was an outcry at home, on the part of those who were not beneficiaries in the Company's good fortune. Adam Smith, in his Wealth of Nations (1776) voiced the attitude of other sections of capitalists when he attacked the rule of the Company in India as "perhaps the worst of all Governments for any country whatever."

Parliament set up an investigation into the Company's conduct of affairs in India, particularly into Clive's administration. That great Empire-builder committed suicide. In 1773, a Regulating Act was
passed, giving the British Government certain controlling powers over the Company, and establishing a Governor-General and Council, nominations for which had to receive the Crown’s approval. A few years later a Board of Control was established, extending those powers. But the Company remained the actual rulers of the greater part of the vast area of India, with its millions of inhabitants, for another three-quarters of a century.

The Struggle in North America

We must turn West, and see what has been happening all this time in North and Central America.

In our last chapter we saw the British established as masters of the North American seaboard, from Florida up to (but not including) Nova Scotia. We saw various colonies founded along this stretch of territory, and actual settlements—of Pilgrim Fathers, convicts, indentured labourers and others—made. The early years of the 18th century saw yet more colonies in this same area “de-limited” and established—Maryland, Carolina, Pennsylvania, Georgia (the names themselves are a guide to the date of founding).

The British had a footing, also, further north in the continent—on the shores of Hudson Bay. The Hudson Bay Company had been founded in 1670. It had, so to speak, grown out of the repeated attempts by Baffin, Hudson, James and other 17th century explorers to find a North-West Passage to India. When at last it was realised that this was non-existent, but that the profits to be made from the fur trade were considerable, Prince Rupert and other gentlemen and merchants obtained a grant from Charles II of exclusive trading rights in all lands yet to be discovered in the Hudson Bay area.
But between these two British zones lay the French settlements and possessions at the mouth of the St. Lawrence river.*

Very early in the 17th century the St. Lawrence valley had been opened up by French explorers and the townships of Quebec and Montreal founded. French and British areas actually touched where Nova Scotia (the French province of Acadia) adjoined the New England colonies.

War began ere the close of the 17th century. The French beat off a British attack on Quebec, and captured the forts of the Hudson Bay Company. But during the following war, which was supposed to be about the Spanish Succession (1702-1713), the British were more successful, and compelled the French to give up Nova Scotia.

A French Plot

Still, however, the St. Lawrence territories of the French separated the sea-board colonies from the Hudson Bay settlements. And now a characteristically devilish design on the part of the French became apparent. They had established a settlement, too—Louisiana—on the Gulf of Mexico, to the south of the English colonies; and their agents, working up the Mississippi, Wabash, and Ohio rivers, had got into touch with others, working down from the St. Lawrence, by way of the Great Lakes. The British colonies were thus in imminent danger of being ringed round, on the land side, by French territory, and so prevented from making any further westward advances into the interior. This hit the landed proprietors and traders of the colonies where it hurt, for speculation in newly opened-up "Western lands" was just then proving highly profitable. A chain of

---

* Cf. Map in Plebs Outline of Economic Geography, p. 60.
French forts gave military reality to this sinister scheme.

Moreover, the French were winning over to their side the Indian tribes which roamed the plains south of the Great Lakes. "The French character," says one (English) historian, "has generally lent itself more readily than the English to friendly relations with uncivilised peoples."* The British, indeed, as the same authority admits, "utilised Indians in warfare against Indians." But this, one assumes, was forced on them by the duplicity of the French. There were raids and counter-raids, localised fighting in which the colonists took the main share on the British side, with the British fleet as their line of communications with Europe.

Two years before the official outbreak of the Seven Years' War (1756-63) Washington and other colonial commanders were fighting the French on the Virginian and Pennsylvanian frontier, and a British force under General Braddock was annihilated by French and Indians. (The Seven Years' War was the period during which Clive established British ascendancy in Southern India and Bengal. The military operations which Britain conducted in Europe—in Germany, in alliance with Prussia—"were undertaken as a grand diversion of French resources in Canada, in the Carnatic and on the sea.").

For the first two years of the war things went badly for the British. Then, in 1758, the tide turned. Fort Duquesne, the French centre south of the Lakes, was captured.† A little later, the British General

* Woodward, p. 109. Cf. the British attitude to the Red Indians, as exemplified in the footnote to p. 33.

† "This outpost . . . held by the French and called Fort Duquesne, and then by the English and called Fort Pitt, is now held by steel millionaires and called Pittsburgh." (W. E. Woodward, Washington, the Image and the Man).
Wolfe carried the war into Canada and took Quebec, and this was followed (1760) by the surrender of Montreal and the capitulation of the remaining French forces. But the war had been won at sea even more definitely than on land, since in the naval battle of Lagos and Quiberon the French fleet had been destroyed, and all communication between France and Canada cut off.

The same peace treaty (of Paris, 1763) which debarred the French from keeping a single soldier in India registered also the surrender of the whole of Canada, and the pick of the French West Indian islands, to Britain.

"An empire had been won by arms." One large piece of it was now to be lost by arms, too.

The Revolt of the Colonies

Within thirteen years of this signal British victory, the Colonies of the American sea-board had revolted and issued a Declaration of Independence. "One of the brightest times in all English history," as an Empire historian sadly observes,* "was followed immediately by one of the darkest." The English workers of the 18th century—the rural population, for instance, which was being robbed of its land by further enclosures and degraded by brutal conditions of poor relief—may not have realised to the full the "brightness" of the times they were living in. But that only shows us once more how necessary it is to lift one's eyes from one's own parish and its troubles, and take consolation from imperial victories in distant parts of the world.

Probably the masses of British workers saw no particular difference as regards brightness or darkness, between the days preceding and those following the

---

* Sir C. Lucas, p. 95.
American revolution. Certainly the American workers and small farmers did not. The revolt of the Colonies has been represented by romantic historians, as a great assertion of, and triumph for, the Rights of Man, Democracy, human equality, and so forth. Actually, of course, the revolt was the result of the antagonism between two groups of traders and landowners—the British, who regarded the colonies (and colonists) as existing primarily to be their customers, and pay taxes and revenues towards the British State; and the Colonials, who were growing richer and more economically independent, and wanted to be their own masters (or rather, to be themselves masters of their own resources and their own subject class).

There were, as a recent biographer of Washington* has pointed out, “two streams of revolutionary impulse” in the Colonies during the years preceding and following the Declaration of Independence. There was “a revolt of the proprietary class—merchants, planters, lawyers, shipowners and distillers—against the economic and political domination of the English.” There was also “the muscular, inarticulate rebellion of working people—small farmers and mechanics, voteless and landless—against the growing power of wealth, British or Colonial.” It was the first of these that “won” in the Revolution.

The planters, slave-owners, and shipowners of the Colonies might utter ringing perorations about men being “created free and equal.” But “when it came to practical matters, most of the patriots were not considered free or equal enough to vote, or to have any hand in the patriotic Government”—and this although the war-cry of the revolt against Britain had been “No Taxation without Representation.”

---

* W. E. Woodward, quoted above.
We get the outlook of the leaders of the revolt pretty well expressed in a sentence from a letter written by Washington, the Colonial commander (and a wealthy landowner) to his stepson, when his men were dying of cold and hunger during the most desperate days of the struggle:—

Lands are permanent—rising fast in value—and will be very dear when our independency is established.

The revolt would probably have come earlier than it did had not the colonies been to such a large extent independent units, jealous of one another's privileges, and unused to joint action. A common grievance was needed to make them act together. George III and his ministers provided it. They insisted that the Colonies should pay what the Colonials considered exorbitant taxes, to defray the cost of the French war. They went further, and tried to enforce the payment of these taxes by putting the Colonies under martial law.

Revolt followed. Representatives of the propertied classes of the Colonies met and issued the Declaration of Independence in 1776. The British, by their command of the sea, could blockade all the American ports, and ensure adequate supplies to their troops. But the war was as badly muddled by those in authority as the events leading up to it had been. And when the "hereditary enemy," France, once more came on the scene, allied herself with the colonists, and guaranteed arms, money and supplies to Washington's men, the tide turned. In 1783, by the Treaty of Versailles, the independence of America was formally acknowledged, and France could congratulate herself on having enjoyed a certain measure of revenge for her earlier losses.

Convict Settlements in Australia

Before the century closed, however, Britain was to find some compensation for her losses in North
America in the gain of a new possession in the Southern Seas. This, moreover, was a "peaceful" acquisition, except in so far as mere natives offered any opposition; and they were in this instance too insignificant, either in numbers or capacity, to matter much.

Between 1768 and 1799, Captain James Cook made three voyages into the South Pacific, exploring the Eastern coast of Australia (then called New Holland). On his first voyage he "took possession" of this new continent for Britain, landing at a point to which, in honour of Sir Joseph Banks, the eminent botanist who accompanied him, he gave the name of Botany Bay.

Now it is probable that further developments might not have followed so quickly had it not been for a practical problem with which the British Government of the time found itself confronted. As we have already noted, convicts and political prisoners had been for a long time shipped overseas to provide semi-slave labour in the American colonies. With the Declaration of Independence this particular outlet for "undesirables" was closed. Somewhere else had to be found.

Botany Bay was suggested. And in 1788 (five years after the Declaration of Independence) the first ship-load of 750 convicts landed in Australia, and laid the foundation of the city later called Sydney.

They were only just in time! "Six days after Captain Phillips' arrival, two vessels of the French navy appeared off the coast in course of a voyage of discovery in the South Seas. England, perhaps, acquired Australia by one week's priority."

* Woodward, p. 264.
Summary

We have followed in this chapter the course of events during this century of war—east, in India, and west, in America.

In the former we have seen a British trading company succeeding to the sovereignty of the Mogul Emperors; first by victorious war against the French East India Company, and then by a whole series of wars against Indian rulers.

In America, we have seen the knavish tricks of the same formidable rival frustrated, and the British established in Canada; but the colonies of the American sea-board lost through a revolt of the colonists themselves.

Finally, we have noted the acquisition in the South Pacific of new prison settlements just at a time when the stiffening of the Penal Code against the recalcitrant lower orders at home made the provision of such settlements a more than usually urgent question.

Britain, during this period, has advanced from being one of a group of European countries competing with each other for the trade of Asia and America, to the position of leading colonial power of the world.

What of the state of affairs in the "motherland" herself throughout this same period?

The native aristocracy of these islands was enriched and strengthened by the addition to it of West Indian planters and East Indian nabobs—the millionaires of the 18th century.* It was this vast influx of

*The West Indies, through the slave trade, had grown richer and more prosperous than ever. Throughout the 18th century "the British West Indies had played in the new world the part the island of Delos had played in the second century B.C. . . . In the West Indies the negroes brought from Africa were exposed for sale under the British flag and sent to serve European masters all over the new world." J. L. & B. Hammond, The Rise of Modern Industry, p. 194).
wealth which built elegant country seats in the midst of the great estates "enclosed" by their owners (cf. Goldsmith's "Deserted Village") and which helped to capitalise the technical inventions and improvements which formed the basis of the Industrial Revolution, thus providing new kinds of employment for British workers—men, women, and little children. Whether the British workers, rural or urban, were as grateful for these benefits as they might have been is open to grave doubt. But at all events, if any of them made their lack of gratitude apparent in deed—either by joining trade unions or by stealing bread for their children—they stood an even better chance than formerly of getting the opportunity, by transportation, of seeing something for themselves of this great new Empire beyond the seas which the energy and enterprise of their rulers had won for them.
THE British Empire, as this brief story of its growth from the 16th to the 18th century has made clear, was a kind of by-product of the search by British merchants for profitable trading grounds overseas. It grew, not "according to plan," but at haphazard. It was the accidental outcome of trading voyages to the Indies for silks and spices, to Africa for slaves, to Virginia for iron and timber, to Canada for furs. Trading posts became forts or settlements; defence of legitimate interests led to intervention in "native" affairs, and so to direct or indirect control of territory; wars with rivals to yet further annexations. To make one area secure it was necessary to control yet another, and so on.

The dawn of the 19th century saw Britain with possessions in each of the three great oceans—in both sides of the Atlantic, in the Indian Ocean, and in the Pacific.

Hitherto, we have seen, this struggle for markets abroad had resulted in constant wars with other Powers, intent on the same glittering prizes. First the Spaniards, then the Portuguese, then the Dutch, and finally the French had to be beaten ere British monopolies could be safely established. During the period dealt with in this present chapter there were no rivals left in the field. France, throughout the 18th century the enemy on every front, east and west, was too much pre-occupied with her own internal
affairs during the first part of the 19th, to be a rival any longer.

For Britain, accordingly, this period was one of consolidation. Between 1815, the date of Napoleon's final defeat, and 1914, Britain was only once at war with a European Power (with Russia, 1854-56). She was free to consolidate her gains.* Not that this was an entirely peaceful process. On the contrary, she was at war, in one or other part of Asia, Africa, or the South Seas, almost all through the century. But these were merely "native wars," part of the necessary work of consolidation.

These native wars were of course land wars. But in all of them it was British sea-power which was the controlling and deciding factor—as it was in the wars with Napoleon. "Great Britain emerged in 1815 (after the Napoleonic wars) without a rival, as the one power able to carry on the shipping of the world, in spite of the fact that she had lost about forty per cent. of her ships during the years 1803-14."† The big fundamental technical development of the Industrial Revolution—the use of steam-power—was, moreover, shortly to be applied to ships, with revolutionary results. Not only were distances shortened, but "for the first time men began to cross the seas and oceans with some certainty as to the date of their arrival." It had taken three months, in the 18th century, to get an answer back from America to a message from Britain, or vice versa. Obviously an Empire depending on such communications could be but loosely linked. The steamship, and later still the railway and the telegraph, brought the outlying

---

* A Secretary of State for the Colonies was first appointed in 1801. It is significant that, at first, the office was combined with that of the Secretary for War.

† Knowles, *Industrial and Commercial Revolutions.*
British possessions much closer to the "mother" country, and resulted in a degree of consolidation and organisation never before possible. Between 1800 and 1850, the area of the Empire was trebled,* and between 1850 and the present time it has trebled again.

So, while at home, under the Industrial Revolution, "the towns had their profitable dirt, their profitable smoke, their profitable slums, their profitable disorder, their profitable ignorance, their profitable despair," the Power which had gained new strength thereby could proceed more efficiently than ever before with the great task of carrying the blessings of civilisation to other lands.

The Napoleonic Wars

Before going on to describe this process during three-quarters of a century of "peace," we must first pause to note certain useful acquisitions made by Britain during the last of the long series of struggles with France—the wars with Napoleon (1793-1815). England's main effort in those wars was on the sea; her share in the land-fighting in Europe was relatively small. But France was held within Europe by the British fleet. There was no fighting this time between the two Powers in India or America—France was cut off from both. Napoleon's one attempt to break out (his Egyptian campaign—a definite attempt to threaten the British hold on India) was checked by Nelson's victory at the Nile. Trafalgar made assurance doubly sure. While France was busy fighting on all fronts at home, Britain could take full advantage of the opportunity to get possession of various strategic points in Asia and America. Now,

* 1800—1,500,000 sq. miles; 1850—4,500,000 sq. miles. (Bowman, *The New World*, p. 14).
indeed, for the first time in the history of the Empire, something like a conscious plan begins to be apparent.

Four of these new acquisitions—the Cape, Ceylon, Mauritius, and Malta—were all important because of their relation to India and the route thereto. All were taken from the French, or from the Dutch when Holland was made a part of Napoleon's empire.

The Cape of Good Hope had been established by the Dutch as a port of call (on the way to the Indies) in 1652. It was at first just a big farm—with a fort attached, of course—which supplied fresh meat and vegetables to the ships of the Dutch East India Company. By the time the British took it (1795) it had grown into a small colony, whose farmers had already been in revolt against the Dutch Company.

The island of Ceylon was of strategic importance, too, because of the harbour of Trincomalee, "one of the chief naval harbours in Asiatic waters." It was taken in the same year as the Cape. Mauritius was another naval base of value to a Power controlling India; and Malta was a key-point in the Mediterranean, a sort of "listening-post" over against the French port of Toulon.*

British sea-power, in fact, was beginning to be organised, and a "skeleton" of naval harbours and ports of call built up as a necessary basis for the job of extending and consolidating British world trade.

* There were also acquisitions, from French or Dutch, in Central America; the West Indian Islands of St. Lucia, Trinidad, and Tobago; and, on the mainland, British Guiana and British Honduras. But further developments in this part of the world were checked by the emergence of the independent republics of South America, and by the growing strength of the United States which, with the enunciation of the Monroe Doctrine (1823), barred Britain or any other European Power from extending her possessions in the New World.
The Further Conquest of India

The most important centre of that trade was India. We broke off the story of British expansion there, in our last chapter, at the point where, having ousted the French from south and north, the British East India Company was compelled by circumstances over which they had less and less control to go on with the policy of intervention—armed or otherwise.

Just previous to, or during the Napoleonic Wars, there were two wars with Tippoo Sahib, the ruler of Mysore, resulting in the extension of British power in the south—on the western, as well as the eastern coast of the peninsula; an advance against Oudh, in the north, which pushed the British frontiers right up the Ganges valley from Bengal to beyond Delhi; and little affairs with the Gurkhas, the Mahrattas, and various ruling princes in the interior.

The Mahratta area, extending right across Central India, was, so historians tell us, suffering from "perpetual war and civil misrule."* It therefore next became a primary British duty to restore law and order. This was finally accomplished, after "one pitched battle and two minor but crucial engagements"; and new and tame rulers, assisted by British resident officers, were installed. The same urgent necessity of dealing with the "chronic anarchy" of India led, a little later, to the annexation, after wars in each case, of Sind (1843) and the Punjab (1849).

In the meantime, in order to safeguard the blessings of peace and security in the peninsula, there had been a war with the Afghans on the north-west frontier (1837-43); and, earlier still, a five-year campaign against Burma, on the eastern frontier of Bengal. A second Burmese war followed in 1852. There were also peaceful acquisitions of certain large areas. A

* Woodward, p. 315.
gifted British administrator discovered, or invented, something called "the doctrine of lapse," by which, when the native ruler of a State which had received British "assistance" died, the sovereignty was "escheated" to Britain. This, of course, was the more justifiable since so many of the native princes were "as princes, contemptible, rapacious and utterly indifferent to public duty."

The "Mutiny"

Yet, in spite of all this beneficial (if not entirely disinterested) civilising work, the natives of India—or a considerable proportion of them—were ungrateful, not to say actively discontented. Native rulers resented being superseded; native merchants and traders took the view that their economic interests were being sacrificed to those of the British; the native common people, forgetful of the exploitation to which they had been subjected under their own rulers, murmured of oppression. It was evident that a touch of the iron hand would be necessary before British rule could be firmly consolidated.

The opportunity came in 1857. A mutiny of sepoys (i.e., native) troops in Meerut spread to other sections of the army, and to the civil population in Delhi, Oudh, and other areas in the north. At

* Woodward, p. 323.

† "He was persuaded that the mutineers of the Bengal army were not so much the avengers of professional grievances as the exponents of general discontent... the Government of India of late years had alienated or alarmed every influential class." (B. Disraeli, speech, July 27th, 1857).

‡ "The rising, although primarily a military mutiny of the Bengal army... was not confined to the troops. Discontent and unrest were widely prevalent among the civil population, and in several places the populace rose before the sepoys at those stations mutinied." (Oxford History of India, p. 722).
Cawnpore there was a massacre of British. Delhi and Lucknow were held by the insurgents.

The iron hand came into play. As in Ireland in 1919-20, it was realised that a stern lesson was the only one that could be of use. But whereas in Ireland the unity of the population was the greatest obstacle to the arduous work of the Black and Tans, the much smaller degree of unity amongst the Indians made the British task relatively easy. No time was lost in striking terror into the civilian population. An organised campaign of village-burning in “guilty” districts began. The men in the villages were slaughtered. The women, children, and old people were “burnt to death in the villages.”* Prisoners were hanged, shot, drowned, or (a favourite method) blown to pieces from cannon. Mahommedans were “sewn in pigskins and smeared with pork-fat before execution.”

When Neill marched from Allahabad, his executions were so numerous and so indiscriminate, that one of the officers attached to his column had to remonstrate with him on the ground that if he depopulated the country he could get no supplies for the men.†

An officer of Havelock’s advance guard reported to the Times correspondent that—

the executions of Natives were indiscriminate to the last degree. . . . In two days forty-two men were hanged on the roadside, and a batch of twelve men were executed because their faces were “turned the wrong way” when they were met on the march. All the villages in his front were burned when he halted. These “severities” could not have been justified by the Cawnpore massacre, because they took place before that diabolical act.‡

---

* Kaye, History of the Sepoy War.
† Russell’s Diary. (Russell was the Times correspondent in India).
‡ Russell’s Diary.
There were massacres of civilians in various cities.

At the time of the capture of Lucknow...the unfortunate who fell into the hands of our troops was made short work of—Sepoy or Oudh villager, it mattered not—no questions were asked; his skin was black and did not that suffice?*

At Delhi—

all the city people found within the walls when our troops entered were bayonetted on the spot. ... These were not mutineers, but residents of the city, who trusted to our well-known mild rule for pardon. I am glad to say they were disappointed.†

Before the year was out the "mutiny" was practically over, though it took another two years to "stamp out the last smoking ashes of revolt." Ere that time had elapsed, an "Act for the Better Government of India" (1858) had ended the long career of the British East India Company, control of all the territories under its rule being now vested in the British Crown. The Governor-General was replaced by a Viceroy representing the British sovereign, and a Secretary of State for India became one of the most important ministers of the British Government. Thus Queen Victoria succeeded to the throne of the Great Mogul (though not till 20 years later did she assume the title of Empress of India).

The work of consolidation, now that practically the whole of the peninsula was under unified control, could go ahead uninterruptedly. Railways were built, and telegraphs laid. "At the time of the Mutiny there were only 273 miles of railway in India, and 4044 miles of telegraph. In 1922 there were over 30,600 and 69,000."‡ One unfortunate result of this

* Lieut. Majendie, a British Officer (quoted by E. Thompson The Other Side of the Medal).
† Montgomery Martin, Rise and Progress of the Indian Mutiny (quoted by Thompson).
‡ Kermack, p. 59.
material and political unification has been the development of a much greater degree of unity amongst the Indians, and the growth of the idea of a common Indian nationality, which have been the source of much anxiety to British statesmen.

"Key Points"

Meantime the business of consolidating the British position was going on at other points in the Indian Ocean. A far-seeing official, Sir Stamford Raffles, had early realised the strategic value of Singapore, and although he had some difficulty in converting the home government to his view, he was successful in securing its annexation in 1824. The British were thus established at the "eastern gate" of the Indian Ocean—on the road to the yet Farther East, China and Japan. Aden, on the other side of the ocean, was taken possession of in 1839. Its importance, of course, became much greater later, when, with the cutting of the Suez Canal, the "western gateway" lay through the Red Sea.

South Africa

The "western gate" of pre-Suez days, commanded by the Cape of Good Hope, was, as we have seen, secured by Britain during the struggle with Napoleon. Like so many other parts of the Empire, South Africa was originally only considered of importance because of its position on the way to somewhere else. But it was soon to have a value—and a whole string of problems—of its own.

When the British took possession, the area of the colony was some 60,000 square miles.* There was a white population (mainly Dutch) of 26,000, owning

---

* The area of the Union of South Africa to-day is 473,089 sq. miles
30,000 slaves, and perhaps a quarter of a million natives—Bushmen, Hottentots, and Kaffirs. The Bushmen, the survivors of the original natives of the continent, were dying out. The Hottentots, of whom there were some 17,000 in the colony, were being hard pressed by invading tribes of Kaffirs from further north. There had been trouble already between the Dutch and these last, for not only did the Kaffirs resist the white man's expansion northwards, but they themselves were pressing down into his territory. Defence meant aggression—on both sides; and Britain was soon involved in a series of Kaffir Wars—with Basutos, Zulus, Matabele—which lasted almost without a break from 1811 to 1878.* The Kaffirs were defeated, but they proved much too virile a people to go under as the blacks of Australia or the redskins of North America did, with the result that South Africa has never become a "white man's country" as those other areas have done.

Settlers from England were invited (1820) "to settle the border districts and garrison the frontier." This resulted in a steady extension eastwards along the coast, to Port Elizabeth and Durban (christened later). Meantime, the Boers—the original Dutch farmer-settlers—proved restive. And when in 1834, slavery was formally abolished throughout the British dominions, and the Boers were defrauded of most of the compensation due to them for their slaves,† large numbers of them (1836-40) trekked northwards

* Even as late as 1852, Lord Grey, then Colonial Secretary, wrote—"Beyond the very limited extent of territory required for the security of the Cape of Good Hope as a naval station, the British Crown and nation have no interest whatever in maintaining any territorial dominion in South Africa." But despite such declarations, extension of territory (and wars) went on.

across the Orange River, leaving British territory behind. This "Great Trek" led, after a war between Boers and Zulus, ending in a Zulu defeat, to the foundation of two independent Boer republics, the Orange River Colony and the Transvaal. But British expansion northwards along the east coast, to what is now known as Natal, cut off these little states from all access to the sea, and in 1842 the Boers attacked the British in Durban. They were driven back to the interior, and the following year Natal became a British colony.

There were fierce Kaffir Wars in 1846 and 1851, and Britain consolidated its hold on the territories immediately surrounding the two Boer republics. In 1877, Britain annexed the Transvaal; four years later the Boers rose in revolt, and after the British defeat at Majuba Hill, the independence of the Transvaal was once more recognised.

Already diamonds had been discovered at Kimberley, just east of the border of the Orange Free State, and this provided an objective for railway development northwards from Cape Town and the other southern ports. It was just such an objective which was needed to encourage the opening-up of South Africa at a much greater speed than hitherto, for the lack of navigable rivers made railways an essential factor. Later, came the finding of the Rand goldfield in the Transvaal; and with it an entirely new economic importance for the Boer States. But this development, and the parallel British expansion still further north into Rhodesia, falls into the period to be dealt with in our final chapter.

"Consolidation" had carried British control right round the south-east coast of Africa to the borders of Portuguese territory; and inland, northwards to a depth of close on a thousand miles.
When by the Treaty of Paris (1763) the whole of Canada passed into British hands, the great majority of its inhabitants were French. The need to conciliate these new subjects—at a time when, just south of their borders, other colonists were in full revolt against Britain—led to the passing (1774) of the Quebec Act; which indeed marked a change from the days when Englishmen, militantly Protestant, had landed in North America as a challenge to the power of Catholic Spain. By this Act, Roman Catholicism was recognised as the religion of the colony, while severe penalties were still imposed by law on that religion in Britain itself.

Immediately after the Independence of the American Colonies was achieved, some 40,000 "loyalists" (people who insisted on being British subjects) left the States and moved into Canada, forming the nucleus of the province of Ontario. There were thus two parts of Canada (which at this time, of course, did not extend further west than the Great Lakes)—Upper Canada (Ontario) predominantly English; and Lower Canada (Quebec) predominantly French. The main difficulty in the way of consolidation lay in reconciling the racial and political jealousies of these two areas; and this only became more acute when a steady stream of emigration from Britain altered the balance of forces, and placed the French in a minority.

There was a rebellion in both areas in 1837—just at the time when, on the other side of the Atlantic, the Boers were trekking away from British rule at the Cape. It was put down without difficulty, and the first steps were taken towards binding the two closer together by a new constitution—and a railway. In 1848 full responsible government was granted; and in 1867, Ontario, Quebec, New Brunswick, and
Nova Scotia were made a Federal Self-Governing Dominion.

But all these provinces, lying along the Great Lakes and the St. Lawrence, only constituted what is the smaller, eastern half of the Canada of to-day. To the north-west lay the vast territories exploited by the fur trappers and traders of the Hudson Bay Company, and their rivals, the North-West Company (founded at Montreal in 1784). These companies looked askance at the westward advance of the emigrant-settlers, looking for land to cultivate. Nevertheless the advance went on.

Still further west, over the Rockies, was an area so far only approached from the Pacific side—British Columbia, separated from the rest of Canada first by the mountains, and then by the Hudson Bay Company's domains. The discovery of gold there in 1858 at once led to its incorporation as a British colony. Eleven years later, the Government bought out the Hudson Bay Company, and shortly after this (1871) British Columbia came into the Dominion, on the express condition that she should be linked by a transcontinental railway with eastern Canada within ten years.

It was, indeed, only by means of the railways that the vast extent of Canada could be organised as a single whole. Until they came, British Columbia could be reached only from the Pacific, and all central Canada only by the sea-route into Hudson's Bay, blocked by ice for four or five months of the year.* Once the transcontinental lines were completed, the huge agricultural areas of the north-west were opened up, and the whole extent of territory from Atlantic to Pacific could be administered as a unit.

* Cf. pp. 59-60, and map, Plebs Outline of Economic Geography.
With the shepherding of the original inhabitants, the Indians, into 'reserves,' the whole Dominion was successfully made into a white man's country. (But, as numerous historians point out, the Indians, by this policy of 'reserves' were "secured from extinction.").

Australia

French peasants in Quebec, Dutch Boer farmers at the Cape, convicts in Australia—such were the more or less amenable people (not counting obstinately hostile natives) whom the British authorities were endeavouring to organise into communities dependent upon the home country for manufactured commodities. The natives of Australia, as we have already noted, were too few in numbers and too weak in capacity to form any obstacle to the consolidation of British rule. The main difficulty here sprang from the fact that the early settlers were transported convicts, and that for more than thirty years New South Wales, the first Australian colony, and Tasmania (annexed 1803) were primarily convict settlements. Gangs of 'bushrangers,' the offspring of these settlements, made things dangerous for the free immigrants when these later began to push their way into the unexplored interior.

The immigrants came in increasing numbers when sheep-breeding, and the production of wool, was established as the dominant industry. They came in hordes when gold was discovered at Bathurst, Ballarat and Bendigo in the 'fifties.* After this, the convicts were in a minority, and the main war was a war with the wilderness—with the vast spaces of the interior.

Australia was first crossed from north to south

* The population of Australia increased nearly threefold in the ten years 1851-61.
in 1862. Ten years later a transcontinental telegraph was completed along the same route. Already the continent was divided into six colonies. Railways were mainly confined to the more populated coastal areas in the east and south-east. Not until 1917 was a transcontinental line, running east and west, completed.

There are still many vast open spaces in Australia, and a primary problem of policy is now the desire to "keep the yellow man out" of them. But that again is a part of the story which belongs to our next chapter.

New Zealand and the Pacific

The islands of New Zealand were annexed in 1840. There had already been some vague sort of British overlordship, but it was only when reports of French activities in the Pacific (France was stirring again!) reached the British authorities that the islands were formally taken over. Economically, the attractions were similar to those of Australia—good land for sheep and cattle-farming, and, later, gold. But the Maoris, the natives of New Zealand, were folk of a very different stock to the Australian blacks, and not until after a whole series of wars (1844-48 and 1860-71) did these contumacious people learn their place in the British scheme of things.

"Consolidation" in the Pacific—though this part of the globe had not yet the significance to which it attained in our next period—also led to the annexation of the Fiji Islands in 1874.

China

One further important extension of British trading activities remains to be briefly noted. We have seen how possession of the Singapore gateway opened the
road to the Farther East—to China. The coming of the steamship at the same time shortened the distance thither.

The British East India Company had previously carried on a certain amount of trade with the great southern port of China, Canton; the importation of opium from India being an important item. The Chinese authorities now tried to stop this import. Britain promptly used armed force (i) to compel China to buy the drug, and (ii) more important, to break down the barriers which the Chinese had erected against trade with the outside world generally.

As a result of this first “Opium War” (1839-41) Britain took possession of the island of Hong-Kong, commanding the entrance to the harbour of Canton, and five ports in China, including Canton and Shanghai, were opened to British trade. There was a second war (1856-58) which gave the British the promontory of Kowloon, opposite Hong-Kong—the other “gatepost” of the harbour; and the Yangtse River was opened to British shipping.

**Summary**

We have seen in the period covered by this chapter some 3,000,000 or more square miles of territory added to the British Empire. Much of this expansion had, unfortunately, to be achieved by the use of force against the original inhabitants—black, brown, or yellow—of the square miles in question.

We have noted how the steamship and the railway helped in the consolidation of these varied possessions, and in linking them economically, as well as politically, with manufacturing Britain, which had become, since the Industrial Revolution, the “workshop of the world.”
We have seen the conquest of India completed, and its rule taken out of the hands of the East India Company and vested in the British Crown (i.e., in the British capitalist class as a whole); South Africa grow from a port of call to a large colony, with enormous mineral wealth; Australia from a convict settlement to a mapped-out continent; Canada from a group of settlements strung along a single river to a Dominion stretching from Atlantic to Pacific; the gates of China battered down; “key-points” on every ocean route secured for Britain.

We now go on to a period when the emergence of a whole group of new rivals threatened British world-dominance, and led inevitably to world war.
CHAPTER V

THE NEW IMPERIALISM

(1880 - 1929)

The appearance on the scene of these new, or resuscitated, rivals was a direct result of the Industrial Revolution. Other countries had now begun to organise their resources (and their working-classes) for the mass production of various sorts of commodities. Casting envious eyes at the profits which British manufacturers were making for themselves in the markets of the world, they too decided that it was their duty to carry the blessings of Christian civilisation to inferior peoples.

They were encouraged in this decision by other factors. In Britain and other countries alike the rapid development of the science of wealth production had produced a superior class of capitalists, with surplus money to invest in whatever area of the world promised the most satisfactory return. Looking around the world, these people — financiers — saw whole countries, nay continents, awaiting “development.” The old East India Company, in its later stages, had shewn the breath-taking possibilities of “trading in states and peoples.” But since its day the steamship and the railway had enormously increased such possibilities, making every corner of the globe accessible to the civilising influences of accumulated capital. And the power which the wealth of these financiers gave them made them the dominant class in their respective countries, able to dictate policies to governments, and to secure whatever
assistance they needed from the State to ensure a successful issue for their schemes.

It was, too, as we have already noticed, the era of railway-building, and consequently of the growth of big iron and steel industries. The "opening-up" of new countries, some of them hardly even explored before, meant inevitably the construction of bridges and railroads. Now, before you sink as much capital in a new country as building a railway necessitates, you naturally (if you are a capitalist) want some guarantees about "getting your money back." If the country in question has a stable government, one which, moreover, is able to defend itself, you carry on your negotiations with, and get your guarantees from, that government. But if the country is not of that type, you are compelled, in the interests of civilisation (and your railway) to get your own government to annex that country, or proclaim a "protectorate" over it, in order to establish Law and Order, and so make possible a proper margin of profit.

Thus, in the period at which we have arrived, we shall see France, Germany, the United States of America and Japan, all now industrial powers, challenging Britain's monopoly of overseas markets, and building commercial empires of their own; while countries such as Russia and Italy, not yet to any great extent industrialised (but with wealth-owning classes anxious to become still wealthier and with politicians ready to wax eloquent about "national prestige" and the need of a really up-to-date nation for foreign possessions), join in the scramble, too.

The New Era in Britain

Such causes as those touched on above were bringing about a noticeable "change of heart" in Britain herself. During the preceding period her manufacturers had not been greatly interested in
annexations or the growth of the Empire; although, as we have seen, the soldiers and administrators had seen to it that annexations went on. All the manufacturers asked for was that in every country there should be an “open door” to their trade*—a very natural policy, seeing that they enjoyed a practical monopoly of the world’s markets, with no competitors (at the moment) compelling them to take possession of a country in order to make their trade with it secure. But the growth of classes of financiers, and of big iron and steel manufacturers, soon revived an active interest in the Empire. Already Disraeli, alive to the possibilities of the new era, and backed by the financial power of the Rothschilds, had secured for Britain a preponderant share in the control of the Suez Canal, and had taken over from Turkey the adjacent island of Cyprus, a possible naval base now that the Mediterranean had become a vital part of the highway to India. Disraeli boldly announced a policy of “ostentatious and aggressive Imperialism, marked on distant frontiers by a new forward policy.” And he was to be followed by an even more militant apostle of Trade and Empire, Joseph Chamberlain (himself the Parliamentary representative of one of the great centres of steel production), who hailed Commerce as the main concern of the modern State in these memorable words:

All the great offices of State are occupied with commercial affairs. . . . The Foreign Office and Colonial Office are chiefly engaged in finding new markets and developing old ones. The War Office and the Admiralty are mostly engaged in preparation for the defence of these markets and for the protection of commerce. . . . Even the Education department bases its claim to the public money upon the necessity of keeping our people well to the front in the commercial competition which they have to sustain. . . .

* Cf. the opening of the door in China, as described in the last chapter.
Once more, then, we are back in an age of international competition, intensified a hundred-fold as compared with those earlier struggles described in previous chapters, by reason of the enormously increased powers both of capitalist production and of the whole machinery of war.

The Scramble in Africa

This new rivalry of nations began in a wild scramble for territory in that continent, the greater part of which had only recently been "opened-up" by explorers and missionaries, which was, moreover, inhabited by peoples lacking civilised weapons of warfare—Africa. Between 1880 and 1890, 6,000,000 square miles of African territory, with close on 90,000,000 inhabitants, were annexed by European Powers.

The actual process by which these annexations were carried out has been thus described:—

First, semi-private or private expeditions of exploration are sent out into territory in possession of native communities and chiefs or kings. These expeditions are always directly or indirectly associated with or controlled by commercial companies, or by groups of European financiers and capitalists. Usually the explorer acts in the name of the capitalist association or joint-stock company, and in their name he proceeds to obtain or extort "treaties" from the native chiefs and rulers. These treaties are curious documents; the king or chief signs them by making a mark, and thereby proclaims to the world that he has received from the European or his company a little cloth, some bottles of gin, and the promise of protection, while he has given in exchange to the European and the company the sovereignty over the whole of his lands and people.*

The scramble was solemnly "legalised" by a Conference of all the European Powers which met at Berlin (1885). At this Conference the Powers em-

* L. S. Woolf, *Economic Imperialism.*
powered one another to go ahead with the partition of Africa, and all bound themselves, in doing this, "to further the moral and material well-being of the native populations."

Britain, as we have seen, had already a footing at one or two points in Africa; on the West Coast, where three small colonies survived from the days when they were depots in the golden age of the slave trade; and in the south, at the Cape, whence, pushing north and north-east, she had founded the colony of Natal, established protectorates over various native "kingdoms," and ringed round the two Boer republics with her own possessions. Now, faced with the appearance on the scene of new competitors (Germany had laid claim to territories in West, South-west, and East Africa; France was extending her footholds on the west coast as well as north, in Algeria and Tunis; and the King of the Belgians, at the head of a company all his own, was claiming vast areas on the Congo), British financiers formed new "development" Companies, and the British Government hastened to give them Charters. A Royal Charter was granted to the British East Africa Company in 1885, to the Royal Niger Company in 1886, and to the British South Africa Company in 1889.

The East Africa Company, by means of "treaties" (of the kind described above) with the Sultan of Zanzibar, the King of Uganda, and numerous chiefs, obtained possession of British East Africa (now called Kenya Colony) and of Uganda. The Niger Company—its agents working overtime to get in ahead of French rivals—secured Nigeria, thus preventing

* The very best people were directors of these companies. The directorate of the East Africa Company included the Marquis of Lorn, Lord Brassey, one Field Marshal, three Generals, and the Vice-President of the Church Missionary Society. (Woolf, Empire and Commerce in Africa, p. 243).
the French from controlling the whole course of the great Niger river to the sea by cutting them off from its lower reaches and the delta. A little to the west of this territory the British Government carried on a series of wars in Ashanti, resulting in a protectorate over that area (1896) and its annexation (1901). French designs of an unbroken belt of territory in this area were thus twice checkmated.

The South Africa Company, under the control of Cecil Rhodes (whose fortune had been made out of Kimberley diamonds and Rand gold) set itself from the first to defeat the claim of the Boers. Its ostensible object, as defined in its Charter, was to acquire concessions in the territories north of Bechuanaland and the Transvaal.*

A year after its formation it occupied Mashonaland with an armed force; and two years later raised another force for the invasion of Matabeleland. "The company then picked a quarrel with Lo Bengula, the Matabele king, and its mercenaries invaded his country and defeated him." Thus Rhodesia came into being. And here, as in East Africa a little later, the natives were herded into "reserves" and the fertile land handed over to white settlers.

But the two Boer republics still stood in the way of the solid British South Africa—leading to an All-Red Route from Cape to Cairo—of Rhodes' dream. In 1895, Jameson, Rhodes' lieutenant, tried to bring off a coup d'état by leading a raid of the Company's men into Transvaal territory, in the hope of precipitating a revolt of "uitlanders" (the English, German, and Jewish gold-diggers who were denied citizenship by the Boers). The scheme failed, and the South Africa Company was placed under Imperial control.

---

* The charter was extended in 1891, to cover additional areas beyond the Zambesi river.
But Rhodes' plans went forward, and the slogan of "Briton versus Boer" became familiar in Britain. In 1899 came war, followed three years later by the annexation of both republics. British territory now ran northward in an unbroken block from the Cape to the southern end of Lake Tanganyika, a distance of some 2000 miles.

**Egypt**

Meantime, Britain had been working southward from the north of the continent. In 1879 she had intervened to secure the deposition of the Khedive of Egypt, whose debts had become a source of anxiety to his creditors (the Rothschilds and others) in London and Paris. Two years later, as a result of an Egyptian nationalist rising under Arabi Pasha, a British Army occupied Egypt, and a protectorate was established; a step "equally necessary in the interests of the bondholders and of the oppressed population," not to mention the safeguarding of the Suez Canal. France, previously a partner in the "Dual Control" of Egypt, was now shut out. She retaliated by seeking to extend the vast area of her West and Equatorial African territories eastward across the Sudan (the upper portion of the Nile valley) to Abyssinia. Britain had already made one ill-fated attempt, under General Gordon, to subdue the Sudan. In face of French activities in Abyssinia, a British expedition under Kitchener was now sent to occupy Khartoum. To forestall this move, French expeditions from the Congo on one side and from Abyssinia on the other were to converge on the upper Sudan. But the plan miscarried, and only one small force, under Marchand, met Kitchener's victorious army at Fashoda. The French had to give way.*

* For the full story, see Woolf, *Empire and Commerce in Africa*, pp. 190-5.
The arrows indicate the French attempt to "cut" the chain of British territory, across the Sudan (see page 80).
Britain was now in control of the whole length of the Nile Valley—2000 miles southward from the Mediterranean.

Only German East Africa intervened to block the all-British Cape-to-Cairo route.

The Scramble in Asia

In Asia, as well as in Africa, Britain found it necessary to take active measures to prevent all her civilising work being upset by envious rivals. France sent a military expedition to China and annexed Tonking and Annam. Britain, to maintain her prestige, had to invade Burma, depose King Theebaw, and annex the country (1886). South of the French zone, in the Malay peninsula, she safeguarded her possession of Singapore by extending her protectorates over various small native states.

In China, where concessions for railways (with their accompanying “spheres of economic influence”) were now the great prize, the representatives of France, Germany and Russia were desperately busy, seeking to compensate themselves for Britain’s initial advantage in first opening the door. France was claiming economic privileges in the southern provinces; Russia had her eyes on Manchuria. Jealousy of one another prevented any kind of concerted attack, or China’s independence must inevitably have gone the way of India’s. But if the actual partition of China was not practicable, its division into “spheres of interest” could at least be proceeded with. And since a base on the spot was essential to the proper working of these “spheres,” the Powers helped themselves to selected pieces of Chinese territory; Russia taking Liao-tung and Port Arthur, Germany Kiaochau, France Kwang-chow-wan, and Britain (in addition to her previous possession of Hong-Kong) Wei-hai-wei. In the “battle of concessions” for
railway-building, Britain managed to beat all her rivals, securing orders for some 2800 miles of line; Russia coming second with 1530 miles.

In another country, over on the other side of Asia—Persia—Russia was Britain's most formidable rival. Southern Persia touches the western frontier of India, while on the north it marches with Russian territory. Here, therefore, as in the adjacent state of Afghanistan, it was urgently necessary to safeguard the approaches to India against any possible Russian advance. This was achieved ultimately by a Treaty between Russia and Britain dividing Persia into three zones—Russian in the north, British in the south, and a "buffer" area in the centre, in which the Persians were more or less left to themselves.

Alliances

But this Treaty brings us to another, and highly important, part of our story. In this feverish struggle of the various Powers for markets and spheres of influence and concessions, it was becoming apparent that no one of them would be strong enough to oust all its rivals. Sooner or later they would have to group themselves into rival camps, and fight the first round, at least, in pairs. In 1902, Britain concluded an alliance with Japan, the one Asiatic State which had not proved too weak to hold its own against the European invaders but, on the contrary, had made itself into a capitalist-industrialist Power on the best European model, complete with army and navy. Japan had just proved its greatness by defeating Russia in a war for the economic control of northern China. She was therefore, an ally worth having.*

* The alliance was the cause of some difficulty between Britain herself and the Dominions of Canada and Australia, both of which were opposed to "yellow" immigration, and therefore not amicably disposed towards Japan.
Throughout the earlier phases of the contest, as we have seen, it had been France who was Britain's most serious competitor, both in Africa and Asia; with Russia a close second. But by the end of the century (at about the time of the Boer War, and a little later than the seizures of Chinese ports noted above) a re-alignment of forces began to take place. Germany, left well behind in the race for African and Asiatic possessions, was proving herself a dangerous competitor in the production of iron and steel. Her better industrial organisation, newer plants and more up-to-date technique were enabling her to push into markets where Britain had hitherto held a monopoly. Moreover, she now definitely challenged that monopoly by beginning to build a powerful fleet.

France also had reasons for regarding this rapid development of German power with distaste. Her industrial magnates had their eyes on the iron of Lorraine, taken from her after the Franco-German war 30 years before, and now the basis of German prosperity. Pourparlers began to pass between the Chambers of Commerce of France and Britain. The politicians were given their instructions. King Edward VII played his part. And an alliance (called an entente) between Britain and France was the result. Other developments followed. France had already concluded an alliance with (and lent money to) Russia. It was accordingly desirable that Britain and Russia should compose their differences. Accordingly, the Dual Entente (France and Britain) became the Triple Entente (France, Britain and Russia), and the little arrangement noted above about Persia followed.

The Entente meant that Britain must stand alongside her allies even where her own interests were not directly involved. For example, France and Germany quarrelled in 1905, and again in 1911, over
the question of the French claim to Morocco, in North-West Africa. On both occasions Britain made it clear that she was ready to go to war on the side of France. "The quarrel was now showing itself to be primarily an Anglo-German quarrel, and not, as hitherto, a predominantly Franco-German quarrel."* And Britain was making the appropriate preparations. "British annual expenditure on armaments increased between 1895 and 1903 from £35 to £60 million, exclusive of £218 million spent between 1900-3 directly on war in South Africa and China."†

Germany, on her side, was pursuing one line of economic "penetration" which directly threatened British interests. This was the scheme for the Baghdad Railway—a line running from Constantinople, through Asia Minor, to the Persian Gulf, carrying with it important mineral concessions along its route. The creation of a German economic sphere in this region was regarded by Britain as a dangerous threat to the security of her main line of communications with India—the Suez-Red Sea route.

War, now, was merely a question of time and convenient opportunity.

1914-18

That opportunity came in 1914. France, Britain, and Russia were ranged against Germany and Austria. Later, Italy and then the United States came in on the side of the Entente, not to mention the various secondary States which entered the struggle, willingly or by compulsion, on one side or the other. For four years the struggle raged. But at last Right and Justice triumphed. In other words, Germany and her allies were defeated.

---

* Plebs Outline of Modern Imperialism, p. 21.
† Plebs Outline of European History, p. 118.
The victors proceeded to divide the spoils. They did this, however, in a highly moral manner, refusing to annex German overseas possessions in the bad old-fashioned way, but giving one another "mandates" (under the League of Nations) over those territories. The difference between a mandated territory and a possession is a legal point too fine to be discussed in a small book such as this.

Britain's share of these territories was considerable. In Africa she took over German South West, German East (re-named Tanganyika Territory), a strip of the German Cameroons (added to the area of Nigeria) and of Togoland (added to the Gold Coast); in the Near East she acquired mandates for Mesopotamia (Iraq), with its oil deposits, and for Palestine, an additional bulwark for the Suez Canal; in the Pacific, German Samoa, Nauru Island, and German New Guinea. Moreover, the German fleet was destroyed.

After the War

Yet, despite all these gains, it can, alas! hardly be claimed that the Great War really settled anything. Germany, it is true, was deleted. But two Powers—the United States and Japan—emerged from the War stronger than before, and the contest for spheres of influence, markets and raw materials was intensified rather than abated. Hardly was the War over than the financiers of Britain were plunged into economic war with those of the United States over the question of oil supplies. The United States accused Britain of attempting to secure a monopoly of the world's oil-fields. They even asserted that Britain's presence in Persia and Turkey was due to the existence of oil in those countries, rather than to a desire to assist in the moral and material uplifting of their inhabitants. And they waged economic war against Britain, also, in other areas. By financial "penetration" they es-
established a sort of overlordship not only in South America, the republics of which had for a century been among Britain's best customers, but even in the Dominion of Canada, actually a part of the British Empire.*

Again, a powerful section of U.S. capitalists clamoured for a Big Navy, which could not but be regarded as a threat to British sea-power.

France, too, now that she had succeeded to the possession of the Lorraine ironfields, had become as potentially dangerous a competitor as Germany herself had been before the War. And France was also working for dominance in the Mediterranean which constituted a serious threat to the safety of the British high road to India.

Russia, again, was a menace. The War had broken the power of the Tsardom and put in power a Workers' and Peasants' Government which was the avowed enemy of capitalist imperialism everywhere. Its propaganda, and the propagandist value of its example, particularly among the Asiatic peoples—in China, India, Persia, etc.—was far more dangerous than the Tsar's armies had been.

To crown all, there was growing "unrest" among the subject peoples of the British Empire. The movement for Indian independence had grown to alarming proportions. A touch of the iron hand was once again clearly necessary, and this General Dyer supplied at Amritsar. Yet the movement

*This intensification of international competition necessitated a more efficient organisation of the Empire as a commercial concern; better and more up-to-date publicity methods, and so on. Hence the posters and newspaper advertisements urging the people of Britain itself to "Buy Empire Goods," etc. Hence also the need for Imperial Conferences, in which representatives of all parts of the Empire endeavour to agree on a common economic policy.
grew stronger and stronger. Egypt also was in revolt, and refused to be satisfied with the limited measure of independence which was all (considering the position of the Suez Canal) that Britain would allow her. Ireland, at Britain's very doors, fought a War of Independence, and secured for herself the status of a self-governing Dominion. China, after a revolution of her own, demanded the revocation of the treaties which the outside Powers had forced upon her, and British forces had to be sent to Shanghai to defend British women, children and dividends. The natives of various parts of Africa grew less and less grateful for the "reserves" of land allocated to them, and more and more disinclined to work for low wages on the areas of fertile land, once theirs, which had been granted to white planters and settlers.

It was clear that there would have to be more wars, more "Pacts" with allies, bigger and better armaments.

*   *   *

Here our story breaks off. The next chapter has yet to be written.
NOTES ON READING

For general history and geography of the Empire:—

* Historical Geography of the British Empire. Sir C. P. Lucas.
  (6 vols.).
* The British Empire. Basil Williams. (Home Univ. Library)
* The Expansion of Britain. W. R. Kermack (small textbook).
* A Short History of British Expansion. J. A. Williamson.
* The New World. I. Bowman (modern problems).
* Plebs Outline of European History. M. H. Dobb.

For particular sections:—

* Oxford History of India. V. A. Smith.
* The Other Side of the Medal. Edward Thompson.
* An Indian Commentary. By G. T. Garratt.
* Modern India. By R. P. Dutt.
  Kenya from Within. McGregor Ross.
* Empire and Commerce in Africa. L. Woolf.
* A History of South Africa. By Eric Walker.
  China, and Malaya.
* The Plebs Atlas (for current problems).
# A CHRONOLOGICAL TABLE

of leading events in the history of the British Empire

<table>
<thead>
<tr>
<th>NEW WORLD.</th>
<th>BRITAIN.</th>
<th>OLD WORLD.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1492</td>
<td>Columbus crosses Atlantic</td>
<td></td>
</tr>
<tr>
<td>1497</td>
<td>Cabot's first voyage</td>
<td></td>
</tr>
<tr>
<td>1498</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1540</td>
<td>English merchants trading with Brazil</td>
<td>Vasco da Gama reaches India</td>
</tr>
<tr>
<td>1553</td>
<td></td>
<td>Trade with W. Africa</td>
</tr>
<tr>
<td>1562</td>
<td>Hawkins' first voyage to W. Indies</td>
<td>sailing round the world</td>
</tr>
<tr>
<td>1577-80</td>
<td>Drake</td>
<td></td>
</tr>
<tr>
<td>1585</td>
<td>Raleigh founds colony of Virginia</td>
<td>Portuguese challenged</td>
</tr>
<tr>
<td>1588</td>
<td>Piracy on Spanish Main</td>
<td>E. India Company's first factory at Surat</td>
</tr>
<tr>
<td>1600</td>
<td></td>
<td>Dutch monopolise E. India Is.</td>
</tr>
<tr>
<td>1612</td>
<td></td>
<td>E.I.C. factory at Madras</td>
</tr>
<tr>
<td>1620</td>
<td>Pilgrim Fathers land</td>
<td>&quot;&quot;, &quot;&quot;, on Hoogli</td>
</tr>
<tr>
<td>1639</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1640</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Year</td>
<td>Event</td>
<td></td>
</tr>
<tr>
<td>------</td>
<td>-------</td>
<td></td>
</tr>
<tr>
<td>1649</td>
<td>Civil War</td>
<td></td>
</tr>
<tr>
<td>1651</td>
<td>Charles I executed</td>
<td></td>
</tr>
<tr>
<td>1652</td>
<td>Cromwell's Navigation Act</td>
<td></td>
</tr>
<tr>
<td>1653</td>
<td>Wars with Dutch</td>
<td></td>
</tr>
<tr>
<td>1655</td>
<td>St. Helena occupied</td>
<td></td>
</tr>
<tr>
<td>1656</td>
<td>Bombay becomes British</td>
<td></td>
</tr>
<tr>
<td>1657</td>
<td>African Co. of London occupies Gambia</td>
<td></td>
</tr>
<tr>
<td>1658</td>
<td>French India Co. founded</td>
<td></td>
</tr>
<tr>
<td>1659</td>
<td>Dutch occupy the Cape</td>
<td></td>
</tr>
<tr>
<td>1660</td>
<td>French in India</td>
<td></td>
</tr>
<tr>
<td>1661</td>
<td>Calcutta founded</td>
<td></td>
</tr>
<tr>
<td>1662</td>
<td>Mogul Empire in India begins to disintegrate</td>
<td></td>
</tr>
<tr>
<td>1663</td>
<td>French victorious in India</td>
<td></td>
</tr>
<tr>
<td>1664</td>
<td>British take Carnatic under their protection</td>
<td></td>
</tr>
<tr>
<td>1665</td>
<td>Clive conquers Bengal</td>
<td></td>
</tr>
<tr>
<td>1666</td>
<td>French defeated in India</td>
<td></td>
</tr>
<tr>
<td>1667</td>
<td>Hargreave's spinning jenny</td>
<td></td>
</tr>
<tr>
<td>1668</td>
<td>Watts' steam eng. patented</td>
<td></td>
</tr>
<tr>
<td>1669</td>
<td>French take Carnatic under their protection</td>
<td></td>
</tr>
<tr>
<td>1670</td>
<td>Clive conquers Bengal</td>
<td></td>
</tr>
<tr>
<td>1671</td>
<td>French defeated in India</td>
<td></td>
</tr>
<tr>
<td>1672</td>
<td>American Colonies declare independence</td>
<td></td>
</tr>
<tr>
<td>NEW WORLD</td>
<td>BRITAIN</td>
<td>OLD WORLD</td>
</tr>
<tr>
<td>-----------</td>
<td>---------</td>
<td>-----------</td>
</tr>
<tr>
<td>1779</td>
<td>Crompton's &quot;mule&quot;</td>
<td>First convicts landed at Botany Bay</td>
</tr>
<tr>
<td>1785</td>
<td>Steam first applied to cotton mill</td>
<td>Britain takes the Cape</td>
</tr>
<tr>
<td>1788</td>
<td>INDUSTRIAL REVOLUTION</td>
<td>Mysore (India) conquered</td>
</tr>
<tr>
<td>1795</td>
<td>NAPOLEONIC WARS</td>
<td></td>
</tr>
<tr>
<td>1799</td>
<td>Slave trade abolished</td>
<td></td>
</tr>
<tr>
<td>1807</td>
<td>English, Scotch, and Irish peasants in increasing numbers become wage-slaves</td>
<td>Maharattas defeated</td>
</tr>
<tr>
<td>1818</td>
<td>Combination Acts in full swing. Luddite riots</td>
<td></td>
</tr>
<tr>
<td>1823</td>
<td>Monroe Doctrine</td>
<td>Burma partly conquered</td>
</tr>
<tr>
<td>1824</td>
<td></td>
<td>Western Australia founded</td>
</tr>
<tr>
<td>1829</td>
<td>Dorchester labourers transported</td>
<td>South Australia founded</td>
</tr>
<tr>
<td>1836</td>
<td></td>
<td>S. African Boers' trek north</td>
</tr>
<tr>
<td>1839</td>
<td>Repeal of Corn Laws</td>
<td>New Zealand annexed</td>
</tr>
<tr>
<td>1846</td>
<td></td>
<td>First 'Opium War' with China</td>
</tr>
<tr>
<td>1849</td>
<td></td>
<td>Punjab annexed</td>
</tr>
<tr>
<td>1852</td>
<td></td>
<td>Second Burmese War</td>
</tr>
<tr>
<td>1854</td>
<td></td>
<td>Independence of Transvaal recognised</td>
</tr>
<tr>
<td>1856</td>
<td>Colonial Office organised</td>
<td>Gold in Australia</td>
</tr>
<tr>
<td>1857</td>
<td></td>
<td>Oudh annexed</td>
</tr>
<tr>
<td></td>
<td></td>
<td>The Indian &quot;Mutiny&quot;</td>
</tr>
<tr>
<td>Year</td>
<td>Event</td>
<td></td>
</tr>
<tr>
<td>------</td>
<td>-------</td>
<td></td>
</tr>
<tr>
<td>1858</td>
<td>British Columbia founded</td>
<td></td>
</tr>
<tr>
<td>1867</td>
<td>Dominion of Canada</td>
<td></td>
</tr>
<tr>
<td>1869</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1879</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1882</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1886</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1888</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1889</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1893</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1898</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1900</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1901</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1902</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1907</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1914</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1919</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1922</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1927</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1928</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

- **1858**: British Columbia founded
- **1867**: Dominion of Canada
- **1869-1888**: Various events including the formation of the Dominion of Canada and the Rothschilds putting up money for the British Government to buy Suez shares.
- **1889-1919**: Events such as Chamberlain Colonial Secy., Japanese Alliance, Entente with France and Russia, and the Suez Canal opened.
- **1922-1928**: Events including Friction with U.S., Anglo-French Naval Pact, and Troops sent to Shanghai.

**Chronological Table**

- End of East India Co.
- Second 'Opium War' with China
- Suez Canal opened
- British occupation of Egypt
- Niger Company chartered
- Brit. E. Africa Co. chartered
- Brit. S. Africa Co. chartered
- Rhodes conquers Matabeleld
- Gold in Transvaal
- Sudan conquered
- Boer Republics annexed
- Commonwealth of Australia
- Union of South Africa
- Britain secures "mandates" in Palestine, Mesopotamia, Africa and Pacific
- Massacre of Amritsar
- Egyptian (nominal) independence granted
- Troops sent to Shanghai
Perth:
Milne, Tannahill, & Methven,
12-14 Mill Street
THE EDUCATIONAL THEORY OF COMENIUS

BY

Shamsul Ghani Khan,

Head Master, Govt. Training School, Ajmer;

Formerly Lecturer in Education, Muslim University, Aligarh;

Author of 'Rousseau's Educational Theory,' and 'The Influence of the Geography of India on its History.'

1928

ARMY ROTARY PRESS
DELHI.
## Contents

<table>
<thead>
<tr>
<th>Chapter</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Life of the Author</td>
<td>1</td>
</tr>
<tr>
<td>I. Life of Comenius...</td>
<td>31</td>
</tr>
<tr>
<td>II. Educational Writings</td>
<td>46</td>
</tr>
<tr>
<td>III. The Religious-Scientific Conception of Education</td>
<td>62</td>
</tr>
<tr>
<td>IV. Democracy in Education</td>
<td>72</td>
</tr>
<tr>
<td>V. Sense-Realism</td>
<td>82</td>
</tr>
<tr>
<td>VI. Pansophia</td>
<td>103</td>
</tr>
<tr>
<td>VII. Utilitarianism</td>
<td>116</td>
</tr>
<tr>
<td>VIII. The Infallible Method</td>
<td>144</td>
</tr>
<tr>
<td>IX. The Method of Nature</td>
<td>156</td>
</tr>
<tr>
<td>X. Paidocentricism</td>
<td>173</td>
</tr>
<tr>
<td>XI. Stimuli</td>
<td>201</td>
</tr>
<tr>
<td>XII. The Compulsory Stages of Education</td>
<td>213</td>
</tr>
<tr>
<td>XIII. The Optional Stages of Education</td>
<td>237</td>
</tr>
<tr>
<td>XIV. Achievements and Influence</td>
<td>252</td>
</tr>
</tbody>
</table>
In writing this little book I was inspired by a desire to present the educational theory of Comenius in a manner most appealing to the modern reader. Comenius has still a message for statesmen and ecclesiastical leaders as well as professed educationists, and I have striven to keep the needs of all classes of readers in view.

The book is critical rather than informational, for I felt that though much was written on Comenius, a thorough criticism of his theory and practice in the light of modern pedagogy and with reference to our present needs was wanting. It is likely to be helpful to the advanced student of education as
a thought-stimulating introduction to Comenius. For less advanced students and general readers it contains all that they may care to know about the great educator and the merits and defects of his doctrines.

I have prefixed a short description of my life, specially for readers in Europe and America. The interest which my treatise on Rousseau's Educational Theory excited outside India stimulated some of my readers to know something about the author. In the present volume I thought it desirable to meet their demand.

In the preparation of this treatise I have received useful suggestions from Colonel R. J. W. Heale, His Majesty's Resident in Gwalior, Dr. King of the Mission College, Indore, Sabibzada Abdul Wahid Khan of Ajmer, Professor
M. W. Keatinge of Oxford, Professor R. L. Archer of the University of North Wales, and Dr. L. F. Anderson of the Ohio State University, and I acknowledge with thanks the valuable help which the suggestions of these gentlemen gave me. I am also grateful to Mr. R. Littlehailes, Educational Commissioner with the Government of India, for his advice that I should write separately on each great educator of historical importance before attempting a comprehensive history of education with movements and tendencies as units of treatment.

Ajmer,

The 8th July, 1928.

S. G. K.
Life of the Author.

I was born at Rampur, the capital of a native state of the same name in the United Provinces of Agra and Oudh, on the 25th October, 1893. My father is in possession of a big manuscript which traces my ancestry to the great Mughal chief, Chughtai Khan. The family, however, lived for several centuries in Afghanistan, married Afghan ladies, and acquired Afghan characteristics, including blue eyes and fair colour. Space does not permit me to outline the history of the family. It suffices to say that in the 18th century one of its members, Haji Mohammad Sayeed Khan, a theologian of repute, migrated to India and settled in Rohilkhand, first at Barielly, and after the Rohilla
war of 1773 at Rampur. The Haji's descendants devoted themselves to literary, administrative and military vocations and possessed in an exaggerated form the aversion to trade, industry, and agriculture which characterised the leading Muslim families in Pre-British India. The family produced some great scholars of Oriental learning as well as commissioned officers who upheld the good name of the family in the English East India Company's wars. As an envoy of the Nawab of Rampur, my grandfather rendered meritorious diplomatic services in preventing the outbreak of rebellion in some discontented parts of Rohilkhand during the Mutiny of 1857-58. To-day the military tradition is represented by an uncle of mine, who is a retired cavalry officer, with a brilliant record of service on the
North-Western Frontier, and the administrative side by another uncle, who is a pensioned member of the Council of Regency of Holkar's dominions, while my father symbolises the literary interests of my family.

My father, Maulvi Hakim Mohammad Najmul Ghani Khan, was born on the 8th October, 1859. He inherited glorious traditions, not only from his father, but also from his mother, grandmother of Rozi Khan, a Rohilla chieftain, who played a prominent part in the battle of Panipat, 1761. My grandmother's brother, Hakim Mohammad Azam Khan, was a voluminous writer on medicine, and his books on various aspects of the subject are used by every Yunani physician in India, and by many in Persia, for he wrote in Persian. Mohammad Azam Khan was, in his last days,
the court physician of Maharaja Holkar and died in 1903 at the advanced age of 104 years. Agha Sanjar, a Persian poet, wrote on his death an elegy, whose last couplet was as follows:

(I said, "O Sanjar, whose death has made the world a house of mourning." He said, "The death of the Khan Sahib, who was the Avicenna of India.")

My father learnt medicine from his maternal uncle, Arabic literature from my grandfather, and other subjects from the learned men who were driven to the shelter of the Nawab of Rampur in consequence of the annexation of the kingdom of Oudh by Lord Dalhousie.

In his adolescence my father began work as an author and has not yet dropped the pen from his hand. Some of his works are as follows: —
<table>
<thead>
<tr>
<th>S. No.</th>
<th>Name of the book</th>
<th>Subject</th>
<th>Language</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.</td>
<td>History of Oudh.</td>
<td>History</td>
<td>Do.</td>
<td>5</td>
</tr>
<tr>
<td>5.</td>
<td>Nehjul Adab</td>
<td>Grammar</td>
<td>Persian</td>
<td>The most comprehensive Persian grammar ever written.</td>
</tr>
</tbody>
</table>

---

The table above lists books with their respective subjects, languages, and notes.
<table>
<thead>
<tr>
<th>S. No.</th>
<th>Name of the book</th>
<th>Subject</th>
<th>Language</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>7.</td>
<td>Qawaide Hamidi</td>
<td>Do</td>
<td>Hindustani</td>
<td></td>
</tr>
<tr>
<td>8.</td>
<td>Mizanul Asfar</td>
<td>Logic</td>
<td>Persian</td>
<td></td>
</tr>
<tr>
<td>10.</td>
<td>Usule Fika</td>
<td>Islamic law</td>
<td>Do</td>
<td></td>
</tr>
<tr>
<td>11.</td>
<td>Talimul Iman</td>
<td>Islamic theology</td>
<td>Do</td>
<td></td>
</tr>
<tr>
<td>12.</td>
<td>Alquawulul Faisal, etc.</td>
<td>Islamic law</td>
<td>Arabic</td>
<td></td>
</tr>
<tr>
<td>No.</td>
<td>Title</td>
<td>Subject</td>
<td>Language</td>
<td></td>
</tr>
<tr>
<td>-----</td>
<td>-------------------------------------------</td>
<td>--------------------------</td>
<td>----------------</td>
<td></td>
</tr>
<tr>
<td>13</td>
<td>Tahzhibul Aqaid</td>
<td>Islamic theology</td>
<td>Hindustani</td>
<td></td>
</tr>
<tr>
<td>14</td>
<td>Tazkaratus Suluk</td>
<td>Sufi philosophy</td>
<td>Do.</td>
<td></td>
</tr>
<tr>
<td>15</td>
<td>Khazainul Advia</td>
<td>Materia Medica</td>
<td>Do.</td>
<td></td>
</tr>
<tr>
<td>16</td>
<td>Qarabadine Najmul Ghani</td>
<td>Medicine</td>
<td>Do.</td>
<td></td>
</tr>
</tbody>
</table>

... 8 volumes, containing about 7000 pages; combines the Vedic, Yunani, and European systems of medicine; embodies the fruits of 20 years' indefatiguable labour.
In my infancy my father was a physician in the service of the Nawab of Rampur. The post that he held was a sinecure; so it enabled him to devote undivided attention to literary work. He taught me the ABC of the mother tongue. But I learnt much more from him unconsciously. It is a typical illustration of the influence of heredity through the social environment that I learnt to write automatically. My father was writing the *History of the Rohillas*, and when he had finished a paragraph, he generally read it aloud to test its mellifluence. This enabled me to listen to the events written in the manuscript, which appealed powerfully to my juvenile interest in narratives dealing with action and war. I endeavoured to imitate my father by writing similar narratives, and one day my joy
knew no bounds when for the first time I wrote a full page. The passion for writing grew so strong that I rummaged my father's library, selected the most good-looking books, and wrote on the margins of their pages. This practice continued for some time, till my father came to know of it and diverted my zeal into desirable channels.

In infancy I displayed remarkable intelligence and self-control. Once, being indisposed, I was given such diet as suited an invalid. In order that I might not be tantalized by the sight of more delicious food, a maid-servant took me out in her lap, when my father and mother dined. Somehow or other I realised what the cause of my removal from the house at meal-times was and told my parents that they might dine in my presence and that I would not
insist on eating with them, as I knew that the food they ate would do me harm. In the same way, once in trying to take some sweets out of a plate placed beyond my reach I caused it to fall down, with the result that it struck my head. I neither cried nor went to my parents for help, but straightway ran to the dispensary adjoining our house and had my wound dressed. At another time my mother tried to send me to bed by asking a maid-servant to put on a mask and represent a ghost. I was not afraid, but amused to see the maid in that condition.

At the age of six, my formal education began. I received instruction from several tutors in succession. They taught me something of Persian, but impeded my mental development in consequence of their bad methods of teach-
ing. At seven I began English for which I evinced remarkable aptitude. In 1901 the Maharana of Udaipur, the premier Rajput chief, gave my father a post in the education department of his state and then for the first time I entered a public school. My father's company, however, taught me more than the formal education that the school imparted. The Russo-Japanese war began and the discussions which my father had about it with his friends in the evenings stimulated me to read the daily papers. I had received a copy of Philip's Shilling Atlas as a prize from the school and this became a favourite plaything in my hands. I often chose one of the maps and located an imaginary republic in it, and then conducted a war between that republic and a neighbouring country, writing descriptions in imitation of the newspapers.
The Turkish Revolution brought about by the Young Turkish party followed the Russo-Japanese war and my love for the Turks prompted me to write a poem on the memorable event. A short novel was also written on the same topic. Unluckily, none of these works which might be useful to me now in connection with my study of child psychology has been preserved.

I was interested in football and hockey, but could never acquire a liking for cricket, I am not sure why. But I was much more interested in reading. My love for books, which owes its origin to my father's example, was developed by the supply of well-graded books. Beginning with historical narratives, historical novels and books of travel and adventure, it was gradually associated with more serious subjects.
When I was in the high school section, I aspired to read the *Encyclopædia Britannica* from A to Z, but could not persevere in the attempt. Perhaps the most useful books that I read in my boyhood were the works of Samuel Smiles (*Duty, Character, and Self-help*.) These made me realise the seriousness of life. It became my favourite occupation to write and classify human virtues and form principles to practise them.

At 16 my university education began. I was admitted to the Holkar College, Indore, and resided for some months with my uncle, who was a member of the Council of Regency of the state. Being in charge of a portfolio in a principality as large as Wales, the uncle could not give such personal attention to me as my father had done,
and I was, ere long, lodged in the college hostel, but did not make a good use of the liberty which the change gave me. I became a revolutionary of the extreme type and believed that man’s glory lay in the success with which he defied authority.

Perhaps anarchy and impiety go hand in hand. The perversion of my political views shook my belief in religion, and I conceived that the only effective means of uniting the various Indian communities in a struggle against foreign rule was to discard religion. But the loss of Tripoli by the Turks and the diminution of the Ottoman Empire in consequence of the Balkan war cured me of irreligiousness. The misfortunes of the Turks made the Muslims of India realise
their Helplessness and turn to God for help. They began to compare their present lot with their glorious past, and were convinced that their safety lay in a return to Islam. The Balkan War and the recent Great War, consequently, caused religious revival in this country. I was profoundly influenced by the new spirit and began to study the *Kuran* and other religious books, which have in due course completely altered my conception of the goal of human life. The desire for a practical expression of my sympathy for the Turks prompted me to visit the Turkish consul-general at Bombay, whom I implored to send me to Turkey as a volunteer in the Balkan war. That officer did nothing to help me. What was worse, he treated me with scant courtesy, perhaps, on the assumption that my visit to him was a juvenile prank. Then I requested
Maulana Mohammad Ali to enlist me as a member of Dr. Ansari's Red Crescent party. The Maulana regretted that his arrangements were complete and he could not admit a fresh member.

These activities caused a serious break in my educational career, and when my uncle took long leave from the Indore state for a tour round the world, my father, who knew that my stay at Indore was not conducive to his design of making me a great scholar, transferred me to the Government College, Ajmer. The change, however, served no useful purpose. The moral tone of the institution was not of a very elevated type and it was there that I first learnt to smoke. The work of the college was too light for me and there was no provision for the wholesome engagement of super-normal
youths. In such circumstances, I was constrained to make a misuse of my super-abundant energy. My ingenuity helped me to devise fresh plans every day to harass the Superintendent of the hostel. These ended in a quarrel with the principal and a misguided sense of honour prompted me to sever my connection with the college.

To return to my father was impossible, for the father was too strict to receive with open arms the son who had defied his principal. So I resorted to Jodhpur and sought admission to the State College. But a few days' attendance at the college lectures convinced me that I knew more than most of the professors of that institution. This made me disgusted with it. Moreover, my father stopped sending me money. I was compelled
to decide that I should seek some employment.

My inexperience led me to Hyderabad in Sind, where I could get no employment for want of a knowledge of the provincial vernacular. My funds soon began to run short and one day I was horrified to know that I had only a few rupees with me. At the same time I came across a man from Upper India, who in returning from the pilgrimage to Mecca was obliged to halt at Hyderabad for want of money that might procure for him a railway ticket to his home. I collected some subscription for him, and as the money collected would not suffice, I added to it the few coins I had, went with him to the railway station, purchased a ticket for him, and was satisfied to see him start homewards. I was left penniless, but had no intention of living
on charity. A lawyer pitied me and gave me some work in English from time to time. The wages which I thereby earned were too insufficient to provide me with the bare necessities of life. The income was so uncertain that on some days I had to go without meals. To make matters worse winter set in and as I had disposed of my warm clothes and bedding to procure food, it caused me great trouble. On an unusually cold night I had to cover myself with matting in a mosque. That was a period of trial, and considering that I was below 20, I underwent the ordeal with manly courage. My sufferings filled me with profound sympathy for the poor and the needy, which has since been intensified into a virtuous weakness of considering even the crimes of a destitute person pardonable on the ground of his poverty.
At last there was relief from my miserable plight. A gentleman recommended me to the prime minister of the Khairpur State. The minister, who had read some of my father's works, appointed me to a post in the local high school. I entered on my work with enthusiasm and was soon marked out as a conscientious worker. I was, however, an untrained man and some remarks of the Inspector of Schools hurt my amour propre. To remove the defects that marred the excellence of my work, I began the study of books on pedagogy, analysing their contents and translating them into practice.

My good work in the school induced the minister to depute me to the Aitchison Chiefs' College at Lahore as tutor to the nephew of his highness the Nawab of...
Khairpur. It was soon discovered that the college arrangements left no scope for me to work on my own initiative. My position was little better than that of an aide-de-camp, and as I was longing to make the best of my powers for the good of mankind, I requested the minister to recall me to Khairpur.

The minister re-appointed me in the high school and at the same time made me the tutor to his sons. I began to live with the minister. He came to be personally interested in me and showed parental regard for my well-being and well-doing. He corrected my political views, and I began to realise the advantages of India's connection with Great Britain, so much so that when the Great War broke out, I volunteered myself for active service. The minister enrolled me as a member of the Khairpur
Imperial service troops and I served the Empire in the Mesopotamian campaign, until the Khairpur Imperial service troops were recalled.

On my return I reverted to my post as a teacher and began to improve my knowledge of history, philosophy, and other subjects by means of carefully planned self-instruction. A petty incident made me anxious to obtain a university degree. It chanced that I travelled in the same compartment with a professor of the Sind College, Karachi. We discussed several topics and the professor treated me with due courtesy, but when our conversation turned round my education and the professor was informed that I was not a graduate, his attitude towards me underwent a change which he could not conceal. The Bombay University, in
whose territorial jurisdiction Khairpur lay, would not admit me for the degree examination, unless I attended a college affiliated to that university. This I thought unnecessary, for I was, already, well prepared. So I left the Khairpur state service, got an appointment in the state high school at Rampur, my birthplace, and obtained the desired degree from the University of Allahabad as a teacher-candidate. At Rampur I worked for 4 years, which were spent chiefly in applying to actual conditions the modern methods which I studied with avidity. My interest in the well-being of my fellow-citizens made me a popular figure at Rampur. I was associated with a number of literary, social, and athletic clubs. I strove to make arrangements for the education of neglected children and did some work in behalf of religious and charitable institutions
My work at Rampur was followed by my stay for one year at the Allahabad Training College, where, for the first time in India, I made use of the source method of teaching history in schools, made a special study of phonetics and the methods of teaching foreign languages, and stood first in the L. T. examination of the Allahabad University; and by my posting as an educational Inspecting Officer in three districts of Oudh, which brought me face to face with the problems of rural education. I made arrangements to ensure adequate co-operation between teachers and parents and tried, with some success, to combine, as far as the cut-and-dried curricula prescribed by the Department of Education could allow, the pupils' instruction in formal school subjects with practical situations, and to introduce
some principles of the Montessori system into the teaching of the preparatory classes. I also grappled, though not quite successfully, with the village teachers' aversion to further study after their appointment and with their ignorance of the wider world. Besides, I had to struggle hard to save my teachers from the axe of retrenchment. To inspire the teachers with a sense of duty, I relied more on example than on precept. Once, when encamped at Pyagpur in the Babraich district, I had a cholera attack, and as soon as the danger was over, I defied my physician and drove to see a neighbouring school, not because I could make a useful inspection in that wrecked condition of health, but because I thought that the moral effect of that exertion on my subordinates would be as great as that of the suicidal charge of the Light Brigade at Balaclava on their comrades.
My experience of teachers in our schools made me alive to the defects in their training and I began to realise that the best service which one devoted to the educational amelioration of my backward nation could do was to train such teachers as were not only skilled in the application of certain methods, but equipped with those moral qualifications without which a knowledge of the technique of education is of no avail. These considerations impelled me to accept the post of the Lecturer in Education offered by the Vice-Chancellor of the Muslim University, Aligarh. I co-operated with the Chairman of the Department of Education in re-organising the Muslim University Training College, which was not till then in a very satisfactory condition. We made some experiments, including the teaching of Persian by the
direct method. We started a Montessori school, which prospered well, organised an educational exhibition and a conference of educationists on the occasion of the Muslim University Jubilee, and taught our pupil teachers to make a frequent use of the source method of teaching history in all the school classes. I lectured on several subjects, including the history of education which I tried to make interesting, by discussing the past with reference to the present, by eliminating from my lectures unnecessary names, dates, and facts, by correlating the subject with kindred subjects, and, last but not the least, by a careful arrangement of the items to be discussed. I also discovered and formulated some new rules of phonetics. Notwithstanding these engagements in the Training Department, I managed to find time for active
participation in the work of the historical and geographical societies of the university and for writing in contemporary periodicals on educational administration and organisation.

The instinct of enterprise, which impelled me in my boyhood to request the Turkish Consul-General to enlist me as a volunteer in the Balkan War and to serve in Mesopotamia in the Great War, stimulated me in my adult age to join a post in the Government service in Ajmer for the sake of organising and administering a training institution which might train graduates, undergraduates, and rural teachers, all in one building and under a unified management, at a cost not exceeding the cost of the rural teachers' institution that previously existed there. I undertook to perform the task, because it presented seemingly
insurmountable difficulties, which lent the work a colour of enterprise.

I found the rural teachers' institution, which was to be the groundwork of my ambitious scheme, in a wrecked condition, reminding me of the fortress of Adrianople, when it was surrendered by Shukri Pasha to the victorious Bulgarians. I set about reconstructing and developing it from the very day that I took charge of it, and have, by God's Grace, succeeded in reorganising it as the chief centre of educational activities in Rajputana and Central India, in spite of the most adverse circumstances, e.g., inadequate staff, meagre funds, want of necessary books and appliances, absence of a practising high school attached to the institution, and, above all, the difficul-
ties involved in co-ordinating the work of various classes of pupil teachers: graduates, under-graduates, and rural teachers.
Life of Comenius.

John Amos Komensky, known to the world by his Latinised name of Comenius, was born at Nivnitz, a village in Moravia. His father, who was a miller, belonged to a community of Christian Protestants, known as the Moravian Brethren. These Protestants followed the martyr Huss, a religious reformer who lived, preached and suffered in Moravia long before Martin Luther raised the banner of revolt against Papal despotism. Comenius's character bore the stamp of the sect to which he belonged. The influences exerted on his impressionable mind by the religious tenets and practices of the Moravian Brethren were reflected in his zeal, piety, humanity, simplicity, self-sacrifice and, above all else, in his democratic spirit.
Comenius received his early education in an elementary school founded by the Moravian Brethren. At the age of sixteen he was admitted to a Latin school in the neighbourhood, where he stayed for four years. The age at which he entered the Latin school was more advanced than the age at which pupils generally began the study of Latin in those days. But his late admission to secondary education was one of the causes to which may be attributed his dissatisfaction with the existing educational system and his desire to replace it by a better one. Being an adolescent, he had reached a fairly advanced stage of mental development, which enabled him to observe with critical eyes the methods of instruction prevalent in the school, and it is reasonable to think that the secondary school which he attended
was in his mind when at a later date he wrote that the Latin schools of the day were "terrors for boys and shambles for their intellect."

After finishing his course in the Latin school, Comenius joined the Lutheran College of Hemberg in Germany for theological studies, and during his two years' stay at that institution he came into contact with John Henry Alsted, a German professor of wonderful attainments. Alsted held enlightened views on education and Comenius's callow zeal for educational reform must have been directed along definite lines under his guidance. It is very probable that Comenius's belief in sense-perception as the ultimate source of knowledge and his emphasis on an orderly procedure in education owe their origin to the influence of Alsted. It is also reasonable to think that
Alsted’s *Encyclopædia* was one of the earliest influences to which may be traced the origin of Comenius’s desire for the co-ordination and systematisation of all branches of human knowledge. The stimulus which Comenius received from Alsted was re-inforced by a report of some German professors on Ratke’s method, which in the history of educational theory forms an important link between the new philosophy of Bacon and its application to education by Comenius. From Herborn Comenius went for travel and visited Amsterdam, and then after a short stay at the University of Heidelberg in Germany he returned to Moravia in 1614.

He was now adequately qualified for the ministerial profession, but under the regulations of the Moravian Church he was too young to be ordained a pastor. So he
was made the rector of the Moravian Latin school at Prerau. His connection with the school brought him face to face with educational problems and he began to feel for a better method, specially of language teaching, in order that the amount of time and energy then wasted upon grammatical complications might be saved. To this end he wrote a school text-book on Latin grammar, which was simpler, clearer, and more concise than any work on the subject written theretofore.

At the age of twenty-four he was made a pastor and, two years later, called to the service of the Church at Fulneck, the headquarters of the Brethren. There he busied himself in the religious and social service of his community, but as he was also the superintendent of the school attached to the Church, his didactic interests were
quit their homeland. Comenius resort-ed to Poland and settled at Lissa under the protection of Count Raphael. There he began teaching in the Moravian gymnasium and set to reconstruct the method of linguistic teaching from the very foundation. Not satisfied with his own ideas, he communicated with the famous educational theorists of the day. His fourteen years' stay at Lissa was perhaps the most remarkable period in his career as an educational reformer. It was at Lissa that he wrote his greatest work, the *Great Didactic*, and published the earliest editions of his Latin text-books. He now began to make his mark in the intellectual world and to acquire international reputation for didactic activities. The community of the Moravian Brethren appreciated his religious services by electing him as their bishop in 1632. But the appreciation of his educational services was not
confined to any particular community; it was shared by men belonging to different countries and different religious sects.

His pansophic scheme, which aimed at a comprehensive and coordinated statement of universal learning, attracted the attention of Samuel Hartlib, a prominent figure in the contemporary literary and philanthropichic circles in England. At his invitation, Comenius travelled to London in 1641. The Parliament came to be interested in the pansophic scheme, but the differences between the King and the people assumed serious proportions and the prospects of a civil war began to loom large in the political horizon. In the presence of these dangers people naturally forgot the arts of peace and Comenius's pansophic scheme was thrown into oblivion.
At last, after a stay of about a year in London, Comenius had to bid farewell to the shores of England and to sail to Sweden in response to an invitation from Lewis de Geer, a rich Dutch merchant, domiciled in Sweden. The Swedish Government was not interested in pansophia, but their aim was to obtain Comenius's help in replacing the current Latin text books by a more systematic series. Comenius was provided with facilities for the work at Elbing, a Swedish possession in West Prussia. There he spent six years and compiled the revised editions of the Latin text-books which he had first written at Lissa. In 1648 the work was completed and Comenius returned to Lissa, where the revised text-books were printed.

Two years later he received a call from Prince Sigismund of Transylvania to establish, organize, and maintain a model
Latin school at Sarospatak in Hungary. The school which he organized was a three-class Latin school. It was a residential institution, well-provided with play-fields and recreation grounds. A perfect Latin atmosphere was assiduously maintained. Boys were not allowed to talk in any language other than Latin in the school, the hostel, or the playground. Indeed Comenius strove to see that the school represented a Latin republic in miniature. Office-holders were chosen from among the pupils and were given the same designations as those of the officers of the Latinum. The government of the school was, in short, modelled on the old Roman constitution.

The Sarospatak school was a fairly successful experiment in the application of the Comenian principles and methods.
With Comenius practical work and theoretical discussion went hand in hand, and he wrote while he worked. His stay at Sarospatak witnessed the composition and publication of fifteen works, the most notable of them being the Plan of a Pansophic School, a treatise dealing with the design on which he planned the Sarospatak institution, the Orbis Pictus (World in Pictures), which is the first illustrated text-book on record, and the Schola Ludus (School Play), which was the earliest application of the 'play-way in education'.

Under the fostering patronage of Prince Sigismund, Comenius hoped to realise his dream of an ideal seven-class Latin school, but the early death of his patron compelled him to return to Lissa in 1654. Fate, however, soon drove him away from his favourite retreat. War
broke out between Poland and Sweden. The Poles, though Catholics, had accorded a generous treatment to the Moravian Brethren ever since they settled at Lissa, but Comenius was led away by his enthusiasm for Protestantism and incautiously wrote a panegyric on Charles Gustavus, the Swedish king, whom he hailed as the saviour of Christendom. This act of ingratitude infuriated the Poles who sacked Lissa in 1656. Comenius saved his life by flight to Holland, but lost his house, his books, his property and, above all, his manuscript of pansophic materials which embodied the labours of many years. This was a serious blow to him. "This loss," he said, "I shall cease to lament only when I cease to breathe." In fact, it marked the collapse of his pansophic scheme, as he was now too old to possess the strength or courage to pursue his favourite conception further.
The rest of his life he lived peacefully in Holland. The Dutch Government treated him with due honour and hospitality and took his help in the reform of their schools. But Comenius was now too old for original work. The period was, however, remarkable for the collection, arrangement and dissemination of what had been done. His Complete Pedagogical Works, including the Great Didactic, which was till then in manuscript, were published. These he dedicated to the citizens of Amsterdam in gratitude for their hospitality. He breathed his last in 1671.

His life presents a pathetic story. He was persecuted for conscience' sake. He experienced the miseries of an exile. His patience and fortitude were put to test by bereavement and penury. He had
to endure the humiliations of a refugee. His heart was grieved to see the forces of destruction tear to pieces the society in Christendom. But he never despaired. He strove to restore piety and virtue through the systematization and dissemination of learning and the reform of schools. He was, indeed, as Raumer says, “A grand and venerable figure of sorrow.”
II

Educational Writings.

Comenius was a voluminous writer. He wrote on pansophia and religion as well as on education. Herein we deal briefly with such of his works as are of considerable importance to the students of education.

The most memorable monument to Comenius's greatness as an educator is his *Great Didactic*. It was originally written in Czech, his mother tongue, in his early years of residence at Lissa. It was translated into Latin and published as a part of the folio edition of his *Complete Pedagogical Works* at Amsterdam in 1657. The *Great Didactic* was more than a manual of teaching method. It conveyed a message not only to the school-masters, but "to all superiors of human society, to the rulers of states, the pastors of churches, the
parents and guardians of children." Its intention was to cover all the aspects of education and to bring about a complete reorganization of the educational system in all its details. It dealt with the aim and principles of education and discussed the methods of teaching the sciences and languages. It prescribed elaborate courses of training in manual dexterity, morality, and piety. It devoted due attention to what is now known as school hygiene. It set forth a well-considered organization of schools, dealing with the purpose, classification, scope, and curriculum of schools of every grade. It was, in short, the first comprehensive work on education.

But there was much in the Great Didactic which could not be considered as original. Dissatisfaction with the existing schools and the education they
imparted had been in the air since the new scientific spirit which was embodied in the works of Bacon had altered human outlook and made people look with distrust on the educational ideals and methods of the humanists. Men like Ratke were busy in theorising and experimentation in education. Comenius studied carefully the pedagogical works of his contemporaries and immediate predecessors, and the *Great Didactic* was an attempt to systematise and render practicable the precepts of these pioneer workers.

The *Great Didactic*, however, had not the publicity it deserved. This was partly due to Comenius's repulsive style of writing. He divided and subdivided the contents in such a manner as to give the reader a sense of want of con-
tinuity in the work. He was full of needless repetitions and of glaring contradictions. He expressed in a hundred words what could be explained in ten. The phraseology was too unadorned and business-like.

Space does not permit us to consider Comenius's other works on educational theory. They were, in the main, designed to amplify, explain, or defend certain doctrines embodied in the Great Didactic. It is, however, worth our while to note the Methodus Linguarum Novissima (Newest Method of Teaching Languages), a treatise on the theory of language as well as the methodology of linguistic instruction, and the Informatorium Skoly Materske (Handbook of the Mother School), the first book on the teaching of infants.
Next in importance to the *Great Didactic* were Comenius's Latin text-books, which he himself despised, but which saved his name from oblivion during two centuries. The most notable of these was the *Janua Linguarum Resaeta* (Gate of Languages Unlocked). This wonderful book was first published in 1631, but was revised, modified and re-printed several times after its publication during Comenius's life-time. In writing this work Comenius was inspired by a desire to prepare a short cut to the mastery of the Latin tongue. The plan and the name were suggested by a similar work of a Jesuit. The *Janua* contained eight thousand Latin words, which were arranged in one thousand sentences grouped under one hundred chapters, each dealing with a particular subject. It was designed to give the learner a start in Latin vocabulary and at the
same time to impart him a knowledge of
the broad fundamental facts connected
with all the branches of learning. In
other words, it was to serve the purpose
of a text-book for content-studies as well
as for linguistic teaching. The follow­
ing were the salient features of the
Janua:—

(1) The Latin text was written
on the right-hand page and
its vernacular translation was
given on the left page. It
was, therefore, intended to
utilize the pupils' knowledge
of the vernacular in the learn­
ing of Latin.

(2) No archaic word was used in
the book.

(3) Only such words were given
as were in harmony with the
age, intellectual capacity,
sentiments, thoughts and needs of the pupils.

(4) The sentences were of a moral nature. Nothing which might savour of immorality or impiety was allowed to enter the book.

(5) No words, excepting very common and unavoidable ones, occurred more than once. One sentence, and not more than one, was designed to teach one word.

(6) The sentences, which were in the beginning simple, became progressively complex.

While engaged in revising his Latin text-books for the Swedish Government at Elbing, Comenius, discovering that the Janua was too difficult for the begin-
ners, wrote the *Vestibulum* (Vestibule), as an introduction to the *Janua*. This little book was composed to provide the beginner with a vocabulary of one thousand Latin words, which were arranged in four hundred sentences, grouped under seven heads. When the pupil had assimilated the *Vestibulum* and the *Janua*, he had to make a more detailed study of the whole universe as well as to increase his command over the Latin tongue by studying the *Atrium* (Entrance Hall). It dealt with the same subjects as were given in the *Janua*, but in greater detail. The language of the book was, in the same way, more difficult than that of the *Janua*; whereas the latter gave the learner a command over some thousands of Latin words, the *Atrium* was designed to accustom the learner to the use of several thousands of Latin phrases as well as single words, and the types of
sentences involved were more difficult and complex than those in the *Janua*. The text of the *Atrium* was not supplemented by a vernacular version.

The next book, proposed to form part of the series, was the *Sapientia Palatium* (Palace of Wisdom), which was, however, not actually written. Comenius planned to compile in this book a collection of extracts from the choicest Latin writers and to teach the student the elegancies of Latin.

There were several merits in these text-books. In the first place, they prevented the learner from mere quibbling in words. The learner learnt the language through, and for the understanding of, the realities in his social and physical environment. In the second place, they formed a well-graded and systematic
series, proceeding progressively from the simple to the complex in such a manner that the first book in the series paved the ground for the second and the second gave the learner an appropriate apperception-mass for the third. Each succeeding volume was an extension of the preceding one as regards both language and thought-contents. In the third place, they correlated the teaching of the different linguistic subjects: the reading-text, grammar, and composition, etc. Thus Comenius made the reading-text the core of linguistic teaching, which the writers on the teaching of languages recommend to-day.

But there were several defects in this earliest and, consequently, tentative attempt to provide the schools with a systematic series of linguistic text-books. In his desire for the same book for
language teaching and also for content-studies, Comenius tried to kill two birds with one stone with the result that both were jeopardized; the language became artificial and unpleasant for the sake of the subject matter, and the subject matter had its proper logical presentation distorted for the sake of the language. Moreover, as every word was used only in its root meaning, the learner could know only one meaning of the word, which could not give him an adequate command over the language.

The greatest defect from the standpoint of modern pedagogy was that as one word was used only in one sentence, the learner could not get the opportunities of coming across the use of that word at intervals and, consequently, he could not revive the associations between that word and its meaning from time to time, after he had done with the sen-
tence which involved the word. This would naturally efface the impressions from his mind, for the permanency of retention and the speed and accuracy of recall depend, above all else, on the frequency of recall, and something which we experience a dozen times after suitable intervals sticks faster to the memory than something which we repeat a hundred times at one sitting and then leave for ever. Besides this consideration, it is also clear that if the learner had to acquire a command over the use of the word by means of only one sentence, it would be necessary for him to repeat the sentence over and over again. This would mean monotonous repetition, which must be exceedingly unpleasant and repulsive to the young pupils. The principle on which the modern linguistic teachers build their methods of providing a ready vocabulary to the pupils is quite different from that adopted by
Comenius. The present language teacher knows that the learning of a language is the formation of habits and that habit-formation requires repetition, but he avoids repetition in one form and makes the pupils read, listen to, and speak the same word in a number of sentences of various forms, and thus combines repetition with variety, which enables the teacher to keep the pupils’ attention screwed down to the word to be learnt without unpleasantness. It may also be said against the Comenian Latin text-books that they failed to keep in view one important aim of language teaching, i.e., the cultivation of an aesthetic sense. A language may be learnt for utilitarian purposes by means of artificially-arranged sentences, but no epitome, like the Janua, can cultivate in the learner a wholesome literary taste which in adult life becomes one’s valuable asset.
Another remarkable work of Comenius was the *Orbis Pictus* (World in Pictures), which was written during his stay at Sarospatak, but not published till 1657 for want of an engraver. This little book, which had an enormous circulation, was an illustrated abridgment of the *Janua*. Each lesson in the book was accompanied by a picture and each object in a picture was marked with a number, the same number being used in the text to indicate the word that stood for the object. It was a remarkable application of the Baconian philosophy, which laid stress on sense-intuition as the ultimate source of knowledge, and was the first practical recognition of the now well-known pedagogical maxim that words should be taught by associating them with the objects they stand for and when it is not practicable to present actual objects to the child's
senses, use should be made of pictures in lieu of the objects. The *Orbis Pictus* was, in short, an eloquent testimony to Comenius's appreciation of the importance of visualisation in education. Preceding the *Orbis Pictus*, there was an alphabet, in which each letter was illustrated by the picture of an animal whose cry corresponded to the sound of the letter, or by a familiar object which made a sound similar to the sound of the letter. In adopting this ingenious device Comenius anticipated the modern phononimic processes.

The *Orbis Pictus* remained for a long time the most popular text-book in Europe and served as a model for the innumerable illustrated text-books that have been, thereafter, published for use in schools.

Before we finish this brief survey of Comenius's educational works, mention should be made of his *Schola Ludus*...
(School Play), which was a dramatised abridgement of the Janua, written at Sarospatak, perhaps, in imitation of the Jesuits. It has 5 acts, 21 scenes, and 52 dramatae personae. It was an ingenious attempt to utilise the children's play impulses and imitative tendencies in school instruction. But it is the driest and most uninteresting drama that has ever been staged. It lacked romance and poetry; it was wanting in that colouring of imagination which lends its charm to the most prosaic things and the most familiar talk. Comenius wrote that the staging of the play in the Latin school at Sarospatak was a huge success, but it is not unreasonable to think that the enthusiasm with which the boys took part in it was due, not to any intrinsic merits of the play, but to the novelty of the activity and a break in the school routine which must have been caused by it.
III.

The Religious-scientific Conception of Education.

In his endeavours for educational reform Comenius was inspired by two seemingly different, but essentially similar, movements, viz., the Reformation and the Baconian philosophy, the one being a breaking with authority in matters of religion and the other a breaking with authority in matters of science. His work was a laudable attempt to harmonize the two movements and combine their educational inferences into a system in which religion was the end and science the means.

This ideal was conspicuous in his conception of the aim of education, which may be stated as follows:—
The present life of the earth is but a preparation for life hereafter, and of this preparation there are 3 grades: to know all things and oneself, to have power over oneself and all things, to refer oneself and all things to God, i. e., knowledge, virtue, and piety. The first is a necessary means to the second and the second to the third. The aim of education is, therefore, to give the individual a knowledge of all the 'knowable things,' because if he lacks a universal insight into things, he cannot judge and behave rightly in all possible situations, i. e., he cannot be infallibly virtuous, and if he is deficient in virtue, he cannot be pious.

Comenius held that the seeds of learning, virtue and piety were inherent in man, but their fruition necessitated careful cultivation. "Those plants of paradise,
Christian children," he averred, "cannot grow up like a forest, but need tending."

It was his belief that a man, in the real sense of the term, could be "formed" only by education, i.e., formal education. This implied that the development of the innate aptitudes of a generation for knowledge, good behaviour, and godliness depended exclusively on the influences which the art of the preceding generation brought to bear on the new generation with the conscious purpose of training it. Consequently, Comenius minimised the part played in man's development by the automatic processes of his innate capacity to develop and the informal influences exercised on him by the environment in which he lived.

Comenius's conception of the factors conducive to human development was, therefore, antithetical to that of Rousseau, who believed that the self-opera-
tive laws of man's growth and the impressions that he automatically received from the environment sufficed for his development and that education was needed only for the upper classes, not because it could contribute directly to development, but because it could serve the negative purpose of protecting the individual from the baneful effects of the artificial circumstances of life in aristocratic circles.

It is unnecessary to say that both Comenius and Rousseau were extremists in their views on the point at issue, and the truth lies in the via media between the extremes which their doctrines represented. We cannot, like Rousseau, discard formal education and leave the development of our youth to their undisciplined instinctive tendencies and to the caprici-
ous and uncertain influences, which the environment would exert on them, if the art of man were not to select, modify, and harmonise with our nature the environmental circumstances for the benefit of the race. At the same time we cannot, in imitation of Comenius, ignore that the formal education which the schools can impart to our children is only a part, and in some cases the least effective part, of that wider education which they receive by virtue of their existence in this world.

Exaggerated as Comenius's view of the importance of formal education in its bearings on intellectual, moral and spiritual training was, the broadened curriculum which he recommended for it was a modernised feature of his educational theory. By regarding the knowledge of the
universe as a necessary preliminary to piety, Comenius was saved from making his conception of education narrow and one-sided,—like that of the mediæval clergymen, whose educational activities were limited to theological knowledge and such linguistic learning as was of immediate help to its acquisition or dissemination,—which would otherwise have been the inevitable consequence of his religious standpoint. As it was, his conception of education was fuller in connotation than that of any of his predecessors and contemporaries. The *Great Didactic* devoted due attention to the learning of languages, the acquisition of the knowledge of social and physical sciences as well as of spiritual learning, and the training of the pupil in manual dexterity, morality, and piety. In short, education as conceived by Comenius connoted much more than mere instruction.
and, being designed to be the preparation of the pupil for well-doing and well-being in this world for the sake of well-being in the world to come, was based on a wider outlook than the present educational ideals, which do not go beyond well-being and well-doing in this world.

But in his desire for omniscience Comenius aimed at the impracticable. Universal knowledge cannot be attained. It is also unnecessary for good behaviour. The modern belief is that virtuous conduct is not so much the resultant of the number of ideas which form the mental contents of the individual concerned as it is of the ways in which the ideas are associated and organized in his circle of thought. One may be well-versed in philosophy and science and may withal have a vicious character; another, not
so learned, may be able to judge, decide and behave rightly in the situations of life that confront him by virtue of his habits of association which may enable him to receive, entertain, re-inforce, keep in the focus of consciousness, and translate into action an idea resulting in a virtuous deed and to inhibit an idea suggesting immoral behaviour.

Comenius's encyclopædia was, as we shall see elsewhere, mainly due to the Baconian inspiration, but it was also a result of his emphasis on the combination of science and religion, which impelled him to include into the curriculum theology and metaphysics as well as 'real studies.' He attached great importance to the teaching of the holy Scriptures which he considered to be "the Alpha and the Omega of Christian schools," and laid down,
"whatever is taught to the boys in addition to the Scriptures (sciences, arts, languages, etc.) should be taught as purely subordinate subjects. In this it will be evident to the pupils that all that does not relate to God and to the future life is nothing but vanity."

Comenius was one of those who attempted to infer the fundamental principles of all positive knowledge from the Scriptures, and quoted freely from them to prove, defend, verify or illustrate his conceptions, whether secular or religious.

But in one way Comenius's powerful religious sentiments had a restrictive and selective effect on his encyclopædism. They led him to recommend the exclusion of pagan writers from the curricula and thus to run counter to the humanistic adoration of the classical paganism. The same sentiments were responsible
for such instructions of his as savoured of Puritanic austerity. In the Latin school at Sarospatak dancing was strictly prohibited, for he held that "the dance is a circle whose centre is the devil." Likewise, he condemned not only games played with dice, but also wrestling, boxing, and swimming.
IV.

Democracy in Education.

A strong democratic tendency was the key-note of Comenius's didactic activities. It was the direct outcome of his religious outlook. In holding each man responsible for his own salvation, the Reformation made it necessary for every one to read the Scriptures and the logical consequence was to make instruction universal. In emphatic terms Martin Luther pointed out to the rulers of Germany the need for the education of their subjects, but it was left to Comenius to set about in a practical fashion organizing a universal system of education, which would render it practicable to educate all the young, irrespective of sex, rank or residence. He would exclude none but those to whom God had denied sense and intelligence.
The democratic leanings of Comenius, which prompted him to recommend the education of all the young, carried him further; he advocated that children should be educated together irrespective of rank or sex. He was strongly in favour of education in public schools in preference to education at home, because in the first place most parents had little ability or leisure to teach their children, in the second place education in common schools enabled the pupils to learn from their fellows through imitation, in the third place it excited the pupils' instinct of competition and spurred them on to put forth their best, in the fourth place it could eliminate class prejudices which would otherwise take a permanent hold of the children's impressionable minds to the detriment of society, and in the
fifth place social economy necessitated the division of work, which implied that parents should not be overburdened with the onerous task of teaching their children, but entrust their education to professional teachers.

The above considerations led Comenius to lay emphasis on class teaching. He condemned the practice of the schools of the day, where the instruction imparted was individualistic, and recommended that pupils should be grouped into classes and all the pupils of a class should use the same text-books, learn the same lessons, and do the same exercise at the same time. He thought that one teacher could teach a hundred pupils at one and the same time with the help of "ducurions" or monitors, each of whom was in charge of ten pupils.
The class system which Comenius so strongly advocated came to be generally adopted and maintained an unchallenged position in schools till the present century, when the Montessori system and the Dalton plan, which took into consideration the importance of individuality, rung its knell as a unit of teaching and retained it only as a unit of organization.

Comenius's passionate plea for female education is a remarkable testimony to the fact that though in general his educational theory took its cue from what was in the air, yet in some of his important conceptions he was far ahead of his times. In an age when intellectual leaders, like Milton, seemed to believe that servitude was the badge of a woman, Comenius wrote, "Nor can any
sufficient reason be given why the weaker sex (to give a word of advice on this point in particular) should be altogether excluded from the pursuit of knowledge, whether in Latin or in their mother-tongue. They also are formed in the image of God, and share in His Grace and in the kingdom of the world to come. They are endowed with equal sharpness of mind and capacity for knowledge (often with more than the opposite sex), and they are able to attain the highest positions, since they have often been called by God himself to rule over nations, to give sound advice to kings and princes, to the study of medicine and of other things which benefit the human race, even to the office of prophesying and of inveighing against priests and bishops. Why, therefore, should we admit them to the alphabet and afterward drive them away from books?
Comenius was, however, conscious that a woman’s education should contribute to her preparation for household duties rather than make her antipathetic to them. “We are not advising,” he wrote, “that women be educated in such a way that their tendency to curiosity shall be developed, but so that their sincerity and contentedness may be increased, and this chiefly in those things which it becomes a woman to know and to do; that is to say, all that enables her to look after her household and to promote the welfare of her husband and her family.” It is hard to disagree with this wise statement of the aim of female education, but it is easy to point out that it is inconsistent with Comenius’s scheme of huddling together boys and girls in common schools and teaching them the same subjects by means of the same books.
However different our views may be from those of Comenius regarding the merits of the co-education of boys and girls, we have nothing but praise for his support of the vernacular. It was an inevitable consequence of his attempt to make education available to the common people. Before the Reformation the mother-tongue was ignored as a factor in education. It was Martin Luther whose activities initiated an era in which, after a hard contest, the vernacular ultimately ousted Latin from the sphere of public affairs and, consequently, from the prominent position which it enjoyed in the domain of education. Like Gautama Buddha, he had to stir up the oppressed masses to open revolt against a priestly aristocracy, and his message could not reach the ears of those whose cause he espoused and whose
support he sought, unless it was expressed in a language which they could understand. The Reformation, therefore, helped the vernacular to emerge from negligence. It was, however, left to Comenius to give it its due position in education. He recommended the vernacular not only as the medium of instruction during the first twelve years of the individual's life, but also as a means of instruction in Latin in the earliest classes of the secondary schools.

Comenius's faith in sense-realism, which is to be attributed to the influence of Bacon, strengthened his religious convictions in upholding the vernacular. "To attempt to teach a foreign tongue before the mother-tongue has been learnt," he writes, "is as irrational as to teach a boy to ride before he can walk. My method con-
fesses its inability to teach Latin to those who are ignorant of the mother-tongue, since the one paves the way for the other. Finally, what I have in view is an education in the objects that surround us, and a brief survey of this education can be obtained from books written in the mother-tongue, which embody a list of the things that exist in the external world. This preliminary survey will render the acquisition of Latin far easier, for it will only be necessary to adopt a new nomenclature to objects."

But by a singular irony of fate Comenius, with all his fine thoughts about the importance of the vernacular in education, was destined to confine his activities as a practical worker to the teaching of Latin, the writing of the Latin text-books, and the organization of Latin schools; and it was left to
posterity to undertake the organization of the vernacular education, without which a scheme for universal education would be an unrealised dream.
Sense-Realism.

The Renaissance had two aspects, the literary, viz., the re-discovery of the classical literatures, and the scientific, which had its origin in the brilliant conjectures of Copernicus and the adventurous voyages of Columbus and Vasco da Gama. So far as education was concerned the literary side of the movement was the first and most immediate in its effects. To exalt humanity through the study of the classical writers was the ideal that the educators set before them. People became keenly alive to the beauty of expression as well as to the beauty of conception. When the inspiration hardened into a convention and the form remained without the spirit, educational activities confined
themselves to what is known as verbalism and the schools became "places where minds were fed on words" and where the precious years of youth were spent in irksome and unproductive grammatical drill and grind.

But in the achievements of scientific discoverers, like Galileo and Kepler, who took their cue from Copernicus, and of explorers, who followed in the footsteps of Columbus and Vasco da Gama, the scientific side of the Renaissance was slowly gathering strength, and the revolt against the now formalised literary tendency of the Renaissance and also against the sterile scholastic modes of thinking,—which the Renaissance had attempted to banish from the domain of learning but with little success on account of the concentration of its main forces on literary accomplish-
ments and the absence of a new mental philosophy to replace the philosophy of the schoolmen,—came to a head in the works of Francis Bacon.

In his *Novum Organum* (the New Instrument), published in 1620, Bacon formulated the method of induction, which was unconsciously used by the scientists of the age. In this treatise he put his finger on the weakness of the current method of deductive reasoning, which the age had inherited, through the schoolmen, from Aristotle, and by virtue of his impressive expression convinced the world of the futility of proceeding from certain *a priori* principles, categorically assumed to be absolute truths, to the deduction, by means of the syllogism, of all the propositions that a science could contain. The new method, by which Bacon designed
to replace the mechanism of deductive reasoning, rested on the assumption that all knowledge came first through the senses and was then worked upon by the human intellect, with the result that the observation of particular things paved the way for the comprehension of general laws. Bacon, therefore, recommended that, to discover the truth, one should use his senses in perceiving real things, verify the knowledge thus acquired by experiment, and finally, by comparison and contrast, infer what we, to-day, call a concept.

The *Novum Organum* made a revolution in modes of thinking and opened unknown routes to scientific investigation. Its effects on education were as revolutionary as on science. The reason is obvious. A new logic almost necessarily gives birth to a new pedagogy. Bacon's laws for the discovery of truth
were convertible into pedagogical maxims which could facilitate the communication of knowledge and conduce to the development of the mind.

The Baconian philosophy was, therefore, the progenitor of a new cult in education, known as sense-realism. It was so called because those who professed it pinned their faith on the following principles:

(1) It is the knowledge of real things that is of use in the well-being and well-doing of mankind and not the mastery of words and sentence which the verbalists regarded as an end in itself:

(2) This knowledge of real things can be acquired, not through what others have said about
them, but through the use of the learner's own senses.

From these fundamental principles there evolved a number of theories that brought about radical changes in education. The scientific movement, which found an able spokesman in Bacon, was perhaps the first movement that was all-sided in its ultimate effects on educational theory and practice. The Renaissance had wrought profound changes in education, but in its sphere of influence it was limited to the aims and contents of education. Similarly, the educational inferences from the Reformation were applicable only to the aim, scope, contents, and medium of instruction. So far as the methodology of education was concerned, neither the Renaissance nor the Reformation had done anything remarkable. It is no
exaggeration to say that, except, perhaps, in the Jesuit system of instruction, there was no methodology of education worthy of the name before sense-realism. It does not mean that the teachers worked without a method. Of course, professional work of any kind whatsoever enables the worker to select, through trial and error, certain ways of doing his work and to form, through repetition, more or less fixed habits of sticking to those ways. But the methods of the pre-Comenian schoolmasters lacked a philosophic basis, which alone could impart confidence to those who employed them. The Baconian philosophy was, therefore, a boon to such educational workers as were in earnest about their profession. Being in its essence a mental philosophy, however defective and inadequate, it could afford groundwork for the building of a methodology of education.
Ratke was the first to attempt the construction of this methodology. But his activities were practically confined to the formulation and demonstration of such methods of teaching Latin as might release time and energy for the study of real things. To Comenius is due the credit for the application of the new philosophy to education in all its aspects. Comenius was a staunch sense-realistic. His belief in sensation as the foundation of knowledge and, consequently, of wisdom, virtue, and piety finds expression in these passionate words:—

"The foundation of all knowledge consists in correctly representing sensible objects to our senses, so that they can be comprehended with facility. I hold that this is the basis of all our
other activities, since we could neither
speak nor act wisely unless we com-pre-
hended what we were to do or say. Now
it is certain that there is nothing in the
intellect that was not first in the senses,
and, consequently, it is to lay the
foundation of all wisdom, of all
elocuence, and of all good and prudent
conduct, carefully to train the senses to
note with accuracy the differences be-
tween natural objects; and as this point,
important as it is, is ordinarily neglected
in the schools of to-day, and as objects
are proposed to scholars that they do not
understand because they have not been
properly represented to their senses or
to their imagination, it is for this reason,
on the one hand, that the toil of teach-
ing, and on the other hand the pain of
learning, have become so burdensome
and so unfruitful."

In the training of the child’s powers
of the mind he observes an order which, though apparently based on the erroneous conception of 'faculties,' does not carry him far amiss:—"First educate the senses, then the memory, then the intellect, last of all the critical faculty. This is the order of nature. The child first perceives through the senses. Everything in the intellect must have come through the senses."

But it is to be remembered that, though an ardent sense-realist, Comenius was, over and above all else, a minister of an enthusiastic denomination. His fervent evangelicalism kept him from belief in sense-experience as the only source of knowledge, and revelation was to him a source of knowledge independent of sensation." This was a vital point of difference between Comenius and Bacon.
But in his partiality for real things and contempt for the study of words as an end in itself, Comenius quite out-Baconed Bacon. Witness his vehement expression, "In the place of dead books, why should we not open the living book of nature? To instruct the young is not to beat into them by repetition a mass of words, phrases, sentences, and opinions gathered out of authors; but it is to open their understanding through things." Again, "We must offer the young not the shadow of things, but the things themselves, which impress the senses and the imagination. Instruction should commence with a real observation of things, and not with a verbal description of them." Also mark the analogies which Comenius employed in the following statement to bring home to his readers the utility of verbalism:—
"Things are essential; words only accidental; things are the body, words but the garment; things are the kernel, words the shells and husks."

In Comenius the individual mind found a champion in its struggle against the thraldom of authority in matters intellectual. To those who caught the first unchecked enthusiasm of the Renaissance the re-awakening promised to bring about a complete emancipation of the individual mind, but their hopes proved to be illusory. The undue importance which men came to attach to the thoughts and ideals of the Greeks and the Romans, while liberating the individual mind from the thraldom of the Mediæval church, imposed on it the bondage of a new paganism, which had Plato and Aristotle as its theologians, oratory as its ritual, and Demosthenes and Cicero as
its high priests. It was left to Bacon to break from this bondage; and in the Great Didactic Comenius, as his faithful disciple, trumpeted the liberty of the individual mind. “Men must as far as possible be taught to become wise by studying the heavens, the earth, oaks, and beeches, but not by studying books; that is to say, they must learn to know and investigate the things themselves, and not the observations that other people have made about things. We shall thus tread in the footsteps of the wise men of old, if each of us obtain his knowledge from the originals, from things themselves, and from no other source.” He reiterates, “It is not Aristotle who must be master of philosophy for Christians, but philosophy must be studied fully according to the leading of senses, reason, and books.” The Great Didactic has something still more emphatic, which excludes books altogether
and pulls down the ancients from the throne on which the Renaissance impulse from the re-discovery of the classical literatures had installed them:—

"Do we not dwell in the garden of Nature as well as the ancients? Why should we not use our eyes, ears, and noses as well as they? And why should we need other teachers than these our senses to learn to know the works of Nature, in which there is much more to contemplate than any one person can ever relate and the contemplation of which brings much more of pleasure as well as profit?"

More astounding than any of the above extracts is the following injunction, in which he goes farther than one could expect from a bishop:—"Let this be our business that schools may cease to persuade and begin to demonstrate; cease to dispute and begin to look; cease lastly
to believe and begin to know; for that Aristotelian maxim, 'A learner must believe,' is as tyrannical as it is dangerous; so also is that same Pythagorean, 'The Master has said it.' Let no man be compelled to swear to his master's words, but let the things themselves constrain the intellect.'

It may be objected that all this fine talk in support of the knowledge of things against verbal training does not agree with what Comenius actually did. This charge of disagreement between theory and practice that my readers may be inclined to bring against Comenius is not without justification. We know that the practical activities of Comenius were confined almost wholly within the sphere of Latin teaching and that his principal achievements in practical pedagogy were the writing of Latin text-

Instruction in Latin simplified and approved for realistic ends.
books and the organisation of Latin schools. But the accusation is based on considerations which are apparent rather than real. In simplifying the methods of linguistic instruction, in writing epitomes to render possible the acquisition of so much Latin in one year as could not otherwise be acquired in several years, Comenius was not forgetful of his sense-realistic principles. On the other hand, in the interest of a knowledge of things it was necessary for him to shorten and improve the methods of linguistic instruction, so that, on the one hand, time and energy might be released for the study of things, and on the other hand, the language might become for the learner a ready and efficient Slave of the Lamp in his study of the universe. It is to be carefully noted that, be it in theory or in practice, Comenius had his eyes only on the utilitarian value of linguistic instruction. Latin was re-
commended to be learnt, not for aesthetic enjoyment, but for the acquisition of knowledge and the imparting of knowledge, being the international and learned language. He laid down that comprehension should precede expression. “It is necessary,” he stated, “that the understanding be first instructed in things and then taught to express them in language.” He avowedly condemned the “unhappy divorce of words and things” and recommended that “the study of things should be joined to the study of words that our acquaintance with the objective world and with the language may progress side by side.” This emphasis on the correlation of linguistic instruction and content-studies was, as we have elsewhere seen, a marked feature of his Latin textbooks; the Janua, for example, was at once an epitome of Latin and an outline of the entire universe.
It is to be borne in mind that Comenius adopted Latin as the medium of higher instruction only as a necessary evil, i.e., as the best of the existing languages, which were, one and all, defective vehicles for the communication of thought. He considered Latin to be too difficult and at the same time a poor language. He had in his mind the creation of a new tongue, similar to the modern Volapuk and Esperanto in its stress on representing one sound by one letter and no more and one object or idea by one, and only one, word, and in possessing infallible rules for the construction of sentences. It was, however, to be different from Volapuk and Esperanto in one respect: whereas these have been formed from existing languages, Comenius's international tongue was to be derived from things themselves in such a manner that the words it contained were not to be
so many labels arbitrarily attached to the things they signified, but the vocal forms of the words were to correspond with the intrinsic nature of the things denoted by them. This was an idea which even Bacon could not venture to conceive, an idea which makes a fetish of sense-realism. No doubt, languages have not sprung up by mere chance. In language, as in anything else which is brought about by man or nature, there is nothing arbitrary. There is not a single word in any language but owes its origin and vogue to such psychical and physical causes as are based on fixed laws governing the mind and matter. But the Comenian scheme of building an artificial language, in which there would be a clearly perceptible harmony between words and things, was little short of an absurdity.

Though an advocate of direct obser-
The use of visualising devices recommended.

The vation of things, Comenius knew well the limitations of the objective method. Limited as the learner's immediate environment is, the knowledge that he must acquire to provide himself for future needs is not confined to his immediate environment, and therefore all that he learns cannot be taught by the demonstration of actual objects. Consequently, when actual things were not available, Comenius encouraged the use of such representations of them as could be conveyed by copies, models, and pictures. Herein we find the crude beginnings of the visualising devices of to-day. Comenius's *Orbis Pictus* was based on this principle of visualisation, and in his remarks on the organization of schools he suggested that there should appear on the walls of a classroom such drawings and sketches as were suited
to visualise the essential points in the course of studies of the class. To our astonishment we find that Comenius believed that every item of knowledge, whether earthly or celestial, could be visualised. "If any be uncertain," he averred, "if all things can be placed before the senses in this way, even things spiritual and things absent (things in heaven, or in hell, or beyond the sea), let him remember that all things have been harmoniously arranged by God in such a manner that the higher in the scale of existence can be represented by the lower, the absent by the present, and the invisible by the visible."
Bacon hoped that the application of the inductive method would help investigation to lay open the secrets of nature, and the knowledge thus acquired would, on account of its vast potentialities, enable mankind to live in an environment, where ideal sanitary, material, economic, social, and political conditions would obtain. This ideal was embodied in Bacon’s *New Atlantis*, a fable dealing with an imaginary republic, in which the chief feature was Solomon’s House. It was an institution equipped with all sorts of scientific instruments, and maintained an army of research scholars and inventors.

The *New Atlantis* fired the imagination of the contemporaries and the immediate successors of
Bacon. Men began to dream of the advent of a millennium of peace and prosperity to be brought about, not by some spiritual agency, but by the revelation of Nature's hidden stores. The knowledge of the material universe, hitherto despised and neglected, acquired a new momentousness and value. Its accumulation became the sacred duty of those who were in the van of literary progress. Educators began to realise the importance of knowledge in shaping the destiny of mankind. It no longer sufficed to impart to the educand culture, discipline, or training, with the aid of materials that were in themselves of secondary importance. The facts to be learned were invested with intrinsic significance. The consequences were the concentration of attention on the knowledge to be taught and the development of an ideal of educational achievement which was little short of omnisci-
ence. Ratke, who set to work as an avowed disciple of Bacon, and Milton, who tried to give a new lease of life to the decadent humanistic system of education by incorporating with it such elements of the realistic tendency as would enable the classics to keep pace with the march of events and hold the field against the rival school, were both in favour of encyclopædic courses.

Comenius was in this respect a true child of his age. We have already discussed his exaggerated view of the importance of knowledge in the acquisition of prudence, virtue, and piety. But he realised that existing knowledge was in utter confusion. In the first place, the grain lay hidden under the chaff; there was nothing to demarcate the useful from the useless, the verified from the unauthenticated. In the second place, over-
specialization severed one branch of learning from another. The physicist, for instance, neglected theology, and the theologian was ignorant of physics. Consequently, what belonged to one department of knowledge often contradicted the basic principles of another. Few sciences could give adequate support to sister sciences. In the third place, there was not much in one and the same science on which the leading scholars held unanimous views, and so the learner wasted his precious time in grappling with controversial points. In the fourth place, knowledge in each and every science was embodied in works that were in one way or another very fragmentary.

To remedy these defects, Comenius aimed at the selection of authentic and useful material out of the muddled scrap-heap.
the collection of all that was 'knowable', the correlation of all the branches of knowledge in such a way as to bring them into harmony with one another, the preparation of a statement of knowledge that carried with it the approval of recognized authorities in the domain of science and letters, and the arrangement of its contents in a systematic manner with common fundamental facts as the starting-point. The name which he gave to this bold and ingenious conception of an authoritative, well-selected, well-arranged, comprehensive, and unified statement of the knowledge of the universe in all its aspects, physical, social, and spiritual, was Pansophia.

Wild as this conception might appear, it well deserves our admiration. Though, in the main, it drew its inspiration from Solomon's House, it im-

Definition of Pansophia.

Differences between Comenius's Pansophia and Bacon's ideal.
plied much more than the mere re-iteration of the ideal embodied in that mythical institution. The chief points of difference between the conception of Bacon and the pansophic ideal of his great disciple are the following:

1. Bacon's practical interest was directed to the growth of sciences by further additions which the investigators would make with the help of the new instrument he had placed in their hands. Comenius was, like Bacon, alive to the need of additions to what the race already knew. Witness his thoughts on the duties of learned men to be engaged in the Schola Scholarum (School of Schools), an international institution which he recommended for research work: "These men should...spread the light of wisdom throughout the
human race with greater success than has hitherto been attained, and benefit humanity by new and useful inventions. For this no single man and no single generation is sufficient, and it is therefore essential that the work be carried on by many, working together and employing the researches of their predecessors as a starting-point.” But like a practical man as he ever was, Comenius planned first to accumulate and give a desirable form to existing knowledge and then to employ it as a starting-point for the ‘forwarding’ of the sciences. The pansophic scheme of Comenius, therefore, emanated from a more practical attitude of mind than did Bacon’s reverie. It was in fact a necessary preliminary to the realisation of the great philosopher’s vision.

2. Bacon failed to appreciate the
Pansophia implied the unification of different subjects; Bacon ignored it.

need for the co-ordination of all the branches of learning, which was the most prominent feature in the pansophic plan. To do Comenius' justice, it must be said that this conception of harmonizing the different sciences was entirely his own. It should further be remarked that it was not lacking in utility. We all know how many evils, intellectual and moral, hold their sway in this world because of the support that they receive from the want of co-ordination among the various departments of human knowledge. If knowledge is power, it is obvious that a cordial alliance of its various constituents will impart greater strength to mankind than an accumulation of more or less detached and, in many cases, contradictory systems of ideas. The pansophic scheme, therefore, merits the gratitude of the
race, being the first, though unsuccessful, attempt to build human knowledge on the principle of fundamental unity in diversity.

3. In his great masterpiece of constructive imagination, Bacon had his eye only on such knowledge as can be acquired by sense-perception, specially that knowledge which concerns physical sciences. Comenius’s design was wider in its scope, as it included the knowledge of God as well as of man and nature. In a letter which he wrote from Amsterdam to the Royal Society in London he implored its members not to deal too exclusively with the physical aspect of the universe to the neglect of the more important metaphysical and supernatural side. Obviously this difference between Comenius and Bacon is attributable to Comenius’s preoccupation with religion.
The pansophic ideal was too ambitious to be attained by a single man. Comenius did not fail to realise this. He knew that the work which its pursuit would entail required the co-operation of proficient scholars, who might be the leaders of the intellectual world in all the departments of learning, and funds were needed for the initiation and continuation of their work. This consideration impelled Comenius to seek state patronage, for in those days few private bodies possessed resources that would suffice for the enterprising scheme. Consequently, the great reformer broadcast his ideas on the subject. The scheme won the sympathy of many, but the only effective offer of help came from England. Samuel Hartlib's influence succeeded in interest ing the parliament in pansophia, but the political strife between the Roundheads
and the Cavaliers frustrated the hopes of Comenius and his English admirers. The dauntless soul, however, clung fast to the lofty ideal, until the sack of Lissa by the Poles, which caused Comenius the greatest loss that he thought he ever suffered, the loss of his _Sylva of Pansophia_, a manuscript in which he had been, for years, accumulating pansophic materials. This disaster virtually marked the end of his pansophic activities.

The pansophic ideal, however, pervaded the entire system of Comenius’s educational theory. It was responsible for his emphasis on teaching all things to all men. He held that all should be educated in all those subjects which can make a man wise, virtuous, and pious. At every stage of education he recommended a pansophic course. He was, however,
careful to see that this instruction in universal knowledge was in conformity with the age and capacity of the pupil. Even in the mother school, designed for children below six years of age, the course recommended was pansophic, but it meant little more than an accurate perception of such commonplace things and the comprehension of such simple terms as were considered to be at the root of all-sided knowledge. In the vernacular school, which was proposed to instruct all the young of both sexes for the next six years, this pansophic instruction implied, not a deep or exact knowledge of all the arts and sciences, but the principles, causes, and uses of the most important things in the universe in all its aspects, with the intention of providing the pupil with ability to judge and behave rightly in the varying situations of life. The same
subjects were repeated, but in greater detail, in the Latin school, admission to which was not recommended to be compulsory for all. The pansophic instruction, therefore, so far as it related to compulsory universal education, was tantamount to the teaching of such rudimentary facts as would enable the learner to respond well to all the common situations in man's physical, social, and spiritual environments, and did not, as such, savour of impractical idealism.

The pansophic ideal of Comenius was also conspicuous in his Latin text-books. Each book in the Janual series was designed to represent to the learner such an epitome of the universe as was not beyond his comprehension. The delineation of the universe was, of course, in broad outline in the first book of the series and grew more detailed in each succeeding book.
Comenius's faith in sense-realism resulted in the characterisation of his educational theory by what is, in educational terminology, known as utilitarianism. To be clear as to what we mean when we call Comenius a utilitarian we shall deal with the different meanings in which the term utilitarianism has been, and can be, used in psychology and ethics as well as in pedagogy.

In ethics, utilitarianism stands for the doctrine that the greatest happiness of the greatest number should be the end and aim of all social and political institutions. The doctrine, whose chief exponents were Jeremy Bentham and John Stuart Mill, regarded the happiness of all concerned as the
criterion of virtuous behaviour. It was social rather than individualistic in its standpoint and was a wholesome corrective of the egoistic hedonism of the earlier days, which regarded the happiness of the doer alone as the end and aim of his conduct. Utilitarianism, as defined here, found its definite formulation in the 18th century, but if we apply it to the philosophy underlying the ideals of Comenius, we find that in one sense this ethical doctrine could be, and in another could not be, applicable to his conception of the goal of human behaviour. Comenius held that the individual was to acquire knowledge, virtue, and piety for his own salvation. This conception, apparently, savoured of egoistic hedonism but with the important difference that the happiness which Comenius set before the individual as the ultimate end of his activities was celestial rather than earthly.
Its attainment necessitated that the individual should so regulate his conduct as to contribute to the greatest good of the society; thus the happiness of those who could be effected by the individual's behaviour in this world was regarded to be the means for the attainment of happiness by the individual in the world to come. So Comenius's ideal combined the egoistic hedonism of the earlier days with the universal utilitarianism that developed in the following centuries. But this is not what we are herein concerned with.

The term utilitarianism can be, though it has not been, used to connote a psychological principle, which implies that human behaviour, in its various forms, is for the individual's adaptation to his environment, which gives him pleasure. This means that pleasure is the end of
human behaviour, and feeling, knowing, willing, and doing have, one and all, a utilitarian function and value. The validity of the principle may be questioned on the following grounds:—

1. Pleasure is not always the conscious end of activity. In the case of reflex and instinctive activities pleasure is not the motive, it may be the unforeseen result. The infant who sees the red ball suspended in front of its chair and who reaches out and grasps the ball, does not execute this activity because of a desire to obtain pleasure. The activity is of a spontaneous character and the pleasure issues because the end of the activity has been gratified. Pleasure, no doubt, exercises a selective influence on the child’s activities, prompting it to repeat an activity that has caused it pleasure and refrain from one that has
resulted in pain, but it does not originate activity.

2. A lower animal's activities may be, one and all, for adaptation to its environment, but a man's activities are not necessarily conducive to this end. A saint, for instance, will ignore the environment in which he is placed and direct his activities to the pursuit of a spiritual ideal.

3. In many cases, the individual, stimulated by his sense of duty, consciously sets his face against a line of action that may result in pleasure and deliberately subjects himself to pain.

These arguments may be refuted as follows:

1. Pleasure may not be the conscious end of activity; it is, none the less, the end of activity. Modern developments
in psychology have shown that our conscious behaviour and our unconscious activities, be they of the mind or of the body, rest ultimately on one and the same basis. The unconscious as well as the conscious activities of the organism, man, are purposive. They are variant in detail, but alike in general plan. The palpitation of the heart, the respiratory function of the lungs, the wrestling of the phagocytes in our blood with the bacilli of influenza, the automatic closing of the eye when a glare of light suddenly assails the retina, the infant’s opening its mouth to receive its food, the unconscious recoiling of the foot when a thorn pricks it, the startling of the child when a sudden thunderous sound dashes against its ear-drum, the crying of the baby when a bitter drop falls into its mouth, are as well designed by Nature for the purpose of our adjust-
ment to the environment as the sustained reasoning of a philosopher or the consciously directed imagination of an artist. There is, in short, a common element of drive or urge in our unconscious activities and our conscious behaviour, and the drive is towards an adjustment to the environment, which results in pleasure and is conducive to the survival of the individual and, through him, to the survival and progress of the race. Consequently, Nature directs every form of activity to a utilitarian goal, no matter how unconscious the doer may be of the utility of the activity.

2. For a lower animal the environment is more or less fixed; it is mainly a physical and immediate environment. But it is not so with a human being, whose imagination, memory, and intelligence impart a meaning to his environment which defies constancy. For th-
human being the environment is not, except in a primitive stage of civilization, an immediate environment; it is an idealized future environment to which he must adapt himself. The physical environment is only a part, and certainly an insignificant part, of man's environment, which has several aspects, social and spiritual as well as physical. In spite of all the apparent similarities between man and man, so widely different are the capacities to learn and improve in different human beings that for all intents and purposes each one has his own environment. Two men may live in the same perceptible surroundings, but may withal have exceedingly different environments. The saint, therefore, in his contempt for his social and physical environment and in his absorption in meditation and worship does behave for the sake of adaptation to his environment, and his
activities have a utilitarian aim, fundamentally similar to the purpose for the activities of an Eskimo in hot pursuit of a caribou.

5. Though different in its intensity and in its mode of expression in different cases, the feeling of pleasure may be regarded as fixed in its subjective nature. But the object which may inspire one with this feeling is not fixed. What may cause pleasure to one may give pain to another. What may be a real source of joy for an individual at one time may cease to bring to the same individual the slightest glow of gratification at another time. The growth of knowledge and intelligence and the consequent changes in human outlook tend to associate the feeling of pleasure with something different from what originally caused pleasure. Consequently, the man who, in his behaviour, is inspired
by a sense of duty to the utter disregard of what may gratify his carnal appetites is prompted to behave for the sake of pleasure as much as a sot who ignores the welfare of his fellow-beings and entertains himself with a cup of strong drink when he should be engaged in social service.

It is clear from the above that the psychological principle that human behaviour is for the sake of utility or pleasure rests on a solid foundation. Its application to education implies an emphasis on education as the preparation of the learner for actual life and, consequently, on the selection of the contents of the curriculum with regard to their usefulness in the learner's adjustment to the environment. In the days of Comenius, however, psychology as a science did not exist. Nevertheless,
his genius enabled him to foresee intuitively what psychology was destined to reveal to posterity. "Nothing is provided by nature," he observed, "of which the practical application is not soon evident." He held that education was not for intellectual luxury or the mere satisfaction of theoretical curiosity, but for clearly conceived utilitarian purposes, in the first instance for adjustment to this world, and ultimately for adjustment to the next world, and he prescribed that "the child shall learn only what is to be useful to him in this life or in the other;" and also, "With every subject of instruction the question of its practical use must be raised, that nothing useless may be learnt." Consequently, everything useless was to be ruthlessly expunged from the course of instruction. Languages were to be learnt, not for the indolent pleasure which results from
bandying words, but for their utility in the acquisition and communication of knowledge. Comenius had no patience with the divorce between the school and the outer world which is even today a curse of education. "Nothing should be [learned," he said, "for its value at school, but for its use in life."

Comenius was not satisfied with the insistence on remote utility of what the pupil learnt, but laid stress on the immediate utility of what he was required to do or know. He laid down that "only those things should be taught whose utility can be easily demonstrated." No doubt the pupil has much to learn beforehand in the course of his preparation for the wider world, and, therefore, it cannot always be practicable to convince him of the utility of what he is required to learn. But much can be done, in this respect, if the
teacher presents his lessons in such a manner that everything he teaches acquires a twofold utility, i.e., the thing learnt is realised by the pupil as something having an intimate connection with some of his immediate needs and interests, while the teacher, without the pupil's consciousness of it, appreciates the thing taught as something which will prove useful to the pupil in adjusting himself to some situations that may confront him in adult life. For instance, the teacher may teach some rules concerning official correspondence with the remote purpose of imparting to the pupils ability to carry on such correspondence with propriety in adult life, but he may associate an immediate utility with the lesson by making it the centre of a series of playful activities in which the pupils represent officers, clerks, and applicants.
Utilitarian as Comenius was in the sense that education is for usefulness in the actual situations of life, his was not a narrow, bread-and-butter utilitarianism. The preparation of the educand for life may be either specific or general. If education aims at specific preparation, it gives the learner such knowledge and skill as can be directly helpful to him in earning his livelihood. The course of study is, therefore, avowedly vocational. On the contrary, if the educator has in view the general preparation of the educand, he contrives to equip him with such knowledge and ability and to discipline him in such forms of activity as are of greatest and most permanent significance in the wider world in which the pupil will be called upon to play his part as a man and not as a mere earning machine. The
course of study which must suit this conception of education has a distinctly cultural character. This general preparation does not run counter to specific preparation. If it does not directly provide for the individual's success in his occupation, it does so indirectly by imparting an all-round general efficiency which may facilitate the acquisition of efficiency in the particular calling of the individual. Consequently, it is quite reasonable to recommend an education designed for the general preparation of the educand as a necessary preliminary to specific or professional preparation; and Comenius's insistence on an education which taught the educand what Rousseau felicitously calls the art of humanity does not detract from the utilitarian value of the educational system he planned and advocated.

There is yet another sense in which
the word utilitarian has been used specifically in education. In this sense, it signifies a doctrine which is exactly antithetical to disciplinarianism. As long as one is called a utilitarian because of his faith in a system of education that renders a man fit for a successful response to the situations of life, his utilitarianism need not be in contradiction to disciplinarianism, for the development of mental faculties by appropriate exercises which characterises the disciplinarian conception of education, may possess appreciable utility in life. But the sense in which we are now to discuss utilitarianism does not admit of its combination with disciplinarianism. If you believe that the facts learnt are really important and the exercise of the mind which the learning of the facts involves is of mere incidental value, you
are a utilitarian; if you think that the facts learnt are in themselves of little consequence and the way in which the facts are utilised in the exercise and development of the various powers of the mind is of real significance in education, you are a disciplinarian.

The origin of disciplinarianism in this sense is traceable to the once popular faculty psychology. It was believed that the brain was divided into a number of compartments, each of which was the seat of a particular power or faculty of the mind and that each of these faculties had a distinct identity and might work independently of others. The necessary corollary from the faculty psychology was the doctrine of formal training which signified that if a faculty of the mind was exercised and developed by use in connection with one sub-
ject, it could work efficiently in all the departments of human knowledge and activity, exactly as the muscles of the arm, if developed by dumb-bell exercises, could be efficiently serviceable in all the activities which required manual strength, e.g., in lifting a heavy load, in putting the weight, and in wrestling; and just as a Sandow would select and recommend for physical development certain apparatus and prescribe certain definite ways of using the apparatus, in the same way the adherents of the doctrine of formal training selected certain materials from human knowledge and recommended them as apparatus for intellectual gymnastics, prescribing certain definite ways in which the materials were to be used so as to contribute most satisfactorily to the intellectual development of the learner. Mathematical training was
considered to be capable of making the man a reasonable creature in all the situations of life, grammar was regarded as the best means of cultivating in him the power of voluntary attention and effort, linguistic recitation was valued as the best apparatus for the exercise of memory, and so forth. In short, there was an appropriate subject for the development of each and every mental faculty and an antidote for every disease of the mind; and as the number of faculties was limited, the consequence was that a few subjects, considered to be capable of affording them exercise in the surest ways came to monopolize the curriculum, which had no room for many other subjects containing facts of intrinsic value.

The faculty psychology persisted in
position of the doctrine of formal training, exercising its baneful influence on most educational institutions, till Herbart dealt at it a blow that in shaking it also shook the disciplinarian conception of education. He taught us that the mind is an indivisible unity, that all conscious activity, cognitive, affective, and connative, is due to ideas and their tendency to associate with one another, and that the various phases of mental activity are inseparably involved in every state of consciousness. The doctrine of formal training was, therefore, thrown overboard, the contents of the course of instruction began to be judged from the standpoint of their own value in the life of the learner, and a broadening of the curriculum was the result. The faculty psychology was buried so deep by Herbart that it has never risen again. But the doctrine of formal training has
come to be revived in a modified form. As it is, nobody who has received modern psychological training would believe that if memory is exercised by committing to heart the names of the officers of the Black Watch regiment, the learner will by so doing acquire facility in memorizing formulae in algebra; but it is generally held that the efficiency imparted to the mind by exercise in one subject can facilitate the learner's work in another subject so far as the two subjects possess common elements, e.g., the memorizing of the linguistic text can be helpful to the learner in memorizing an extract from his text-book on history in as much as the words and phrases, the types of sentences, and the thought-contents are identical or similar. It is also believed that our absorption in the study of a subject or in the pursuit of an occupa-
tion can develop in us some particular sentiment or ideal, which may be transferred to other pursuits; for example, the qualities generated in a child's sentiment towards the household pets may colour his behaviour towards a regiment of soldiers which is, in adult life, placed under his command; similarly an individual's engagement in his school studies may develop in him the ideal of patient and thorough work which will stand him in good stead in his professional activities.

Defective as Comenius's psychological notions were, his belief in sense-realism saved him from giving way to disciplinarianism. He was, on the contrary, an extremist in his appreciation of the importance of the facts to be learnt. In dealing with his pansophic scheme we have seen how he made a fetish of
knowledge. He could not be satisfied by choosing subjects for the curriculum in such a way that a limited number of them might embody elements common to all the departments of human learning and all the spheres of human activity. In consequence of the current belief in the transfer of training in proportion to the existence of common elements in kindred subjects, the present educationist will think it unnecessary to include trigonometry in the curriculum, if he has already assigned a place in it to geometry. But Comenius would exclude nothing useful. He must teach all things to all men. All his efforts were directed to the Herculean task of making the acquisition of universal knowledge practicable. His pansophic scheme aimed at its collection and presentation in a concise and systematic form. His Latin text-books were
designed to give the pupil a command over the medium of instruction in such a way as to release time and energy for the acquisition of knowledge. He did much to improve the methods of instruction; but to him the method was important, not because it provided exercise for this faculty, or that, but only as a useful means to the acquisition of knowledge. He had no patience with those roundabout methods which the disciplinarians recommended, methods which presented the subject-matter in a manner calculated to accustom the pupil to drudgery and strenuous volitional effort. Had Comenius been alive to-day, he would have set at naught the heuristic method and ridiculed the source method of teaching history. We adopt these methods for the exercise and development of the pupil's intellectual powers. But Comenius thought differently. His
writings on education indicate that he considered the growth of the pupil's knowledge to be tantamount to, or at least as the sure means of, his mental development. In short, Comenius subordinated the methods of instruction to the facts conveyed by instruction. That is why he repeatedly piques himself on the idea that the methods he recommended were the surest, easiest, quickest, and the most pleasant means of the acquisition of knowledge. This pompous claim is heralded in the very title of the Great Didactic, which runs as follows:—

"The Great Didactic, setting forth the whole art of teaching all things to all men: or a certain inducement to found such schools in all parishes, towns, and villages of every Christian kingdom, that the entire youth of both sexes, none being excepted, shall quickly, pleasantly, and
thoroughly become learned in the sciences, pure in morals, trained to piety, and in this manner instructed in all things necessary for the present and for the future life, in which, with respect to everything that is suggested, its fundamental principles are set forth from the essential nature of the matter, its truth is proved by examples from the several mechanical arts, its order is clearly set forth in years, months, days, and hours, and finally, an easy and sure method is shown, by which it can be pleasantly brought into existence.”

The above statement admirably sums up what we have tried to vindicate in this chapter, i.e., that Comenius was a utilitarian in two senses:—

1. He believed that the value of education lay in its usefulness in this
life and in the life hereafter. His educational theory was, in this respect, antithetical to the doctrine that knowledge should be learnt for the sake of knowledge, a notion entertained by those who believe that uselessness is of the essence of liberal education.

2. He attached primary importance to the facts taught, and cared for the method of teaching only as an effective means to the communication of facts. In holding this view he contradicted the disciplinarians who looked upon the way in which a mental faculty was exercised as of real importance in education and considered what was taught to be little more than suitable material for mental exercise.

If we combine the two aspects of Comenius's utilitarianism, we may conclude that in his theory of education the
method of instruction was treated as a means for the acquisition of knowledge, which was, in its turn, considered to be the means for a suitable response to all the situations of this life, and this last was the means for happiness in the life hereafter.
VIII.

The Infallible Method.

Comenius believed that his ideal of teaching all things to all men was attainable if education was reformed on the principle of order, which he considered to be 'Education's first law,' and 'the dominating principle in the art of teaching.' So firm was his belief in the inevitable success of an orderly procedure that for him efficient education was synonymous with the systematic arrangement of the subjects taught and the right methods of presenting them. He recommended that the time for instruction should be carefully divided, so that each year, each month, each day, and each hour might have its appointed task, and exorted the teachers to be careful to see that the division of the time was rigidly
adhered to in order that nothing might be omitted or perverted. Comenius attributed miraculous virtue to the systematic arrangement of the contents and methods of education. "As soon as order is thoroughly secured," he wrote, "the process of the art (of instruction) will proceed as easily and as spontaneously as those of nature." He was sanguine that the orderly procedure of education would enable the children to receive the desired instruction as rapidly, pleasantly, and thoroughly, as the fish learn to swim and the birds to fly. He had an exaggerated notion of the efficacy of what he conceived to be the systematic method of education, as is evidenced by the following quotation from the Great Didactic:

"As soon as we succeed in finding the proper method, it will be no harder
to teach any number desired than, with the help of the printing press, to cover a thousand sheets daily with the neatest writing."

The most conspicuous and, from the standpoint of modern pedagogy, the least scientific feature of the system, which Comenius regarded to be infallible, was uniformity. He proposed the same schools for all, boys and girls, both noble and ignoble, rich and poor, in all cities and towns, villages and hamlets, and laid down that the same teacher should teach in one school or, at least, in one class, the same textbook and the same edition of it should be used by all the pupils in a class, the whole class should do the same exercises at the same time, and each class should use the same textbook for instruction.
in all the subjects, literary as well as realistic. He also insisted on the use of the same method for teaching all the languages, the same method for instruction in all the sciences, and the same method for training in all the arts. In Comenius’s system there was no scope for such variations in method as might suit a particular teacher or a particular class. Every teacher was required to use the same method, without making any concession for the particular circumstances in which he was conducting his work. All the classes had to learn the same subjects by the same methods in the same periods of the working day. In all the classes the same amount of time was spent in school instruction and private study.

In fact, the thread of uniformity runs through all the texture of Com-
enius's educational theory. He fixed the same number of years for each of the four grades of schools, which represented successive stages in the individual's development from birth to maturity, and divided the work of all the schools among the same number of classes, assigning the same amount of time to each class.

For his advocacy of a systematic procedure in education Comenius deserves our gratitude. But it is hard to agree with his assertion that the desired systematisation of education must impose an unalterable uniformity on the arrangement of its contents and the methods of presenting them. In considering his comparison of the method of instruction to the printing press and the minds of the pupils to sheets of paper, the following facts are not to be ignored:
1. The sheets of paper are blank, when they are put to the printing press; the pupil's mind, on the contrary, is not a blank to start with, even though the educator catch hold of him at birth. No doubt, the theory of innate ideas is a mere illusion. But the child, when it comes into the world, brings with it certain tendencies and potentialities, which give a characteristic turn to the synthetic activity through which it receives impressions from, and reacts upon, the environment. Heredity endows different individuals with different capacities and aptitudes. Consequently, the minds of the pupils may, if at all, be analogous to different sheets of paper, each one having the capacity to receive the impression of the print in its own way. To produce the desired effect, the educator must take into con-
sideration the individuality of the pupil. This implies that in determining what he teaches, how long he teaches, how he teaches, and in what order he teaches, he must as far as the circumstances allow, guide himself by the principle of variety in dealing with various minds. It is no longer possible, in the light of what modern psychology tells us of individual differences to consider any one course of study as ideal and to hold that any method of instruction or plan of procedure in school technique can be applied with like favourable results to all children.

2. Man is effected by a much greater variety of influences from the environment, and to a far greater extent, than a sheet of paper. Matter is constantly flowing in and out of, and modifying,
man's bodily structure. In the same way, the mind is incessantly receiving impressions from, and being modified by, the environment. The incidences of time and place, therefore, bring about such modifications in man as are much more perceptible than any modifications they may produce in a sheet of paper. Age and residence are responsible, not only for striking differences between man and man, but also for remarkable alterations in the mind and body of the same man. The repose of a sheet of paper, manufactured by a Canadian factory, in the stores of the Central Stationery Office at Calcutta for a period of five years will not make it perceptibly different from what it was when exported, or from a copy of the same sheet, kept for a similar period in a stationer's shop at Moscow. But a stay for a couple of years in London will
make a child of a Punjabi merchant remarkably different from what he was when he bade adieu to his birthplace or from his brother who has been receiving education in Lahore. The necessary inference from this is that the educator should not stick to a constant system or persist in applying a never-changing method, but vary his procedure to suit the varying conditions of the social and physical surroundings of his pupils.

3. In dealing with a sheet of paper, the printing press operates on matter in a passive state. But in his endeavours to make the desired impressions on the pupil's mind, the teacher has to deal with active machinery, moving through its inner impulses towards a definite goal. This machinery does not easily submit to the sway of the machinery of
the teacher's method. It may co-operate with the latter, when it suits its purpose, but it may also compete with or run counter to the predominating machinery. Consequently, it is a question of pitting force against force, and like a good general the teacher must needs survey, not only the field of operations, but the strength and arrangement of the hostile force and regulate his movements in conformity with the shifting position of the enemy. No pre-conceived method can, in fact, claim certainty. The effectual method of teaching evolves mainly in the course of the lesson it deals with and takes its cue from the varying moods of the pupil's mind. Modern pedagogy does not pretend to provide the teacher with an infallible instrument that may be equally serviceable in all the details of his work. Books on methodology can do no more than to
state, explain, and illustrate, broad principles whose limits the teacher should not transgress, but within which there is scope for the teacher's adopting any method that may suit the actual conditions.

4. In the process of printing the really effective factor is the printing press and the activities of the labourer who plies the machine are subservient and auxiliary to it. But in education the teacher is a potent factor. Teaching implies the interaction of the teacher's mind and the pupil's mind. Consequently, the efficacy of a method of instruction depends upon the use that the teacher makes of it, and as the mind of one teacher differs vitally from the mind of another, we cannot prescribe one and the same method for all teachers. The indivi-
duality of the teacher must be taken into calculation and he should have due liberty to adopt such methods as may suit his own aptitudes, powers, and qualifications as well as the age, capacity, interests, and inclinations of his pupils, the nature of the subject taught, and the varying conditions of the social and physical environments.
IX.

The Method of Nature.

Given the need of an infallible procedure of education, the problem was where to find it. To the solution of the problem Comenius devoted years of careful thought and patient labour, which recall to one’s mind the super-human perseverance with which Gautama Budha toiled in search of the key of salvation. At last, after much “groping” in the dark and “after many workings and tossings of the mind,” the great Moravian lighted upon the object of his quest and discovered that the key of method lay “in the immovable laws of nature”, for “if we wish to find a remedy for the defects of nature, it is in nature herself that we must look for it, since it is certain that art can do nothing
unless it imitate nature." Elsewhere he contends, "Order which is the dom-
inating principle in the art of teaching all things to all men, should be, and can be, borrowed from no other source but the operations of nature. As soon as this principle is thoroughly secured; the processes of art will proceed as easily and as spontaneously as those of nature. Very aptly does Cicero say, 'If we take Nature as our guide, she will never lead us astray,' and also, 'Under the guidance of Nature it is impossible to go astray.' This is our belief, and our advice is to watch the operations of nature carefully and to imitate them." To put the matter in a nut-shell, Kom-enius believed that the imitation of the operations of nature in the art of education could provide him with the infallible system he was in search of. This statement is, however, too vague to give us
definite guidance, for nature has been, and can be, interpreted to connote widely divergent, and even contradictory, conceptions. The meaning which Comenius attributed to the method of nature reflects the influence of Bacon. The cumulative effect of the works of the "noble Verulam" was, as we have already seen, the transfer of attention from metaphysical speculation to the study of the physical universe and the discovery of the laws that governed it. The sub-human aspect of nature began to loom large in the intellectual firmament. Her adoration became a fashionable craze. The enchanted imagination of the age invested her with marvellous virtues. She was believed to possess the panacea for all the ills that afflicted mankind. Comenius was caught in the whirl of the contemporaneous furore. For him, following nature was tanta-
mount to observing the life of birds, the growth of trees, and the influence of the sun, and establishing pedagogical principles in the light of his observations. The following extract from the Great Didactic presents a capital illustration of Comenius's method of deducing the maxims of education from what he considered to be the laws of nature as well as of the verbosity which stood in his way in the publicity of his doctrines:—

"Nature does not hurry, but advances slowly.

For example, a bird does not place its eggs in the fire, in order to hatch them quickly, but lets them develop slowly under the influence of natural warmth. Neither, later on, does it cram its chickens with food that they may
mature quickly (for this would only choke them), but it selects their food with care and gives it to them gradually in the quantities that their weak digestion can support.

Imitation.—The builder, too, does not erect the walls on the foundations with undue haste and then straightway put on the roof; since, unless the foundations were given time to dry and become firm, they would sink under the superincumbent weight, and the whole building would tumble down. Large stone buildings, therefore, cannot be finished within one year, but must have a suitable length of time allotted for their construction.

Nor does the gardener expect a plant to grow large in the first month, or to bear fruit at the end of the first year. He does not, therefore, tend and water it every day, nor does he warm it with
fire or with quicklime, but is content with the moisture that comes from heaven and with the warmth that the sun provides.

Deviation.—For the young, therefore it is torture:

(i) If they are compelled to receive six, seven, or eight hours' instruction daily, and private lessons in addition.

(ii) If they are overburdened with dictations, with exercises, and with the lessons that they have to commit to memory, until nausea and, in some cases, insanity is produced.

If we take a jar with a narrow mouth (for to this we may compare a boy's intellect) and attempt to pour a quantity of water into it violently, ins-
stead of allowing it to trickle in drop by drop, what will be the result? Without doubt the greater part of the liquid will flow over the side, and ultimately the jar will contain less than if the operation had taken place gradually. Quite as foolish is the action of those who try to teach their pupils, not as much as they can assimilate, but as much as they themselves wish; for the faculties need to be supported and not to be overburdened, and the teacher, like the physician, is the servant and not the master.

Rectification.—The ease and the pleasantness of study will therefore be increased:

(i) If the class instruction be curtailed as much as possible, namely, to four hours, and if the same length of time be left for private study
(ii) If the pupils be forced to memorise as little as possible, that is to say, only the most important things; of the rest they need only grasp the general meaning.

(iii) If everything be arranged to suit the capacity of the pupil, which increases naturally with study and age."

With his characteristic love of uniformity Comenius, throughout his exposition of the principles of the natural method, adopted, the same procedure as illustrated above, viz, the enunciation of what he regarded to be a law of nature, an example from sub-human nature in support of his general statement, the exposition of the defects characterising the existing system of education and, fina-
ily, the formulation of certain pedagogical maxims that would rectify the errors of the existing schools and bring education into conformity with that law of nature.

Critics have vied with one another in finding fault with the Comenian method of nature. In the first place, it is contended that in education ‘following nature’ signifies that the teacher should start with the hereditary endowment of the pupil and work in harmony with the laws that govern the pupil’s mental activity and development.

Comenius, on the contrary, did not take pains to examine the proper constitution and nature of man and to build his educational theory on that basis. For the nature of man he substituted nature without man and drew his principles for
the higher life from what he observed in the lower. In the second place, it is argued that Comenius's method of establishing his principles of pedagogy was neither deductive nor inductive. It implied little more than analogy, which is good for illustration, not for proof. The analogies are, it is pointed out, too fanciful, in many cases, to lend any authority to the pedagogical maxims that are assumed to be based on them. In the third place, Comenius is accused of deceiving his readers as to the origin of his principles of pedagogy, on the ground that they were not inferred scientifically from fundamental principles, as the Great Didactic pretends to show, but were the results of his practical experience as a teacher. Comenius is, therefore, considered to be an imposter in claiming for a collection of a posteriori precepts, depending exclusively on the unreliable
Support of empirical evidence, the honour that is due to a system proceeding philosophically from cause to effect.

These contentions are too weighty to be lightly brushed aside.

Defence of Comenius. But to be fair to Comenius, one should not ignore the following considerations:—

1. In his conception of the laws of nature, Comenius appears to have been conscious of a unity permeating the entire universe, organic and inorganic, animate and inanimate, physical and psychical. His great successor, Froebel, devoted his life to the revelation of this unity, and his belief in it lends its colour to his entire educational theory. That there are certain forces ruling mind and matter, alike, is very probable. The theory of evolution, for example, sees in the history of all forms of exist-
ence, organic and inorganic, conscious and unconscious, a development from a simple or rudimentary condition to one that is more complex and of a higher character. The biological conception of whom attributes the origin of the conscious behaviour of man, of his unconscious activities, and of the irrational behaviour of lower animals to the same fundamental forces. Similarly, memory, in the sense of the modification of an organism by contact with its environment, is not only an essential feature of conscious life, but of all life as well. If we hold that memory is the resultant of the impressions made on matter in our nerve-cells, it is reasonable to conclude that it is due to forces that make similar impressions on matter even in lifeless forms of existence. In the indelible marks made on a precipitous rock by the repeated passage of water, we
can discern the same process of nature as helps us to retain in memory the words that have been ineffaceably impressed on our nerve-cells by dint of repetition.

It is, therefore, unreasonable to despise Comenius's exposition of the method of nature as the resultant of the unsystematic workings of a fanciful mind. On the other hand, it is not improbable that his genius enabled him to realise that certain processes of nature were equally manifest in human nature and sub-human nature. He may also have conceived that the phenomena common to man and nature without man were, owing to their universality, of primary importance and fundamental in their relation to the phenomena peculiar to human nature or to sub-human nature. He may, consequently, have
attempted to build pedagogy on the immovable foundation of these common, fundamental phenomena of nature. In such circumstances it was quite justifiable on his part to direct his observation to sub-human nature for the discovery of the processes of nature, because the life of birds and the growth of plants could, on account of their remarkable simplicity, reflect the universal processes of nature in undisguised and uncoloured forms and enable him to image the processes sought for more easily than under the complex conditions of human life. If the point at issue were viewed in this light, there would be the same plea for Comenius's endeavour to discover the secret of man's development in the hatching of the birds as for a biologist looking for the explanation of human will in the hormic processes of the insignificant stentor.
2. No doubt, some of the conclusions of Comenius involved fantastic analogies, *e.g.*, his recommendation that the same teacher should teach a school, or at least a class, on the ground that the same sun sheds light on the whole world. But, in general, if we assume, as we have attempted to maintain above, that he had a realisation of the universality of fundamental laws of nature, the charge of dependence on analogy, automatically, fails to the ground. Given the possibility of some common laws governing human nature and sub-human nature, Comenius's line of argument becomes inductive in that the law is derived from the observation of particular facts in sub-human nature, one of which he gives as an illustration of the law, and verified by observations in the domain of architecture, gardening, and other arts. It is deductive in so far as
he applies the law enunciated to the particularised sphere of education and infers from it some principles of instruction.

3. There can, reasonably, be no moral or intellectual culpability, if one were to form a hypothesis empirically before proceeding to demonstrate it scientifically. Empirical acquaintance is, generally, a necessary preliminary to investigation on scientific lines. In it the scientific mind finds both a stimulus and a guidance to the line along which it should proceed. Newton did, empirically, perceive the effects of gravitation before he sought for a scientific explanation of its nature. So Comenius was unquestionably right in first collecting facts through experience and then in attempting to establish them on a philosophical basis in the light of the meagre philosophy then available.
Before I conclude the discussion of Comenius’s method of nature, I must needs point out that his conception of education according to nature was more rational than that of Rousseau. With the latter nature was, in the main, opposed to art. He held that the child should be allowed to develop its powers under the unimpeded influences of its physical environment. Comenius, on the contrary, recommended that in the education of the human race, the art of man should make the best of what nature could provide. The system of education he elaborated was at once natural and artificial. “This is an artificial arrangement,” he explained, “but it is also natural; for the exact mode in which the action takes place is artificial, but the law on which the action depends is natural.” In a word, Comenius’s method laid due stress on nurture as well as nature.
Paidocentricism.

However debatable Comenius's procedure of evolving the principles of his natural method of education may be, there is a unanimous verdict in favour of the principles themselves. They are a striking proof of his modernism, and it is worth our while to make a brief survey of such of them as anticipate the psychologized education of to-day.

The dominating tendency of modern education is the transfer of the 'incidence' of attention from the thing learnt to the learner, connoted by the neologistical term, paidocentricism. In the doctrines of Comenius, the paidocentric principles occupy a prominent position. His pansophic
scheme was, in its essence, nothing but an attempt to replace the existing arrangement of the different subjects, made on principles that disregarded how knowledge grew in the learning mind, by a unified statement of knowledge, which would take account of the organic unity of the learner’s mind and render the subject matter more easily and thoroughly assimilable by the educand and susceptible of an efficient, power-generating organisation in his circle of thought. In a word, pansophia would substitute a psychological arrangement of knowledge for a logical one.

Paidocentric as the pansophic ideal was, Comenius’s conception of development from within, education according to nature implied principles that still more emphatically testified to his paidocentric proclivities. They emanated from his
motion of human development. It is gratifying to note that Comenius's belief in sense-experience as the ultimate source of knowledge did not impel him, as it was destined to do in the case of Locke, to exalt the influences of the impressions from without at the expense of the inner impulses. We find in the Great Didactict "In all the operations of nature development is from within;" and again, "The right instruction of youth does not consist in cramming them with a mass of words, phrases, sentences, and opinions collected from the authors, but in unfolding the understanding that many little streams may flow therefrom as from a living fountain. Hitherto the schools have not laboured that the children might unfold like the young tree from the impulse of its own roots, but have been contented when they covered themselves with foreign
branches. Thus they have taught the youth, after the manner of Æsop's Crow, to adorn themselves with strange feathers."

The ideas embodied in the foregoing statement would have made Comenius a seventeenth century Froebel, but for his belief that the inner development of the educand was so intimate a correlative of the growth of his knowledge that, for all intents and purposes, development and learning were identical. Comenius, consequently, combined in him Froebel's appreciation of the inner with Herbart's estimation of the outer.

An inevitable consequence of this standpoint was an emphasis on the correlation of the impressions brought to the learner's mind by the subject matter with the
initiation and progress of his powers. In the preceding chapter the illustration of Comenius's procedure of deducing the maxims of pedagogy from the processes of nature involved the principle, "Everything should be so arranged as to suit the capacity of the pupil, which increases naturally with study and age." Elsewhere he said, "All the subjects that are to be learned should be so arranged as to suit the age of the students, that nothing that is beyond their comprehension be given them to learn." He even anticipated what Pestalozzi meant by the 'psychological moment' for the presentation of the subject matter. Witness his words, "Nothing should be taught to the young, unless it is not only permitted but actually demanded by their age and mental strength."

The most important corollary from
Comenius's conception of an education adapted to the age and capacity of the pupil was the recognition of the necessity of a well-graded procedure of instruction. He laid down that there should be no pressure and derived support for his dictum from Aristotle's statement, "The desire of knowledge is implanted in man, and the mind grows, as the body does, by taking proper nourishment, not by being stretched on the rack." He also observed, "Nature compels nothing to advance that is not driven forward by its own mature strength," and again, "Nature makes no leaps, but proceeds step by step." Accordingly, the Comenian procedure of education condemned hurry; teachers were exhorted to proceed from the easy to the more difficult and from the simple to the more complex in such a way that the difficulty or the
complexity increased steadily, but so imperceptibly that nowhere in the pupil's progress the next step might make him conscious that there was an increase in the difficulty or complexity of his task.

But in determining what was simple Comenius did not view the thing taught from the standpoint of a logician or a scientific analyst, but from the point of view of the learner. That is why he emphasised that the general should be taught before the particular. This does not mean that Comenius recommended a deductive method of teaching. The explanation of what he had in his mind lies in this statement: "If anything is to be learnt, its general principles must first be explained. Its details may then be considered and not till then."
Consequently, the Comenian method proceeded from the most general, by graded steps, to the most minute and presented the outline before its elaboration. If a rule was to be taught its general tenor was to be thoroughly understood before the discussion of exceptions and anomalies. If the lesson aimed at giving the pupil the knowledge of an object, his attention was directed, first to the object as a whole, and afterwards to its constituents. In the same way, a sentence was learnt as a whole from the Janua, before it was analysed into words for grammatical scrutiny.

In this respect, Comenius was far more reasonable than Pestalozzi, who in his desire for commencing the child’s education with the simplest and most elementary facts in the subjects to be learnt carried
[analysis to an extent beyond which analysis was impossible, and presented the unanalysable elements thus discovered to the beginner. The Pestalozzian instruction in language began, not with significant words and sentences, but with meaningless syllables arranged on phonetic principles; similarly, in learning to write the child did not start with words, not even with letters, but with loops, curves, and lines into which a master of calligraphy would divide the forms of letters; equally absurd was his method of teaching drawing, in which he recommended initial exercises in lines and angles, instead of practice in drawing concrete objects. Consequently, the simplest element in Pestalozzi's programme of studies was such from the objective point of view, whereas the simplest element for Comenius, was such from the subjective point of view.
The fact is that minute analysis is the function of a well-developed intellect and is practicable only after repeated and intimate acquaintance with the object to be analysed. But the child’s intellect is in the making, and his acquaintance with the environment is superficial and recent, for childhood is one’s introduction to the world. Consequently, what is a complex for the adult is often a unit for the child. To a botanist a rose is a complex divisible into several constituent parts and analysable into several elementary qualities; to the child it is a unified whole. At birth the child has a sentience of his environment, including itself, as of one ‘booming, buzzing confusion.’ The growth of his powers and experience enables him, by slow degrees, to analyse this unified confusion into separate things.
The whole life of an individual is, from this point of view, one long process of analysis, the indivisible unit of knowledge being the biggest at birth and becoming smaller and smaller as age and experience increase.

These considerations indicate how Comenius in recommending a proceeding from the general outline to the particular details foresaw what psychology enabled the educator to realise long after his demise. In the same way, to our utter astonishment, he laid down such principles of gradation of studies as have found a place in our modern pedagogy in consequence of our knowledge of apperception, a psychical process, discovered and formulated by Herbart in the 19th century. These principles of Comenius are embodied in the following statements:
"All studies should be carefully graduated throughout the various classes in such a way that those that come first may prepare the way for, and throw light on, those that come after."

"Every subject should be taught in definitely graded steps, that the work of one day may thus expand that of the previous day, and lead up to that of to-morrow."

"All the studies should be so arranged that those which come later may depend on those that have gone before, and those which come first may be fixed in the mind by those that follow."

Thus Comenius demonstrated the necessity of so arranging the lessons that each lesson built itself on the pupil's apperception-mass resulting from previous lessons, and
provided the pupil with the ideas that would enable him to apperceive the contents of the following lesson. Each lesson was, in short, to be the presentation of the old in the new. Comenius also foresaw what is meant by the first Herbartian step, preparation, which aims at bringing into the pupil’s consciousness such stock of his previously acquired ideas as will enable him to apperceive the lesson that follows. The Didactica Magna states, “It is desirable that before any special study is introduced, the minds of the students be prepared and made receptive of it.”

Comenius’s insistence on the gradation of instruction in accordance with the principles discussed above permeates his entire educational theory. We discern it in his general statement of the curricula of
the various schools he proposed: "These
different schools are not to deal with
different subjects, but should treat the
same subjects in different ways, giving
instruction in all that can produce true
men, true Christians, and true scholars;
throughout graduating the instruction to
the age of the pupil and the knowledge
that he already possesses. In the ear-
lier school every thing is taught in a
general and undefined manner, while in
those that follow, the information is
particularised and exact; just as a tree
puts forth more branches and shoots
each successive year and grows stronger
and more fruitful."

In his Latin text-books, Comenius
applied the same principles.

The sentences and thought-
contents in the *Janua became
progressively difficult and complex and
each book in the Januual series was an extension of the previous book.

Our contention that the present-day tendency of treating the pupil as the centre of interest and consideration was a conspicuous feature of Comenius's educational system is borne out, with remarkable clearness, by his conception of man's development as a harmonious evolution of all his powers and the consequent stress on the principle of correlation of the educational activities. Given the organic unity of man, correlation, becomes the keynote of education. The psychological grounds for the correlation of educational influences were first explained by Herbart, who pointed out how ideas are powerless in influencing man's destiny, except when associated with one another, and how the sum of knowledge
and concepts is incapable of impelling the will with its utmost energy, except "by virtue of the complete interpenetration of all its parts." That the principle of correlation has not yet been firmly established in actual school practice is evidenced by Sir John Adam's complaint, "At present, instruction is largely a thing of shreds and patches. Our pupils learn a large number of subjects, each more or less independently of the others, and our pupils too often see little connection among them."

If the various school activities are woefully disintegrated to-day, they were much more so in the days of Comenius, and to remedy the miserable state of affairs, he emphasised correlation throughout his educational system. At each stage of education, even in infancy, training in
morality, piety, and physical dexterity was to be imparted along with, and as an inseparable correlate of, linguistic and intellectual instruction. Comenius formulated several maxims of correlation, for instance:

"Things that are naturally connected ought to be taught in combination."

"Great stress (should) be laid on the points of resemblance between cognate subjects."

"The study of languages should be joined to that of objects."

"Exercises in reading and writing should always be combined."

"The sense of hearing should always be conjoined with that of sight, and the tongue should be trained in combination with the hand. The subjects that are taught should not merely be taught orally, and thus appeal to the ear alone, but should be pictorially illustrated, and thus develop imagination by the help of the
eye." "Each subject should be taught in combination with those which are correlative to it; that is to say, words should be studied in combination with the things to which they refer; while reading and writing, exercises in style and logical thought, teaching and learning, amusement and serious study, should be continually joined together."

Comenius's attempt to combine amusement and serious study was, perhaps, the most daring application of the principle of correlation before our own century. Even Froebel durst not conceive it, except in the favourite occupations of men possessing an artistic sense of the highest type. Comenius's views on this topic found a clear expression in the following statement:—

"It will be of immense use if the amusements that are provided to relax the
strain on the minds of the scholars be of such a kind as to lay stress on the more serious side of life, in order that a definite impression may be made on them even in their hours of recreation. For instance, they may be given tools, and allowed to imitate the different handicrafts, by playing at farming, at politics, at being soldiers or architects, etc.” These remarks bridged the gulf between play and work, learning and doing, and might do credit to an exponent of the twentieth century project method.

With the later Herbartians, correlation took the form of concentration or the unifying of all subjects about one common central subject, such as literature or history. This form of correlation also characterised Comenius’s system. The linguistic text-book, such as the Janua, was used by the class concerned as the core of
instruction, not only in the various linguistic subjects, grammar, translation, composition, reading, and writing, but also in all the realistic subjects, scientific, social, moral, and religious. The principle of concentration has found favour with the exponents of modern pedagogy, but in a less exaggerated form, e.g., in treating the reading-book as the centre of instruction in the various linguistic subjects.

It is, however, generally realised that a mere unification of the contents of the curriculum will not suffice. It is averred that the correlation of the influences brought to bear upon the learner by the minds of the various teachers is still more necessary. On this score most people find fault with the Dalton plan and look with distrust at the Gary school. This need of the unification of the teaching
mind was also foreseen by Comenius, who believed that "a diversity of teachers tends to distract the mind quite as much as a diversity of books," and recommended one teacher for all the subjects in one school or, at least, in one class.

Dr. Rusk observes that Comenius's instruction, "Schools should be organized in such a manner that the scholar shall be occupied with only one object of study at any given time," is contradictory to his principles of correlation mentioned above. To my mind the contradiction is apparent rather than real. On the contrary, the combination of these seemingly contradictory maxims is a clear proof of his paidocentricism. When he recommends the combination of things, he finds in the things to be combined a natural inter-connection, that is, he discovers that the said things
are capable of being interpreted as a unified complex by the learner's mind. When he disapproves of combination, he does so in case the things concerned are not susceptible of finding a place in what Herbart might call one and the same presentation-mass. In denouncing the teaching of two things at a time, Comenius did not object to the correlation of various points connected together by a psychological link, nor did he condemn cross-references between homogeneous subjects, for example, between history and geography. Similarly, he did not question the desirability of teaching several subjects in one and the same working day. His objection was levelled at the attempt to teach two subjects in one and the same period as also at distracting the boy's attention from one thing or one phase of the topic in hand by presenting him
something not helpful to him in the 
comprehension of the point under dis-
cussion. In a word, Comenius desired 
to secure one step, before another was attempted.

This brings us face to face with 
Comenius’s principle of thor-
oughness, which is a remark-
able characteristic of his methodology. 
It is conspicuous in the very title of the 
Great Didactic. It is also evidenced by 
the statements, “The education given 
shall not be false but real, not superficial 
but thorough;” “Everything should be 
taught thoroughly, briefly, and pitifully.” 
In learning Latin from the Janua, one 
and the same sentence was so often re-
peated in reading, speaking, translating, 
analysing, parsing and composition that 
it was thoroughly assimilated by the 
pupil and the word, whose use it illustra-
ted, became a part and parcel of the pupil's working vocabulary.

Another pedo-centric tendency in Comenius's educational system was his stress on learning by doing. The pupil was made to learn a language by reading and by its use in speech and writing. We have seen how the boys in the Latin school at Sarospatak were required to use Latin at all times, outside the class-room as well as inside it. The various practical subjects, writing, singing, etc., which Comenius called arts, were learned by actual practice. Virtue was inculcated, not by fine talk, but by good example, by sympathetic guidance, and above all, by well-graded practical exercises. Even the pupil's religion must have a practical outcome. "From the very beginning," Comenius enjoined, "it is necessary to form practical and not theoretical
Christians, if we wish to form true Christians at all. For religion is a real thing and not a reflection of reality, and should prove its reality by the practical results it provides.” Consequently, it was laid down that the infant should commence its training in morality by bowing, kneeling down, and raising up its hands, as if for prayers. Play was considered to be a sure means of education in childhood, and the physical well-being of the learner was never ignored. The *Schola Ludus* was a capital illustration of Comenius’s recognition of the importance of movement in education.

After what we have seen of the influence of Bacon on Comenius’s doctrines, it is, perhaps, unnecessary to mention that teaching by induction was one of the main features of his pedagogy. This is, in its essence, a paidocentric tendency, for the
inductive method presents the subject-matter to the learner in the order determined by the way in which knowledge develops from sensation to conception in the pupil's mind. Comenius held that the matter should come before the form, examples before rules, and things before their classification. Accordingly, the pupil was not required to learn conjugations declensions, grammatical definitions and rules of syntax before he was introduced to a reading-book. On the other hand, the pupil was made to read, at the very start, a suitable reading book, like the Vestibulum, which afforded material for learning grammatical rules inductively. These were, in their turn, applied deductively to help the pupil in the use and understanding of the language.

The modern emphasis on paidocen-
Comenius's solicitude for the educand's bodily health,

tricism impels the educator of to-day to provide carefully for the physical well-being of the child, with the result that a knowledge of school hygiene has become as essential to the equipment of a teacher as a knowledge of child psychology. This aspect of modern pedagogy was also conspicuous in Comenius's scheme. He instructed all to "play that they may have a sound mind in a sound body," and dwelt at length on the proper care of the educand's physique, not because, like the Greeks, he aimed at his preparation for a military career, but because he considered that the health of the body lay at the root of wisdom, morality, and piety. Consequently, he recommended that the educand's diet should be moderate in quantity and simple in quality and pointed out that "the human body needs movement, ex-
citement and exercise." Not only did Comenius realise the necessity of repose and diversion, but he also conceived that the periods of rest and recreation should alternate with those of work and study, a notion which entitles him to rank with the most upto-date educationists of our own times.

There is yet another paidocentric tendency that characterised Comenius's educational system. It was his earnest aspiration to lighten the drudgery of learning for the child and make instruction pleasurable and interesting. The importance of the topic in modern education necessitates that it should be dwelt on in some detail, and so our next chapter will deal exclusively with it.
XI.

Stimuli.

On the subject of incentives to learning Comenius held enlightened views. Thanks to his paido-centric inclinations, he would not, by compulsion, hold the learner to the mastery of difficult and uninteresting tasks, in the hope that by so doing he would enable the learner to face, with success, the hard facts of this callous world. He would, on the contrary, sugar-coat the pills of school tasks and rely on interest as the sure means of education.

The doctrine of interest, whose pedagogical significance was first worked out in a scientific manner by Herbart, has been, perhaps, the most potent factor in revolutionising our methods of education.
There is no book on modern pedagogy but emphasises that the teacher should make the lesson interesting. The maxim, as it stands, is, however, too inadequate to give us definite guidance as to the stimuli that should be made use of in education. If we interpret interest in its popular sense, the maxim is liable to render pedagogy too soft by identifying interest with amusement or entertainment. On the other hand, if we view the maxim from the psychological standpoint, it admits of the educator’s use of a large variety of stimuli, some of which are as disastrous in their consequences as soft pedagogy. Interest can ensue from an undesirable stimulus as well as from a desirable one. A series of activities conducive to the gratification of a low, carnal appetite is, in terms of psychology, interesting in the same sense as social service rendered!
the satisfaction of the inner conscience. Similarly, there are negative interests as well as positive interests, and the former are generally more powerful than the latter in stimulating a human being to know and act. Ordinarily the pupil is more quickly interested in and, consequently, gives readier attention to, what involves fear of punishment, loss, or injury than to something associated with the hope of reward, gain, or honour. Thus the principle of making the lesson interesting involves a mixture of opposites. It can be a means of moral training as well as of the cultivation of vicious tendencies. It may be used to make learning pleasant or unpleasant in accordance with the meaning that the teacher puts on it. It is capable of developing, in the pupil, self-reliance and initiative as also susceptible of habituating him to regulate his behaviour mainly by external pressure.
The fact is that psychology tells us but what is and leaves what should be to be determined by ethics. She explains the various stimuli, but affords little help to the teacher in the choice of the stimuli for use in education. For guidance in this critical work the teacher must perforce turn to ethics. In brief, the doctrine of interest in its relation to education should rest on a psycho-ethical basis.

In this respect, Comenius merits our praise. He did not favour reliance on an ignoble stimulus. For instance, the public notables were to stimulate the pupils by giving ‘small’ presents, which implied that the stimulus was not to assume the form of avarice, but of a desire for the approval of the good and the wise. Nor did Comenius brook an appeal to a negative form of interest.
He would eliminate punishment and compulsion. The stimuli which he recommended were ethically desirable, or at least allowable, forms of positive interest. These we discuss herein.

In the first place, Comenius would make the lessons interesting by a careful gradation of studies in such a manner that the blending together of the new and the old might facilitate the pupil’s assimilation of the new.

In the second place, Comenius believed that the pupil’s interest would be secured, if the timetable of school instruction and of home work were drawn up on the principle of facility for the learner. “For the young,” he remarked, “it is torture if they are compelled to receive six, seven, or eight hours’ instruction.
daily and private lessons in addition." He prescribed that the class instruction should last only four hours each day and the same length of time be appropriated for private study. He would organise the programme of studies in such a manner that the morning hours might be reserved for the learning of the new matter and for subjects requiring a deal of brain work, while the afternoons might be assigned to practical subjects and to the application and reproduction of the knowledge learnt in the morning.

But, for Comenius, interest was, above all else, a resultant of the right method of teaching and tactful and sympathetic treatment with the pupils. He wrote, "If the scholars are to be interested, care must be taken to make the method palatable, so that every-
thing, however serious, may be placed before them in a familiar and attractive manner." If he found the pupils in different or antipathetic to their lessons, he would lay the charge, without making any concessions for the mentality of the pupils or the conditions under which the teacher did his work, at the door of the teacher. His exaggerated notion of the part played by the teacher's method of instruction and sympathy for the pupils was embodied in such passionate statements as:

"No blows should be given for lack of readiness to learn, for, if the pupils do not learn readily, this is the fault of no one but the teacher, who either does not know how to make his pupils receptive of knowledge or does not take the trouble to do so."

"A musician does not strike his lyre a blow with his fist or with a stick, nor
does he throw it against the wall, because it produces a discordant sound; but setting to work on scientific principles he tunes it and gets it into order. Just such a skilful and sympathetic treatment is necessary to instil a love of learning into the minds of our pupils, and any other procedure will convert their idleness into antipathy and their lack of industry into downright stupidity."

Comenius did not fail to point out how the teacher's method could lend interest even to irksome drill and grind. Above all else, he would call forth the pupil's interest by exciting in him the desire to know and to learn which he believed to be inherent in man. In other words, he would appeal to that inner impulse which prompts the child to explore the environment without any conscious purpose beyond the satisfaction of that impulse.
But, where practicable, Comenius would interest the pupil in the immediate utility of the lesson by bringing home to him the practical utility of the matter to be taught. To this end, he would, where possible, discuss the significance of the thing to be learnt in its bearings on actual situations in the pupils' lives as a preliminary to the lesson.

Comenius had a keen appreciation of the educational value of emulation, which he considered to be "by far the best stimulus with school pupils." Accordingly, he recommended the association of the thing to be learnt with an element of sport, which might enlist the pupil's instinct of rivalry in the cause of education, for example, "by pitting the boys against one another to answer and explain riddling questions, comparisons, and fables."
Comenius knew well that the desire for social approval is a potent incentive to effort and was not slow in utilising this innate tendency in education. Hence his statement: "The civil authorities and the managers of schools can kindle the zeal of the scholars by being present at public performances such as declarations and promotions) and by praising the industrious ones and by giving them small presents (without respect of person.)"

It is worth mentioning that Comenius could discern that if the teacher desired to interest the pupil in the lesson, it was imperative for him to eliminate all rival interests, specially racial interests, for instance, loud noises which might tend to distract the pupil from the lesson. Consequently, he proposed that the school
should be situated in a quiet spot, far from noise and distraction.

That Comenius would leave no stone unturned to make instruction pleasurable and interesting is illustrated to perfection by his remarks on the desirability of an agreeable school environment. He wrote, "The school itself should be a pleasant place, and attractive to the eye both within and without. Within, the room should be bright and clean, and its walls should be ornamented by pictures. These should be either portraits of celebrated men, geographical maps, historical plans, or other ornaments. Without, there should be an open place to walk and to play (for this is absolutely necessary for children), and there should also be a garden attached, into which scholars may be allowed to go from time to time and where they may feast their eyes on trees,
flowers, and plants. If this is done, boys will, in all probability, go to school with as much pleasure as to fairs, where they may hope to see and hear something new."
The Compulsory Stages of Education.

In his scheme for the organisation of a "ladder" system of schools, Comenius was several centuries in advance of his times. He proposed four grades of educational institutions, each of which corresponded to a particular period of the educand's development.

Of these the lowest was the School of the Mother's Lap, which Comenius proposed for every family. It was designed to educate infants of both sexes up to the age of six. Comenius's solicitude for a systematic training of children below the school-going age is a clear testimony to his modernism. The Greek and Roman thinkers, such as
Plato and Quintilian, held that education should begin at the very birth of the pupil and regarded right training in the nursery as the most important part of education. Plato dealt with the care of the child even before birth. But the Renaissance in its emphasis on classical languages and literatures threw the education of infants into neglect. Infancy came to be regarded, virtually, as the fag-end of humanity, too insignificant for the educator's consideration. If the educational speculators, who drew inspiration from the literary impulse, ever condescended to take account of infants, they did so, not because of the appreciation of the importance of infancy, but because they desired to cram the infant's memory with words that might, subsequently, 'come in useful' in connection with regular instruction in Latin and Greek.
Comenius's maternal school was, therefore, a bold deviation from, and a wholesome corrective to, the contemporaneous neglect of children. He observed that "Nature develops everything from beginnings which, though insignificant in appearance, possess great potential strength," and believed that "the roots of all sciences and arts in every instance arise as early as in the tender age, and that on these foundations it is neither impossible nor difficult for the whole super-structure to be laid, provided always that we act reasonably with a reasonable creature." Accordingly he recommended, for his school of infancy, a course of training that might embrace the rudiments of all the sciences and arts and lay solid foundations for knowledge, virtue, and piety. The curriculum was, consequently, pansophic.
It was, however, suited to the age, capacity, interests, and needs of the infants. It is worth noting that what Comenius considered to be the beginnings of a science were not such in regard to the logical arrangement of the subject-matter of the science, but from the standpoint of the infantile mind. For instance, Comenius did not find the beginnings of geometry in the aim and scope of the science and its axioms and postulates, but in the infant's learning the sense of the words great and small, long and short, wide and narrow, and in its ability to draw and recognize lines, curves, and circles. In the same way, the generalisations and categories expressed by the words something, nothing, thus, otherwise, where, similar, and different were regarded as the rudiments of metaphysics. In the domain of physics, the infant was to be taught to
know water, earth, air, fire, rain, snow, etc. Instruction in history was to consist in the infant's recalling what recently happened and in noting the part that this one or that took in such or such an affair; while grammar as proposed for the infant was synonymous with the correct articulation of sounds and the right utterance of commonplace words and sentences in the mother tongue. In the same way, Comenius prescribed for this period a course of instruction in optics, astronomy, geography, chronology, arithmetic, statistics, manual training, and even in politics, ethics, and theology.

Stripped of the high-sounding names which Comenius's recommendations involved, the course of infantile training planned by him was tantamount to such sensory, motor, and verbal training as
might suit the infant's age and at the same time provide him with an apperception-mass for formal education in the subsequent periods. It was, in fact, a crude precursor of the Kindergarten system of the 19th century and the Montessori school of our own age. It was characterised by several distinct features that were significant of the paedocentric groundwork of Comenius's educational system. Some of these we discuss below.

1. This infantile training was to be imparted to every child, not in a public school, but at home. A professional teacher was therefore, out of question. In the same way, the nurse, who was a prominent factor in Plato's educational system for the guardians of the state and in Quintilian's scheme for the training of the orator, was ruled out of considera-
tion, for everybody could not afford to employ a nurse. The consequence was a recognition of the importance of the mother in education and an emphasis on female education. This feature of Comenius’s school of infancy was an anticipation of what Pestalozzi advocated in the 19th century. It is interesting to note that in our own century the mother has again given place to the professional teacher, a tendency of the age which is partly a result of the highly psychologized and technical character of the earliest stage of modern education, but mainly a deplorable concomitant of the present-day artificial civilization, in which economic pressure has driven the fair sex to step into the shoes of men and substituted the hotel for the home. The Montessori school, in which the professional directress looms large, owes its origin, primarily, to the conditions arising out of this economic pressure.
2. Like Plato and Quintilian, Comenius knew well the importance of imitation in education. He realised how early education in expression and behaviour implies the child’s imitation of its elders. He also discerned that a child learns much more through the imitation of its fellows. We find him stating in his Handbook of the Mother School: “Children of the same age and same manners and habits are of greater service still. When they talk or play together, they sharpen each other more effectually, for the one does not surpass the other in depth of invention, and there is among them no assumption of the superiority of the one over the other, only love, candour, free questionings and answers.”

We come across a similar statement in the Great Didactic, “Better results and more pleasure are to be obtained when one pupil serves as an example and a
stimulus for another. For to do what we see others do, to go where others go, to follow those who are ahead of us, and to keep in front of those who are behind us is the course of action to which we are all most naturally inclined. Young children are always more easily led and ruled by example than by precept. If you give them a precept, it makes little impression; if you point out that others are doing something, they imitate it without being told to do so.” In these remarks of Comenius is traceable that sociological tendency, which Rousseau ignored in early education, but which has come to be a distinctive feature of modern pedagogy, mainly through the influences of Pestalozzi and Froebel.

3. As an inevitable consequence of his sense-realism, Comenius recommended early education through the senses. “If some
little occupation,” he wrote, “can be conveniently provided for the child’s eyes, ears, or other senses, these will contribute to its vigour of mind and body.” As this juvenile instruction through sense-perception was proposed for all, rich and poor alike, there was no scope in it for the use of such costly articles, (for instance, toy-aeroplanes and wireless apparatus in miniature), as enable an infant in a Montessori school of to-day to acquaint itself, through sense-perception, with the contents of the remote environment. Witness the words of Comenius, “It is sufficient for this age to comprehend spontaneously, imperceptibly, and as it were in play, so much as is employed in the domestic circle.” The principle of physical nearness was, therefore, as marked a feature of Comenius’s initial stage of education as that of Pestalozzi.
4. In his suggestions for infant education, Comenius anticipated the importance of what modern psychologists call kinaesthetic sensations. There is no doubt about his appreciation of the fact that the child learns, mainly, through movement. He devoted a full chapter of the Handbook of the Mother School to the discussion of "How children ought to be accustomed to an active life and perpetual employment." He made due provision for the child's instincts of construction and destruction. "In the impulse to construct and destroy," he averred, "there is but the effort of the little intelligence to succeed in making or building something for himself; so that instead of opposing the child in this, he should be encouraged and guided." In the exercises which Comenius proposed to this end we get the first approaches to Froebelian "occupations."
That Comenius insisted on manual occupation, not on account of its utilitarian value, but owing to his appreciation of its effects on the emotional attitude of the child, and the consciousness of renewed vitality and heightened vigour which pleasure brings with it is evidenced by his remarks on infantile instruction in drawing. We read in the \textit{Handbook of the Mother School}, "It matters not whether the objects be correctly drawn or otherwise, provided that they afford delight to the mind."

b. That spontaneous activity for activity's sake which we call play and which we believe to be nature's educational device was the essential feature of the maternal school. With more than Platonic clearness and in terms that sound like a distant echo of Frekeblian statements on
the subject, Comenius dwelt on the significance of play in early education. He remarked, "It is better to play than to be idle, for during play the mind is intent on some object which often sharpens the abilities. In this way children may be early exercised to an active life without any difficulty, since nature herself stirs them to be doing something." He reiterated, "Let their spirits be stirred up by means of agreeable play."

Next above the School of the Mother's Lap, Comenius proposed the Vernacula, so called because in it the mother tongue or vernacula, a term used by the Romans to signify the language of the common people, was the medium of instruction. Comenius recommended that there should be a vernacula in every village or hamlet in order that all the children between six and twelve
years of age might attend it. Social distinctions were extremely abhorrent to Comenius and he planned to give elementary education to the children of the labourers, the artisans, the peasantry, the bourgeoisie, the gentry, and the nobility under the same roof. Likewise, he thought that there was no justification for the segregation of girls. Plato had recommended the co-education of boys and girls only in infancy. In full recognition of the equality of man and woman and in consequence of his socialised standpoint Comenius would extend this co-education beyond the limits set by Plato. Nor would he make any concession for hereditary endowment, the innate aptitudes and talents, of the pupil. "When boys are only six years old," he thought, "it is too early to determine their vocation in life, or whether they are more suited
for learning or for manual labour. At this age neither the mind nor the inclinations are sufficiently developed, while, later on, it will be easy to form a sound opinion on both." For Comenius individualistic peculiarities were no better than so many evil propensities which the educator should make it his business to eradicate. We read in the Great Didactic, "The differences of mentality are caused by nothing more than a superfluity or lack of some of the elements in the natural harmony, just as bodily diseases are nothing but abnormal states of wetness or dryness, of heat or cold." "These excesses or defects of disposition," Comenius believed, were eradicable "as long as they were not of old standing." It is amusing to note the analogy which he brought forward to lend force to his opinion on the matter. "In warfare," he wrote, "re-
oruits are mixed with old soldiers; the weak and the strong, the sluggish and the active, fight under the same standard and obey the same orders as long as the battle continues. Thus it is in the camp of knowledge; the slow are mixed with the swift, the weak with the quick-witted, the obstinate with the yielding, and are guided by the same precepts and examples as long as guidance is necessary."

Comenius’s democratic sympathies that prompted him to provide equal educational opportunities for the rich and the poor, the man and the woman, are undoubtedly commendable, but it may be questioned whether he was right in ignoring hereditary endowment till the child was 12 years old. Inspite of the essential elements of our being, which we possess in common with our fellows, each of us is born with
certain characteristics of the body and the mind which distinguish one member of the race from all others. Now these individual characteristics, however insignificant, are the most valuable assets of the individual. He can make the best of his life and contribute his greatest to the progress of the race by developing and rightly using his peculiar capacities. In the interests of society it is desirable to nurture and utilise individuality. At the same time it is absolutely necessary to develop what the individual possesses in common with his fellows, for the individual has to make use of his individuality in and through the social milieu, and for the social good. The problem, therefore, is how to develop both individual capacities and common powers and, what is more important, how to inter-connect the two. The solution of the problem
does not lie in first developing, as Comenius suggested, common elements and allowing the peculiar elements to lie dormant in the meanwhile, to be attended to after the common capacities have been adequately developed. This is not nature's way. The child is born, for example, with a facial expression, in which common elements are blended with peculiarities, and we observe the common and the peculiar developing in it steadily, concurrently, and harmoniously from the very birth. When nature does not postpone the nurture of even the physical peculiarities for the sake of general development, is it not a defiance of nature if we consider, as Comenius did, that the peculiarities of the mind have time to make holiday during the critical years of early life? As the things stand at present, we dare to defy nature in this respect almost daily
in our practice, with the most deplorable results. The day is, however, not distant when rapid means of communication as well as a fairly accurate knowledge of the child mind will facilitate arrangements for duly attending to individuality. A super-normal child will not be suffered to have his progress shackled, and a sub-normal child will not be made miserable, by being saddled with normal children. Pupils who love uniformity and routine will not be accorded the same treatment as those who crave for continual variety. A child possessing strong visual imagery will not be required to learn how to read by the same method as a child in whom the motor type of imagery predominates. The problem is indeed difficult, for segregation will be as harmful as uniformity. Its solution, probably, lies along the lines suggested by the
Montessori system and the Daltonic plan, which are laudable, though tentative, attempts of our own times to combine individuality and universality.

As is evident from what we have seen above, the aim of the vernacula was general rather than specific. "We pursue," said Comenius, "a general education, the teaching to all men of all the subjects of human concern. The purpose of the vernacula shall be that all children of both sexes may be instructed in that knowledge which is useful during the whole of life." The vernacula was, therefore, designed not only to pave the ground for higher studies in case the pupil aspired higher than the workshop, but as an institution imparting a self-sufficient and all-round training, practical, moral and religious, that might enable the pupil to judge and behave
rightly in all the situations of life. The vernacula was, for this reason, called a studio of humanity, and its business was to prepare a human being in the real sense of the term.

But Comenius’s solicitude for the pupil’s preparation for life in general did not make him forgetful of the pupil’s preparation for the specific occupation of his adult age. Unlike those who are responsible for the organisation of the present-day elementary (specially, rural) education in India, Comenius would not convert the children of honest, hard-working men into literate-degenerates, unfit for manual labour. For this purpose he recommended that the school-day should be short enough to enable the pupil to utilise several hours of the day in domestic work, and prescribed that “the children should learn the most
important principles of the mechanical arts, both that they may not be too ignorant of what goes on in the world around them, and that any special inclination towards things of this kind may assert itself with greater ease later on."

The course of instruction in the vernacula was, of course, pan-sophic. The children were to learn to read and write in accordance with the grammatical rules of the mother-tongue, to acquire such elementary knowledge of arithmetic and geometry as could be learnt empirically and might suffice for the actual needs of the pupils, to exercise their voice in singing well-known melodies and their memory in committing to heart familiar psalms and hymns together with the catechism and the most important stories and verses in the Bible, to learn and
practise the cardinal principles of morality and piety, and to receive instruction in the rudiments of economics, politics, universal history, and cosmography as well as in the broad fundamental principles of the mechanical arts.

The vernacula was to be divided into six classes, each with a course of a year. Comenius wrote a series of text-books, six in all, for the vernacula. The books were composed on the same principles as underlay the Janual series of text-books for the Latin school. Each of them was designed for a particular class and embraced all the subjects of its curriculum, thus providing the learner with an adequate apperception-mass for a more detailed study of the same subjects in the next higher class. Care was taken to suit all these books to the children for whom they were intended,
No pains were spared to make learning pleasurable. The very titles of the books were based on a clear understanding of what we call derived interest. These were the Violet-bed, the Rose-bed, the Grass-plot, the Labyrinth, the Balsalmbed, and the Paradise of the Soul. Being written in Czech, an obscure dialect, these text-books had not the vogue they deserved and soon disappeared.
The Optional Stages of Education.

With the termination of the course in the vernacula, there ended the compulsory and universal period of education. If the pupil aspired higher than manual occupation, he could get admission to the Latin school, where he had to stay for six years, studying the same subjects as he learnt in the vernacula, with the only differences that the Latin school substituted Latin words for the vernacular names of the things which instruction in the vernacula acquainted him with, and that what he, previously, learnt in a broad and generalised outline was now presented to him in a more detailed and particularised form.
Comenius proposed that there should be a Latin school in every city, and optional as attendance at this school was to be, Comenius's consciousness of the equality of men kept him from recommending admission to it on the basis of social distinctions. On the contrary, he made intellectual fitness a passport to secondary education. Witness his forceful words, "Nor should admission to the Latin school be reserved for the sons of rich men, nobles, and magistrates, as if these were the only boys who would ever be able to fill similar positions. The wind blows where it will and does not always begin to blow at a fixed time." Elective as admission to the Latin school was, its pansophic course of instruction was not based on the principle of election. Every pupil had to learn the same subjects. The aim of
the curriculum was that the youth who completed it should have received a training as a grammarian, well-versed in Latin as well as in the mother tongue, a dialectician, an orator, a mathematician, a musician, an historian, a moralist, practical as well as theoretical, and, last but not the least, a theologian. Of course, the Latin school did not pretend to give the pupil a perfect knowledge of the subjects involved in the training for which it was organised; its intention was merely to lay a solid foundation for subsequent advanced instruction by cultivating in the pupil enlightened and many-sided interests as well as by providing him with an adequate apprehension-mass for, and teaching him the method of study of, the various branches of learning.

It is characteristic of Comenian uti-
Linguistic libertarianism that languages were not regarded as subjects, but merely as so many media of communication and instruction. Consequently, whereas the content-studies were compulsory, instruction in some of the languages to be taught in the Latin school was elective. Of course, every pupil had to learn the vernacular as a medium of communication with his kith and kin and Latin as the medium of higher instruction and of communication with higher society; but other languages were taught only to those who would find them useful in mastering the technique of the profession for which the teachers in the Latin school found them eminently fitted. Greek was, for instance, to be learnt by those who would turn out good physicians, while Hebrew was recommended for those who would do well as theologians.
Above the Latin school, Comenius proposed a university in each kingdom or big province with a further course of six years. The aim of the university was to prepare leaders for the different departments of social activity, the school, the church, and the state. It is significant of the socialised basis of Comenius's system that admissions to the university were recommended to be made in accordance with the needs of the church and of the state. He would, in other words, admit only such a number of students as would be required to fill in the various public offices, civil and theological, likely to be vacant when the students took their degrees. This recommendation merits the attention of the administrators of the Indian universities who admit students without taking into account the needs of the society, with the result
that the graduates go to swell the numbers of the unemployed and the discontented. Will it not be wise on our part to take a hint from Comenius and throw over-board the conventional notion of liberal education, to appreciate the cultural only as a means to the vocational, and to make the university cater for the actual needs of the society?

Limited as admission to the university was, great care was to be taken in the selection of suitable candidates. In the first place, they must be intellectually efficient. To this end Comenius recommended that "only select intellects, the flower of mankind," should be admitted, while "the rest should turn their attention to more suitable occupations, such as agriculture, mechanics, or trade." He proposed that "a public examination should be held for the stu-
dents who leave the Latin school, and from its results the masters should decide which of them should be sent to the university, and which should enter on the other occupations of life."

Given intellectually efficient candidates for admission to the university, Comenius would make a further selection with his eyes on moral qualifications. "Care should be taken," he exhorted, "to admit to the university only those who are diligent and of good moral character. False students, who waste their patrimony and their time in ease and luxury, and thus set a bad example to others, should not be tolerated." This statement contains an excellent counsel to those who are at the helm of affairs in our universities. It is a deplorable fact that the Indian universities, as they are at present, persistently disregard the
principle enunciated by Comenius and render the university training too soft, except on paper, under the impression that the leisure which the student would thereby enjoy would enable him to make the best of the informal educative influences, which must be in the air in a well-regulated university, with the result that in our seats of learning,—specially in those that are of recent growth and have attempted to model themselves on the sanctified universities at Oxford and Cambridge, but have succeeded in imitating only their superficial characteristics,—pseudo-students and pseudo-graduates, who are an unnecessary drain on the purses of their parents and, sometimes, of mis-informed philanthropists, are not exceptions, but types.

It is puzzling to note that whereas innate individual differences were so many deformities for
Comenius in the earlier periods of the educand's development, he set store by the individual capacities and inclinations that manifested themselves towards the end of the Latin school course. Perhaps, he was under the impression that the individual characteristics were of two kinds, the desirable and the undesirable. The latter expressed themselves early in childhood; these were not to be catered for, but eliminated. On the contrary, the former did not express themselves until those capacities of the individual which he shared with all his fellows were fairly developed. The assumption, of course, has no justification, but it was responsible for Comenius's proposals for a compulsory, uniform course of instruction in the schools and a completely elective curriculum in the university. "The studies will progress with ease and success"
Comenius averred, "if each student devote his undivided energies to that subject for which he is evidently suited by nature. For some men are more suited than others to be theologians, doctors, or lawyers, just as others have a natural aptitude for, and excel in, music, poetry, or oratory. This is a matter in which we are apt to make frequent mistakes, trying to carve a statue out of every piece of wood, and disregarding the intention of nature. The result is that many enter on branches of study for which they have no aptitude, produce no good results in them, and attain to greater success in their subsidiary pursuits than in those that they have chosen."

Notwithstanding this sane recognition of individuality as the dominant factor in the choice of higher studies, the bogey of pansophia did not forsake
Comenius even in his delineation of the university. Of course, there is nothing objectionable in his suggestion that the university should make provision for the study of every branch of human knowledge, for this should be, unquestionably, a characteristic of a centre of higher learning; but it is not difficult to point out the absurdity of his recommendation that "those of quite exceptional talent should be urged to pursue all the branches of study, that there may always be some men whose knowledge is encyclopaedic."

The same pansophic standpoint was responsible for Comenius's recommendation that every class of author should be read in the university. To facilitate this he proposed that every author should be epitomised, the epitome serving a twofold purpose; it could take the place of the works of the
author in case the student had no time or inclination to read the originals, and it was also capable of being utilised as an introduction to the author and his works.

In spite of his enlightened views on education in general, Comenius was prone to make a fetish of examination as a test of meritorious work. It is, however, to his credit that with him examination was more a test of the power generated by learning than of reproductive memory. Witness his thoughts on the examination for the award of degrees: "It is most important that everything be conducted with perfect fairness, and, therefore, instead of allowing the academic degree to be won by a disputation, the following plan should be adopted. The candidate (or several at once) should be placed in
the midst. Then men of the greatest knowledge and experience should question them and do all they can to find out what progress he has made, both in theory and in practice. For example, they may examine him on the text of the Scriptures, of Hippocrates, of the Corpus Juris, etc; asking him where such and such a passage occurs, and how it agrees with some other passage? if he knows of any writer who holds a different opinion, and who that writer is? What arguments he brings to bear, and how the contradictory views may be reconciled? with other similar questions. A practical examination should then follow. Various cases of conscience, of disease, and of law should be submitted to the candidate, and he should be asked what course of action he would pursue, and why?"

The desire of Comenius to prepare
practical men rather than pedants evinced itself in his pronouncing, like Montaigne before him and Locke and Rousseau after him, that travel was necessary to give a finishing touch to the education of the leaders of men whom the university intended to produce. He, however, forbade the young to travel, “until the hot-headedness of youth has passed away, and they are sufficiently versed in the ways of the world to do so with advantage.”

Over and above the four types of educational institutions which we have discussed, Comenius conceived the foundation of a Schola Scholarum (School of Schools) or Collegium Didacticum (Didactic College) somewhere in the world. This institution was delineated to be a Solomon’s House, its function being to systematis
and extend knowledge, whereas other institutions aimed at the communication of knowledge. It was, therefore, to “bear the same relation to other schools that the stomach bears to the other members of the body; since it would be a kind of workshop, supplying blood, life, and strength to all.”
Achievements and Influence

The brief sketch of Comenius's educational work that has been given in the foregoing pages is, I believe, sufficient to give my readers a clear idea of the merits and defects of the system he advocated. Let us take a charitable view of the defects that characterised his doctrines, because they were the inevitable effects of the age in which he lived, and also because his merits outnumbered his defects. He was undoubtedly the first writer who dwelt on all the problems connected with education. He was evidently inspired by a desire to elevate education to the position of an applied science based on what was relevant to it in the existing spiritual, moral, mental, and natural sciences. His
practical standpoint and enlightened utilitarianism invested his doctrines with that meritorious worth which the speculations of most educational theorists lacked. He was quite without precedent in undertaking to organise a many-sided training for all human beings because of their very humanity, to outline a definite, self-sufficient and practicable system of elementary education, to elaborate a suitable scheme of education for the infants, to emphasise the education of girls as an absolute necessity, and to design such public schools as set at naught the differences of rank, wealth, and sex. In his scheme of education he made provision for the pupil's preparation for the world to come, at the same time equipping him for adjustment to the varying situations of life in this world. He broadened the curriculum by assigning in it suitable places to the hitherto neglected
social and physical sciences and to training in manual dexterity and virtuous conduct as well as to linguistic, metaphysical and religious instruction. He pointed out that education should be a process in conformity with nature. He subordinated linguistic instruction to content-studies, Latin to the vernacular, and grammar to the reading-book. He laid stress on object lessons, visualising devices, and learning by doing. He correlated the different educational activities and the different subjects of the course. His wise appreciation of the principle of order prompted him to recommend a procedure from the most elementary to the more advanced by slow, steady, continuous, and progressively, but imperceptibly, difficult steps in conformity with the growing powers of the pupil, and to delineate graded curricula, graded schools, and graded...
classes with graded text-books. His careful regard for the happiness of the child evinced itself in his endeavour to lighten the drudgery of learning by all possible means and to introduce into the schools a more humane treatment of the pupil.

Comenius's name, consequently, stands high on the roll of the great educators. It also occupies a respectable place in the list of those who have worked for the salvation of mankind. His ingrained philanthropy expressed itself in his careful regard for the interests of the children, the women, the poor, and the depressed. This chivalrous championship of the weak, which was an outcome of his religious training, reflects the influences which Islam exercised over Europe through the universities of Cordova and Granada and also through
the Crusades. Islam is the Magna
Charta of the weak. The ethical sys-
tem which it includes protects the rights
of women and children and enjoins ac-
tive sympathy with the poor, the orp-
haned, the care-worn and the aged. It
commands men to have due regard for
the comfort of the stranger and the
prisoner and to adopt a chivalrous atti-
tude towards the fallen enemy. It
makes adequate concessions for the sick,
the invalid, and the destitute in matters
of worship and social and religious ob-
ligations. It does not abolish the rights
of private property, but saves the poor
classes from the baneful effects of capi-
talism by insisting on adequate wages
for labour, by condemning usury, by
treating charitable deeds as means of
salvation, and by transferring super-
fluous money from the coffers of rich
men to the public exchequer in the
shape of zakat and other religious dues for the benefit of the needy. It did not abolish slavery, but bound the masters to treat their slaves as their own children, and the history of Islam records many instances in which the slaves became the sons-in-law of the kings and even inherited their masters' thrones. It makes obligatory for a Muslim ruler to be ever in pursuit of the welfare of his non-Muslim, as well as Muslim, subjects. It places on the same pedestal the prophet Mohammed (peace be on him) and his humblest follower, the Caliph and the homeless wanderer, the field marshal and the private soldier, the millionaire and the beggar as regards civic rights and personal privileges. It does not ignore the well-being of even lower animals, prohibiting the exaction of over-work from domestic beasts, prescribing careful arrangements
for their feeding and housing, and allowing hunting, not as a means of recreation, but for the sake of exterminating dangerous animals or for the purpose of procuring food when other means of sustenance are not available.

It may be said that Comenius as well as other reformed Christians who revolted against the Pope had not the slightest intention of adopting the principles of a comparatively new religion as Islam, but to revive original Christianity. I admit this and add that Christianity as it was preached by Christ (peace be on him) was nothing but Islam. The common usage which attributes the origin of Islam to the advent of Mohammad (peace be on him) has nothing but its ignorance to recommend it. Islam dates from the times of Adam and Eve (peace be on them), and the Koran tells us
quite clearly that Adam, Noah, Abraham, Isaac, Jacob, Joseph, Moses, David, Solomon, and Christ (peace be on all of them) were the representatives of Islam as well as Mohammad (peace be on him.)

That Comenius was unconsciously, but profoundly, influenced by the spirit of Islam, which was then in the air in Christendom, is evidenced by his clear sense of the unity that pervades the entire universe, spiritual and material, an obvious corollary from the Islamic conception of One God.

From the conception of the unity of the universe there emanated the most notable ideals of Comenius. His pansophic scheme, as well as his educational system, was to unite science and religion. He hoped for the union, not only of all the Christian churches, but of man-
kind in general by conversion, one after another, of the Muslims, the pagans, and the Jews through universal knowledge, universal schools, universal books, universal methods of instruction, the universal college of research, and a universal language.

In fact, Comenius was one of those who lived, worked, and suffered for mankind. To him belongs the glory of a martyr. But his glory was for himself alone. His contemporaries failed to assimilate and apply his doctrines, and the generations that came after him had no knowledge of his educational theory till the German investigators re-discovered his didactic works about the middle of the 19th century, too late to save educational reformers from the trial and error which afflicted them during the interim. As it is, we find that our modern peda-
ogy agrees in its essence with the Comenian system of education, but it has been developed by workers like Pestalozzi, Froebel, and Herbart, who discovered and formulated the principles of education independently of Comenius.

Of the numerous works of Comenius his Latin text-books alone found favour with men actually engaged in education. The Janua remained for several generations a popular text-book for beginners; the Orbis Pictus was thumbed by school boys in all the countries of Europe. But these books were used, not for a knowledge of the real world, as designed by Comenius, but for an introduction to Latin as an end in itself, but the Great Didactic and the books that amplified its different chapters, for instance, the Handbook of the Mother School, fell into oblivion.
The causes for this utter neglect of Comenius's precious works are not far to seek. In the first place, his many-sided interests were responsible for it. Had Comenius confined himself to education, he would have rendered mankind more effective service than he actually did. As it was, his dearest interests lay in religion. As a minister of an enthusiastic denomination he had to engage himself in polemical writings, which generally roused the indignation of the hostile sects. Religious toleration was not a feature of those times, and in their aversion to Comenius's religious views most men studiously abstained from considering his educational doctrines on the ground that they emanated from an unholy source. To make matters worse, Comenius was involved in the prophecies of Drabik and others, who
held out to the persecuted Moravian Brethren the hopes of a triumphant return to their fatherland. It is, perhaps, too much to accuse Comenius of want of judgment and superstitious leanings. His misfortunes appear to been have responsible for the ease with which he became a dupe of the artful imposters. When no effective support is available, even a straw is clutched with avidity. When facts fail to afford a solace for wounded hearts, even an illusion is invested with incredible significance. It was quite natural that Comenius, who had hope after hope frustrated, would rely even on the groundless or the uncertain, if it promised relief for men of his persuasion. Needless to say, the prophecies were not borne out by what actually happened. The unscrupulous Drabik himself made a formal confession that he was befooling the Protestant world, and returned to the:
fold of the Pope. The effect of this filthy business on Comenius's reputation was deplorable, for he had thrown himself with enthusiasm into the circulation and defence of the prophecies. Men came to regard him as an embodiment of superstition, and Adelung in his *History of Human Folly*, published in 1785, gave him a prominent place in the list of magicians, alchemists, and soothsayers.

Comenius's pansophic interest ultimately proved to be as injurious to his reputation as his misguided sense of the supernatural. Commendable as the idea of accumulating and co-ordinating the various branches of human knowledge was, the defective education which Comenius had received made him unfit for the enterprise. Had he contented himself by ringing the bell that would call all the wits together, he would have received nothing but praise. But his
zeal made him blind to his own defects as a scholar and he actually wrote treatises on physics, astronomy, and other subjects as contributions to pansophia. The fact is that his knowledge of natural philosophy was at once antiquated and erroneous. These works subjected him to the scorn of the following generations, and in their disdain for his philosophical and scientific compositions the critics contemptuously discarded his educational writings also.

In the second place, Comenius's want of skill as a writer accounts for the ephemeral popularity of his books. He lacked a sense of proportion and allowed his pen to run away with him. Conciseness and terseness were unknown to this voluminous writer. Needless repetitions tried the patience of his readers. Unnecessary divisions.
and subdivisions marred the continuity of his statements and had a repelling effect on those who undertook to peruse them. Comenius's lack of the aesthetic sense deprived the Great Didactic of the attractive style which made Rousseau's Emile so popular. The Great Didactic was published as a part of the folio edition of the complete educational works of Comenius, where it was swamped by works of minor importance.

In the third place, Comenius's belief in the continuity and organic development of educational theory prevented him from success in educational reform. He tried to build his new system of education on existing lines; for example, though he considered Latin to be a defective language, he made a compromise with the humanistic school and strove to make Latin a more efficient instrument of
secondary and university education. Humanism was, no doubt, too thoroughly intrenched to be easily ousted, but the Comenian system of education, which was in its basic principles of sense-realism and universal instruction contradictory to the humanists' insistence on literary training and the education of the chosen few, could gather no strength from the unnatural alliance. It was desirable that Comenius should first destroy and then reconstruct. The great fire was a necessary preliminary to the construction of London on hygienic lines. A Rousseau was needed to weed the noxious Ciceronianism before modern pedagogy could strike deep roots.

THE END
THE PROBLEMS OF THE CIVIL SERVICE
The Problems of the Civil Service

By

SIR ALBERT FLYNN, K.C.B.
First published 1968
<table>
<thead>
<tr>
<th>CONTENTS</th>
<th>PAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>THE PROBLEMS OF THE CIVIL SERVICE</td>
<td>1</td>
</tr>
<tr>
<td>THE PROBLEM OF BUREAUCRACY</td>
<td>2</td>
</tr>
<tr>
<td>THE PROBLEM OF RED TAPE</td>
<td>7</td>
</tr>
<tr>
<td>THE PROBLEM OF ROUTINE</td>
<td>12</td>
</tr>
<tr>
<td>THE PROBLEM OF PERFORMANCE</td>
<td>16</td>
</tr>
<tr>
<td>THE PROBLEM OF RESPONSIBILITY</td>
<td>21</td>
</tr>
<tr>
<td>THE PROBLEM OF PERSONNEL</td>
<td>24</td>
</tr>
<tr>
<td>THE CASTE SYSTEM</td>
<td>29</td>
</tr>
<tr>
<td>THE PROBLEM OF PUBLIC CONTROL</td>
<td>33</td>
</tr>
<tr>
<td>THE PROBLEM OF ECONOMY</td>
<td>37</td>
</tr>
<tr>
<td>THE PROBLEM OF HONESTY</td>
<td>41</td>
</tr>
<tr>
<td>THE PROBLEM OF GOVERNMENT UNDERTAKING</td>
<td>46</td>
</tr>
<tr>
<td>THE PROBLEM OF REFORM (FROM WITHIN)</td>
<td>51</td>
</tr>
<tr>
<td>THE PROBLEM OF REFORM (FROM WITHOUT)</td>
<td>55</td>
</tr>
</tbody>
</table>
THE PROBLEMS OF THE CIVIL SERVICE

WHOEVER you be who pick up this book, its problems are yours. Civil Service business is everybody's business.

The public concerns run by the Civil Service are only a collection of such parts of individuals' concerns as they pool with others under the management of the State, for their benefit and at their cost, and the results importantly affect everyone's comfort and pocket. A thoughtful historian says that the great Roman Empire fell because it had no Civil Service. The man who is only living current history is inclined to think that the great British Empire is in danger from having too much of it. He points to the swollen cost, and cries out for reductions. The civil servant points to the fresh work constantly put upon him and demands increases. Each looks at the question only from one side.

This booklet is an attempt to induce each to look at both; for I am confident that the hardest of the problems which arise can only be resolved by the co-operation of all concerned; the citizen-shareholder, the civil servant, and Parliament which is the link between the two. If I appeal to one person more than another, it is to the M.P. He has a double opportunity and a double duty, for he is in touch with both parties to the problems.
THE PROBLEM OF BUREAUCRACY

NATURALLY the things which the individual pools with the rest of his countrymen are the big things; justice within the State, defence against the world without—both administered, though not executed, by the Civil Service—the performance of certain services required by the whole nation, and the supervision in the general interest of those left to individual and municipal effort, in either case by Civil Service machinery. The persons employed (some not technically Civil Servants) in Government departments on 1st July, 1927, numbered about 300,000. These departments administer the Army and Navy, and, in many respects regulate the life of the Nation; its health, education, conditions of labour, taxation, etc.

Civil Service business is far more important than you might judge by the number of its direct performers. The limits of this booklet preclude describing it in detail; but everybody knows what private business is, so it should be sufficient to show how it differs from that. The radical difference is that public business is other people's business and private business is one's own! That makes the civil servant different from other people, as well as different to them.

"Well, I don't see it," a reader may say. "Granted that he's doing a different business, why need he do it differently from other people? Why does he want all these confounded forms and formalities? Why need he be so red-tapey and hidebound? Why doesn't he give me a reason instead of quoting a regulation? Why can't he do things in a sensible way, as I would if I were in his place?" My friend, you wouldn't, and you couldn't, and I'll try to show you why.
In the work itself there are two very important differences; its magnitude, and its complexity. If an official is low down in the official hierarchy, his difficulties are due mainly to the complex regulations under which he acts. (Over-regulated duty alters the man, remember.) As he rises higher, they are due to the magnitude and complexity of the subject matter. A private business, or profession deals with a special "line" of articles, operations or services. The things to be understood and the principles to be applied are relatively few. A public department is usually constituted to achieve a certain end, and has to deal with all the great variety of things and sciences subserving that end.

Compare the work of a shipping firm with that of the Admiralty, which has to deal not only with ships, but armaments, defences, buildings, dockyards and manufacturing establishments, food, clothing, engineering, medicine, law and many other things. Those at its head have to focus big questions. So they need a wide vision and a big grasp. You would find it far easier to be head of the shipping company than of the Admiralty. Thousands of men are equal to the first post, against tens equal to the second.

A Minister of State once said to me, "What a lot you fellows in the Civil Service have to know! Of course you have experts to consult; but what puzzles me, is how you find out which experts come in." It is a still bigger difficulty to judge how much weight should be attached to the various expert considerations, when they are on opposite scales! It is not sufficient for the higher official to have a grasp of the work of his own department. It is only one of a collection of businesses with a common end—the benefit of the country. Some departments are very closely connected, e.g. the Army,
the Navy and the Air Force. Most are connected to some extent. Every year, at estimate time, there has to be a balancing up of the needs of one department against the others. There is never enough money for all that they desire. At any time the decision of a small matter in one department may prejudice a big similar question in another. They need to be in touch.

If you are interested in a private business—I hope, if you are, it is a prosperous one—you have a clear criterion of success: the profit achieved. But the State business does not work to the test of profit or loss; or to any definite test at all.

Let me illustrate the directors' difficulties from a War Office "Directors' Meeting," years ago. A since-famous military colleague twitted me. "Last year your Audit Staff in South Africa cost £9,000 and only disallowed a hundred." I retorted: "Last year the Army cost twenty millions and killed nobody!" "We could save a quarter of a million of it by giving up certain Artillery," observed a finance official. "But then we shouldn't have the Artillery!" said a soldier. "There's nothing certain about public work," said another. "We have to strike a haphazard mean between our fears and our finances." "There's one certainty about it," grumbled yet another. "Whatever you do is wrong!"

The better the service the less the satisfaction very often. As individuals we would prefer an inefficient tax-collector! Instead of a small number of large shareholders, who are satisfied if they get a good dividend, and interfere very little with the business if they receive it, there are millions of small shareholders, called upon to pay instead of receiving, and all wanting a reduction of payment in their particular case. Here is a verbatim account of an interview with an M.P., who came to me
years ago, when I was head of the War Office Pension Branch, asking whether we could not do something for a certain ex-soldier.

"He only served for ten years," I protested, "and he was discharged with an indifferent character. You can't expect the State to give a pension for that."

"But Mr. X., who employed him for eleven years, gives him an exemplary character," urged the M.P. "Hadn't you better ask Mr. X. to pension him?" I suggested. "He seems to have served him better than he served the Army."

"Ah! Ye-es! You're quite right, of course, but . . . He's a constituent of mine, you see. Can't you write me something to show to the fellow to choke him off?"

The clerk whom I told to draft the letter quoted all the regulations which allowed pensions and pointed out that Private J. came under none of them. I composed and sent a different letter, saying that Private J.'s service was not such, either in quantity or quality, as earned a pension. I thought I'd be a plain, sensible businessman—like you!—and give a reason. A chief seeing it some time later said: "Flynn, you'll never make an official. The only safe road is behind the regulations."

Such incidents are inevitable under a system of electoral control. I dare say, in the M.P.'s place, I myself might have acted as he did. But it handicaps State business. I ask you to note the remark of my superior; a competent, shrewd man of the true official type. The civil servant can and does "dig himself in," and it is very hard to bomb him out into the open. This is bad for business, too.

Public business is not headed like private business, by experts, but by parliamentary chiefs, not elected for any
consideration bearing upon their job, and selected for it upon political considerations. Many are very able men and they bring fresh air and savoir faire into the departments; but they often leave before they really understand them. In theory they control the "policy" of the office, relying upon the permanent officials for its "business"; but the policy governing the bulk of the work of a department is the eternal and internal rules and customs under which it works. Now and then some outside upheaval compels an important change; but, in general, instead of the Minister imposing policy upon the department, the department imposes precedent upon the Minister. Consequently one party in power does much the same as another. State business always has been, is, and always will be, Bureaucracy.

So we have these important differences of Civil Service business from a private business:

(1) It is business done for the benefit of others instead of oneself.

(2) It is larger and more complex.

(3) It does not work to a profit and loss account, or to any test which everybody must accept.

(4) It is peculiarly subject to outside interference and criticism in individual matters, as the "shareholder" sees plainly his share of the cost, and cannot evaluate the benefit that he receives from the State. On the other hand, the civil servant can, and does, shelter himself behind "the regulations of the State," which makes the criticism in general of little effect.

(5) It has changing, non-expert Parliamentary heads, themselves subject to a changeable electorate, who will not judge them by their official work, but by some party or popular cry of the moment.

(6) Hence the executive power, most of the adminis-
trative power, and a deal of the policy are in the hands of a Bureaucracy.

In this country, fortunately, Bureaucracy is animated by a deal of public spirit, considerably enlightened by public opinion, and subject to a certain amount of public control through Parliament. It is not necessary to bomb the civil servant out of his position; only to induce the outsider to bomb less, and the insider to reduce his defences; to ally themselves and make a proper delimitation of their respective spheres.

I was long concerned with the insider's problems, so I will approach the matter from his side; consider the necessity for the defences of red-tape and routine, how the civil servant performs his responsible duty behind them, how he is chosen for the duty, and treated while doing it, how far he is or should be controlled from outside, how far economy rests with his shareholders, or with him; the steps which he takes to enforce honesty, the checks upon his own, and whether work is better given to him, or left to outsiders; and I will end with suggestions of the reforms which I believe could be made in public business, whether the faults arise within the Civil Service or without.

THE PROBLEM OF RED TAPE

ALL business which you do for others must be conducted and recorded with a certain amount of formality, because you must be prepared to account to them for your actions. Similarly, your staff must be prepared to account to you. The larger the business, the further the details are from the immediate eye of the chief; so the more he must lay down rules for its performance,
and the more he must require detailed record. He can only supervise the large transactions; but the small transactions are important in bulk. So he must be able to review their results, and, when necessity arises, even the individual cases.

State business, being the largest business and being done for millions of others always likely to question some particular transaction, especially requires rules and regulations, and complicated records and accounts. The outsider mistakes a difference of quantity for one of quality, labels the service formalities Red Tape, and regards them as accumulations of the original sin of generations of civil servants.

I grant that the nature of a civil servant's calling tends to render him fussier and more regulation-ridden than the average person, and that this does not make for humanity. The bigger the business the further away the performer is from the human pawns with whom regulations deal. But I doubt if the civil servant's red-tapeyness is so great in proportion to its justification as that of many large private businesses. I am sure it is not so great as that of most municipal corporations. These rarely even recognize that they are bound in red tape or try to avoid it.

Of late years many civil servants—perhaps stung by the abusive term "red-tape," and certainly influenced by the human sympathies of some of their Parliamentary chiefs—have recognized it, and have made a great advance in the humanity of public work; tried to get nearer to "the fellow at the other end of the letter." But red tape clings like The Old Man of the Sea, and not entirely without cause.

The State cannot legislate separately for the case of every individual. It must deal with people by general
rules. The most important are put in the form of laws. Laws are the most red-tapey, complicated, unfeeling things in the world. They bind the civil servant equally with the public, except in so far as they leave him a power of making "by-laws" in the departmental regulations in which they are commonly expressed for daily use. In some cases a very wide power is given to the Service by law, constitution, or custom, to regulate certain matters, and it is, of course, responsible in such cases.

To the person affected, law-made regulations and office-made regulations are the same—all complicated, hard to understand, often unfeeling towards his individual troubles, and difficult to get altered; but, in fact, departmental rules are alterable much more readily than legal rules, and, in cases where they inflict substantial injustice nowadays they usually are altered. Please note that the red-tapey civil servant is quicker to remedy injustice than Parliament, which you help to elect.

Regulations usually start from certain general rules to which most people would assent, with such exceptions as their framers recognize; but when they are put into force it is always found that there are exceptional cases which have been overlooked. So far as it is in the official's power, the regulation should be put right, if the defect is of any real importance. In so far as the ill-dealing rule is based upon the law, the official has no power to alter it.

I, as a private individual, was recently told something like this by an official, and I have often had to say much the same in my official capacity. "Unfortunately your claim is barred by a certain proviso in a certain Act. The proviso was aimed at barring a totally different class of case, and, if it were a departmental regulation, I should certainly propose a revised form of words which would not bar you; but I am afraid there is
no prospect of early legislation.” The “red tape” was not in the official, but in the law. This is often the case.

More and more exceptions are found, as time goes on, and possibly conditions alter, and new classes of cases arise which were not in the minds of those who made the law or the regulation. The conscientious—even if red-tapey—official, amends and amends until the regulation becomes a mass of rules, exceptions, and exceptions to exceptions; which shows one of three things:

1. The best expression has not been found; or
2. The main principles are not entirely right; or
3. The phase of human life regulated is so complex as to defy simple regulations, without injustice to individuals.

I have been head of the Regulation Branch of a very large Public Office. I always aimed at simple, straightforward regulations, but I frequently could not make them. I hope I was fairly successful in wrestling with (1), and in persuading “the powers” to wrestle with (2), but (3) often downed me!

In the old days the custom was to put the law or regulation first and the individual a bad second, i.e. simplicity was obtained at the expense of occasional hardship. “Hard cases make good law,” a famous judge said, looking at the matter from the point of view of administration. Nowadays the point of view has so altered, that when I quote the dictum, people always say, “You mean ‘bad law.’”

One of the great human changes which has taken place in my time is the growth of the desire to give everybody his due—the true socialism, though those who want to give him other people’s are apt to appropriate the name. But it cannot be done in every small matter without a larger Civil Service than is worth while, or
giving civil servants a freer hand. With their hands tied, they take the safe road behind the parapet of regulations; and they are tempted to build it higher and higher.

I said “civil servants”; but I might have said “public servants,” and I choose a military illustration of over-regulation forced upon the Service. Many years ago a recruit, going to musketry practice in inclement weather without an overcoat, caught a cold, which turned to pneumonia and killed the poor lad. Possibly his particular commanders needed telling to be more careful of the thoughtless young fellows in their charge; but this duty was well understood, and did not require detailing under all the small occasions of a soldier’s everyday life. However, there were outside complaints about the case; and the outcome was a paragraph (long since removed) in “The King’s Regulations for the Army,” saying that the officer taking recruits to musketry practice in wet or windy weather was to see that they took and put on their greatcoats, turned up the collars and buttoned them!

This defunct regulation shows red tape naked. It sees what is right, but sees it out of proportion. People often do in outside life. The other day a child was asked what were the most important things that he was taught at school. He said “to fear God, honour my parents, and never litter the park!” His teachers had seen the excellent, but minor virtue of tidiness so large that it overshadowed the Eleventh Commandment. Trifles will seem worth too much to the civil servant so long as the public make too much of them.

I recognize the civil servant’s peculiar tendency to red tape—have fought against the tendency, in myself as well as in others, during nearly forty years of public service—but he is much what you would be if you were doing his job, and serving under his conditions. Red tape is merely
a general human complaint to which he is particularly exposed. It can only be cured by the general growth of common sense, which includes a sense of proportion, and the bearing of little “random wrongs” without a fuss.

THE PROBLEM OF ROUTINE

THOSE characteristics of the Civil Service which, seen from without, are called “red tape,” seen from within are “routine” (of work and of performance).

Routine properly used is a great economiser of human effort, but it is a great spendthrift when simple matters are put unnecessarily through cumbersome machinery; and it is a servant which tends to become the master. It has done so in the Civil Service, in matters of record and statistics, in trying to fit everything into forms, and to some extent (with much more excuse) in accounting.

The roots of over-routine lie in those peculiar conditions of the Service which I have mentioned, and in the frame of mind which they induce in the official. He is liable to be called upon at any moment for information. So he keeps elaborate records and accounts of what passes through his hands, and calls for elaborate return of what does not and records them. Some of the information is of no practical use, he will own; “but that won’t stop somebody asking for it.” Most of the information is of possible use, but not sufficient to be worth the cost of compilation. A great deal never is called for, or so rarely and in such small quantities that it would be more economical of labour to obtain it if and when asked for.

But there are people who love statistics for statistics’ sake outside as well as inside the Service; and none
more than Members of Parliament, for whom the Civil Service caters. I remember years ago a "question" as to the relative cost of feeding English and Irish hens, and their relative output of eggs. The first remedy for unnecessary records and over-minute accounting is that the Minister at the Head of a Department should answer many more "questions" in such terms as the following:

"This information is not readily obtainable from the records which we find it necessary and sufficient to keep for the work of the office, and, in view of the labour involved, I hesitate to order its compilation unless it is shown that it would serve some practical object of sufficient importance to justify the labour."

The test of "is it worth while?" would dispose of many outside demands for statistics; but the civil servant himself does not apply it nearly sufficiently. He loves records and returns. Sometimes he has the same thing reported in several different returns, and even though the information is already in the office; and how the officials who receive returns fight to retain them! I remember being on a Committee to reduce forms and returns. (We did, but many were gradually reintroduced!) An eminent officer with a sense of humour, was in the chair. Here is a bit of the evidence:

Chairman: "I see that in this periodical return the first point is 'Aspect of the Hospital.'"

Witness: "The aspect is most important, sir, for many medical reasons."

Chairman: "And so this particular return, for the month of July, starts, 'Aspect of Hospital, Southern.'"

Witness: "Yes, sir."

Chairman: "And what was it in June?"

It is not sufficient that returns should be unduplicated,
and confined to varying matters of some importance. They should not be required unless sufficient practical use is made of them. I have known of returns so laborious that they kept a couple of clerks going to record them and sum up the results—and, of course, many more in the aggregate to keep up the information and render them—which, during several years, had never been referred to.

The saving of staff which might be achieved by winnowing out unnecessary returns, etc., is not enormous, or of very highly-paid officials, but I know of no saving which could be made with less drawback. "It only takes a few hours a day of a man's time," record-lovers say. True; but presently there comes a demand for another clerk, because a number of part-time duties have been added. Conversely, "Add a room to an office," a shrewd chief of mine used to say, "and a clerk will be put in. Add a clerk and he'll soon create work for himself." The rigid criticism of the necessity of work is the way to begin the reduction of clerks; that will lead to the reduction of rooms; and in the end it might reduce a department!

You must have enough routine to keep things in order and convenient to refer to. In your private correspondence, you can tear up most answered letters. In an office you cannot. In a small office you may trust to your memory and an alphabetical file, and a carbon copy of your answer. In a large office you must have a system of registration, indexing, etc. The use of stereotyped forms for correspondence, accounting, etc., is sensible, labour-saving routine. Besides economising time it concentrates attention on the important points, and saves additional correspondence upon "queries."

On the other hand, it tends to produce a formal frame
of mind in those dealing with the matter; a tendency to use a form for everything, even if it is altered in MS. until it is scarcely recognizable. Sometimes it is not altered enough. "You are requested to state the sex of the child at the date of the journey," wrote a clerk of mine. He had only altered "age" to "sex."

A very careful watch is required that the certification of forms does not become a formality. I will give an instance—it is a fact, not a jest—showing that it may. In order that defence plans may not get into improper hands, it is usual to require officers given revised plans to certify that they have destroyed the old ones. A certain officer wrote that he could not find his old plan, and asked to be furnished with a copy for destruction! To such a frame of mind routine reduces its slaves.

Many of the above considerations apply to the routine of accounting; but I ask you to note a point peculiar to it; that it is hard to avoid some duplication, owing to the variety of information required from the accounts. If you cannot endure a little unavoidable technicality, you might pass on to the next heading.

There are two ways of looking at expenditure; as what it is in itself—the "subjective" way—or as incurred for a certain purpose—the "objective" way: e.g. you may charge a purchase of food to the provision vote, and afterwards account for the food as stores; or you may value it out all through its career, and ultimately charge the unit which consumes it, or even each individual, so as to work up to an account of the cost of particular services in more or less detail.

The former way is much the simpler for the executive and for accounting. The latter is frequently desired by the statistically-minded, and serves many purposes of administration; e.g. if it is proposed to abolish or add
one of a number of services, the cost of each is an important factor of decision. But it is very laborious, and the cost of services can usually be obtained fairly easily by calculation. So, personally, I am in favour of the subjective method. "Cost accounting" is "Costly accounting." In my experience the results repay only a very small fraction of the cost. I cannot argue out this question here. What is important for present purposes is that departments should, to the utmost extent possible, make the best of whichever method is chosen, and avoid the expensive labour of both.

Such is the practical problem of the routine of public work itself. I shall deal with the routine of its performance under the next head; and I shall suggest, when I come to Reform, that both problems are susceptible of better solution.

THE PROBLEM OF PERFORMANCE

I WILL begin by a confession of faith. I believe that the civil servant performs his work with great diligence, honesty and conscientiousness, and produces the correct result more often than it is produced in any other business. Think of the frequent mistakes made in the transactions of daily life; the orders wrongly executed, the promises forgotten, the requests overlooked, the annoying misunderstandings, the letter that does not answer your question, and the overcharges. These things occur very rarely when you deal with the Civil Service; and, in general, a civil servant will point out an error just as readily in your favour as against you.

I remember, with pride in my old profession, how, during the war, a depleted Civil Service carried on enormously increased work, by training and supervising
temporary assistants, many of whom had little qualification for the work except their zeal, and how many civil servants rose to bigger duty than anyone had supposed them capable of performing. Men who had been units became commanders of hundreds, and sallied outside the defences of red tape to get things done. During the war and the after-settlement—which was worse for many offices—the Civil Service never broke down, though many civil servants did. Some died through overwork and doing jobs that strained their capacity harder than it could stand for long. The Civil Service is not only honest and efficient. It is zealous.

In these remarks I make no distinction between male and female civil servants; but I am bound to say that, while I believe the female staff to be more diligent and conscientious than the male, and a few individuals to be fit for very high responsibility, I have not found them, as a sex, capable of as great output of clerical work (not even in proportion to their lower pay), or so successful in taking charge, as men. No doubt this is largely due to women not having been so well trained for business as men; but I think they will always be subject to two discounts for public work (counterbalanced by their superiority in private life); differences of nature; and the fact that they rarely look upon "business" as their permanent life career.

I should however say that my view is based mainly upon the comparison of temporary war employees, and that I could not overpraise the devotion with which the female war staff performed duties for which they had not been brought up. The trained women civil servants (from the Post Office) who came under me approached nearer to the male standard.

While I hold that the Service is highly efficient in
producing good gross result, I fear that the net result—value of result less cost of achieving it—is not so good as it should be, and that delay often discounts it. He gives half who gives slowly. Civil Service work is passed through too many hands in order to secure accuracy. This is the main cause of the swollen and expensive staff of the Service. Sufficient accuracy—accuracy somewhat above the ordinary commercial level—and greater promptness could be obtained after very considerably reducing the staff.

The popular idea is that the expensiveness and slowness of the Service are due to its meticulous requirements and formalities; which throw extra work upon the person with whom the civil servant deals, as well as upon himself, be it remembered. They are due much more to the fact that things are considered and reconsidered over and over again. Some questions involving no great principle are considered by a dozen people before you get that nasty letter, saying that somebody is directed by a more important somebody else (who probably has not seen your application) to express regret that your request cannot be granted; reason usually unstated. If the matter was a fairly simple one it was probably dealt with like this:

A. considered your request and wrote a "minute" saying that you asked for something barred by a certain regulation, or by such and such precedents (annexed and relevant portions "tabbed").

B. his immediate superior, considered the matter, and signed the minute.

C. the chief of the Branch, considered the matter, and approved the refusal.

A. drafted a letter to carry out the decision.

B. altered a few words and "approved."
The letter was typed, checked by A., initialled by B., signed by C., sent, filed, and a copy placed in the "record."

All that was necessary was that A. should dictate the answer to a shorthand-typist and send it to you, keeping a copy for record. Your case, though new to you, was one of hundreds to him, and he did not need the precedents; drew them only to place his justification upon record.

If the case was unusual, C. would write a minute "putting it up" to a higher authority, D., for decision; and if it could be looked at from several points of view, either C. or D. would refer it to other branches, in each of which a lower clerk would deal with it first, and then his superiors as before. If it were really a difficult matter to decide, perhaps twenty people would have considered it before the belated and disappointing letter was sent to you.

All this discussion will make the decision more certain to be correct; but in 99 per cent. of the cases it will be the same if it is left to A.; and the cost of the time of those considering the matter may well be much greater than the amount involved. As a reasonable man, you would be satisfied with one trained umpire. Besides, you can appeal and will, if the decision affects you injuriously and importantly. Higher consideration could wait till then. If the case were anyone else's you would say: "All this consideration is waste of time. Somebody must settle things, old chap, and we have to take the rough with the smooth, you know."

To transfer my concrete example into general terms:

(a) Civil Service work is, even primarily, often dealt with by a higher grade of official than similar private business.

(b) It is usually submitted to higher authority in the
branch than is necessary; considered by more people than it deserves.

c) It is frequently considered by more "branches" than is necessary. When a simple matter touches two branches they generally know each other's work quite well, and could trust each other to refer only the few doubtful cases. We don't want so much "Any remarks?" (written by one clerk and signed by another probably) answered by "No remarks" (do.).

d) When difficult questions reach the heads there is too much tendency to refer them to Advisory Committees, upon whose advisory reports the whole process of written discussion is started over again. What is wanted, when a Committee is needed at all, is a deciding Committee; but round table conferences of all concerned could settle most matters without Committees.

e) There is a great tendency to set up extra checks to "pick up" errors, instead of stopping them by disciplinary action; e.g. a system is devised for finding lost papers, instead of taking steps to preclude the loss.

f) The work is done far too much by long written minutes. This is the case more than always appears to Committees on the Civil Service. I have known departments which prided themselves that only one minute passes from sub-department to sub-department. True; but they wrote the Branch minutes and kept them in a separate file, often copying also the main file into that! In a department which puts its minutes into the open I have often seen a hundred minutes (some individuals being referred to several times) on one matter.

The habit of dealing with matters by written argument breeds a taste for essay-writing. An officer whom I have already quoted once told me that he saw only one remedy. "I'd sentence a lot of your chaps and mine to

Of course the same treatment might be applied to authors! But I have laboured this point of multiplied and elaborated procedure, because I believe that its cure would reduce the cost of the Civil Service more than any other single reform. The reduplication may not be so bad in all departments; but I have served in three, and seen the inside of many others.

I express my opinion moderately when I say that I believe that reasonable and practicable reform in this matter would save hundreds of thousands a year; and that it would greatly improve the Service by fixing responsibility and training people to take it. Once they get into the habit of doing that, civil servants will be bored with so much "bolstering up," and want to settle things themselves, and cut down a lot of the routine. The fear of responsibility is the root of the Committee habit.

THE PROBLEM OF RESPONSIBILITY

The multiplicated consideration of official matters obviously diminishes individual responsibility, and the less an individual is accustomed to responsibility the more he shrinks from taking it. There are some heads of branches—yes, and heads over many branches—who cannot deal with anything without having some of their subordinates in to advise them. "You've 14 clerks," I grumbled to the competent second of a branch. "Call it 13, chief," he said. "One's always in with Z." (the
branch's head). The Z. type of man not only wastes the time of his own staff; he always finds reason for referring to other branches. The system breeds that type of man; and, alas, promotes him.

I have had to face the question of responsibility more than most civil servants. I have served for years in the War Office, where the division of responsibility between military and civil is a burning question. I was sent upon a number of missions abroad, and if I had not "chanced my arms" sometimes I should have lost a good deal of money to the State. Even then I was attacked for not taking the responsibility of inquiring into matters which my chiefs had ordered me to leave alone.

When the Great War came, some big things would have gone badly if all officials had been "sticky," and none would ever exceed their powers. I was one of the very few Accounting Officers who ever had to exercise his peculiar and responsible power of calling his Minister to account. All these things have made me think a deal about the question of responsibility; and I say advisedly that the Service would be more efficient if individuals were given more discretion, and expected to assume more responsibility; and if branches, and even services, were left to decide, without "reference," matters in which other branches were only concerned in a minor degree.

The result would usually be the same. For some years, a delightful military colleague and I had to deal from opposite sides with responsibility in the matter of losses, damages, etc. We did some good-humoured, heavy-weight boxing over them for a time, but I soon learnt the military side from him, and he soon learnt what he did not know already about finance from me. After that, it did not make much difference which of us decided the questions; and sometimes the one to whom
a small matter came first settled it off-hand, and took the risk of the other objecting. If this were done more, and as a recognized and proper thing, the performance of public work would be expedited and cheapened; and we could have real decentralization. (It is only the same question in another form, that of delegation of responsibility.)

At present the practice is not recognized. The watertight compartment holds the field. When I was Director of Army Accounts, one of my Local Auditors referred to me a case, in which the military objected to his charging a young soldier for a bayonet, which he had broken through slipping when rushing downstairs three or four steps at the time. I said "Drop it." A member of the Public Accounts Committee asked me why I did not make the soldier pay for public loss due to his carelessness.

"Because," I said, "the young soldier we want—the sort who'll rush over the top—is the kind of young fellow who will run downstairs three or four at the time."

The member—a wise man whose opinion I greatly esteem, let me say—shook his head at me.

"That is a very proper view for a soldier to hold," he said, "but I ask you to consider whether it is a very proper one for a Financial Officer."

People will not assume responsibility sufficiently unless their superiors and critics forgive them for a reasonable amount of human error in exercising it; and errors which must be penalized are dealt with more satisfactorily by disciplinary action than by pecuniary penalty. A man can wipe out a "caution" or a "reprimand" by subsequent merit, but he never recovers a fine!

Let me give you a concrete example of the effect of monetary penalty. I was worried by a number of sur-
pluses in certain army store accounts, and I talked to a wise old quartermaster about them. "From my accounting point of view, W.," I said, "surpluses are worse than deficiencies. There are natural causes which lead to losses, and these are usually explained. Surpluses aren't natural. And don't you see the danger of them? If an accountant has more stores than his book shows, he has opportunity and temptation to illicit disposal. Why, upon stocktaking, do we find so many unexplained surpluses?" "Well, sir," said the old quartermaster, "you can't make a man pay for a surplus; and it comes in handy to cover a deficiency!"

Effective decentralization is only possible by delegating responsibility. The present tendency is to exercise so much headquarter supervision over what is professedly left to local control that extra work (more duplicate performance!) and staff outweigh the benefits and convenience of current performance upon the spot.

THE PROBLEM OF PERSONNEL

THE Civil Service may be divided, like a private business, into "The Office" and "The Works"; but "The Works" are of two kinds; those dealing with necessarily public work; e.g. the Post Office Executive; and those in which work akin to that of commercial undertakings is performed; e.g. a Government factory. In the latter case the employees, with a few exceptions, come under the general conditions of labour. In the former case, they are often technically Civil Servants, permanent while they behave themselves, and pensionable. They are as important to public business as the
soldiers who won the battle of Waterloo were to Wellington; and a book might be written on the Problems of the Under Civil Servants; but they would be problems of labour rather than of the Civil Service. This booklet is concerned with "The Office"; the permanent civil servants in the headquarter departments of State, whom people in general speak of as "the Civil Service."

The difference between such civil servants and business employees which strikes everyone is that, whereas the business employee serves upon short notice, and is on the look out for advancement by change of firm, sometimes to one in a different line of business, the civil servant serves under a life contract, and rarely changes even his department. Security of employment removes one of the incentives to zealous performance—the fear of losing one's job—and lack of change leads toward narrowness, though a big public department can offer a considerable variety of work within itself; but public duty is difficult and complicated. The junior official needs long training and the senior official long experience. Continuity cannot be imposed by changing Parliamentary heads. It must be supplied from the staff below them.

Working for the good of others, to an unprovable result, is very different from working for the benefit of oneself, or one's firm, to a provable profit or loss. It requires and breeds a very different view of business; a different motive for its unresting, sturdy performance—a professional zeal and conscience and esprit de corps. These are all reasons for permanence; and there is the practical reason that good men could not afford to enter the Civil Service upon temporary terms, because it does not qualify them for other business.

A few men of all-round ability "go outside" from time to time—as occasionally a doctor becomes an author, etc.
—but in general they do not, and would rarely be successful if they did. Similarly the man trained outside is seldom suitable for the Service. During the War I had a considerable experience of outsiders drafted temporarily into the Civil Service, and, in general, I did not find them a success, though individuals made excellent officials.

I will give you the judgment of a successful businessman, I believe a millionaire, upon the converse side. We were discussing (years ago) my possibly leaving the Service for his business, and he said something like this:

"Remember that outside business is quite different from public business. The morality is different—not necessarily less, but different. The performer is different. The main question for you is, can you change the man? If you remain a Civil Servant you will be no use to me."

I decided "once a Civil Servant always a Civil Servant."

The Service, although essentially a business, should be staffed, like a profession, by men who make it their life career. So it is necessary that men well qualified for the honourable profession should be obtained, and that the profession should make the best use of them; reward merit, and train the best men for the important posts.

I think the arrangements for obtaining good material are reasonably satisfactory. Until a little while before my time, civil servants were appointed by patronage, subject to a simple examination, qualifying or competitive between a few "nominated" candidates. A few brilliant officials were obtained under this system, including some of the best I have ever known, and a number of men who did their work conscientiously—some very efficiently—but the majority of the patronage staff left in my time were merely pensioners upon the public bounty.

We later officials have not yet escaped the slur which they cast upon the civil servant, who "played
(observe my past tense) from ten to four, like the fountains in Trafalgar Square.” I heard one, dealing with an account transaction, ask his chief, “I say, G. Would you prefer this debited or credited?” I remember one coming in at 11.55 (we were 11 to 5) and saying he would have a day’s leave. He came back at 4.45 and said he’d changed his mind! Quite a number did very little work; filled up the day by reading the newspaper, writing outside articles, etc.

It is proper that everyone who desires should have an equal chance, according to his qualifications, of entering the public service. The test now adopted is a competitive, literary “open” examination. For the performance of purely clerical work it is a good test; but it does not necessarily prove fitness for posts of an administrative nature. For these, character and personality are all-important; but attempts to estimate them usually fail. Different schoolmasters “mark” them with very different generosity, and interviewing boards are generally impressed more by the superficial than the solid youth.

I think the upper examinations could include tests which would show the likelihood of the candidate becoming a good official, better than tests in academic subjects, which are not in themselves of much use in the Service, although they test the candidate’s capacity. Especially I would set some subject to be “mugged up” in an hour or two, followed by an oral examination upon it. The capacity to “get up” subjects quickly is the most important “workly” qualification of a higher civil servant. He needs it every day.

Examination by a trial for a period, of candidates who are prima facie likely, upon actual official work, is my ideal, but it would involve too long a delay of the youths’ career, too much disturbance of official work, and too
much expense. When the test of actual performance is available, however, it is worse than red tape to require Civil Service examination; e.g. when recruiting the permanent service from a well-tried temporary staff, as was done after the War. It often happened that the worse official was selected through being the better scholar.

There are different grades of official work, and the age at which boys have to "go out" varies. For both reasons people are entered into the Service in different ranks, at different ages and by different examinations. Those who run the Service aim at tapping all classes:—

The ordinary schoolboy for such work as he would go to in private life; as a book-keeper or routine clerk.

The public (or upper) schoolboy for superior work of this kind; the Executive.

The University man for the superior professional work; the Administrative.

(Most of the work has, in fact, an element of each kind, though in different proportions.)

If the Service were recruited young, and every man had to work his way up—the ideal for a democratic country—I doubt if sufficient men ultimately fit for the administrative places would be obtained. Anyhow, some of the very best material would be lost to the Service. Moreover, under a one-class system, men would often get into positions of responsibility too late in life, and sometimes with outlook limited by the long performance of routine. So I have to acquiesce in a class system of entry, provided that, once the men are in the Service, they are dealt with according to the merit which they show there, not according to their merit as schoolboys,
or the age at which they left school to go out into the world.

I will deal separately with the class barriers within the Service. Apart from this I think that entrants are reasonably well-trained nowadays, and fairly treated as regards promotion within their class, but that promotion is still governed rather too much by "seniority if competent," and the benefit of the doubt about competence given too much to the man. The only safe rule for promotion is "When in doubt, don't!" In every office that I have seen the inside of—a good many—I have found "stickit officials"; wooden men for whom some job where they cannot do much harm is found. It is an expensive remedy; kind to the man promoted, but unkind to the more capable man who is not, and unfair to the taxpayer.

The question of remuneration is a difficult one, and would fill a whole booklet. My individual opinion is that the annual increment system carries men in the lower classes to higher figures than the work is worth; that the indifferent man is much better off, and the average man rather better off than in private life, but that the really good man is worse off. I never recommend the Civil Service to an exceptionally competent youth; but, if he would have to enter in a lower class, this negative advice is mainly on account of the class barriers.

THE CASTE SYSTEM

A SYSTEM of entry in different classes can only be worked efficiently upon two conditions.

(1) Those entered for the higher administrative work
must be removed if they do not prove fitted for it. The work is too important to entrust to "duffers." Promotion must be by rigid selection, and some preference must be given to those likely to be fit for further promotion.

(2) Those who enter in the lower classes must be given every opportunity of showing their fitness for a higher class. When they show it, they should be preferred to fresh candidates from outside, and thereafter should be judged on their official merits for further promotion.

I say emphatically and with a full sense of responsibility that, in my experience, these conditions, though admitted in theory, are most insufficiently observed in practice. The different classes of the Civil Service are treated as "castes," determined by a man's entrance examination, and special promotion into the upper caste is very rare.

The constant agitation of the lower classes has led to assigning more valuable posts to them, and even to recognizing that certain offices of an "executive" character shall be mainly officered by the intermediate or "executive" class; but in the most important of the offices, and for the most important posts of others, the caste system remains with very rare exceptions in the way of special promotion. The upper caste has retired farther up the hills, but it still does not admit the caste of the plains.

Only an old civil servant, himself of the upper caste—no one else is admitted to the inner minds of the chiefs—knows how firmly the Heads of Departments regard the ruling class as the peculiar property of the resident Universities. They are honest enough and right enough in holding that governance needs education and culture;
but they forget that men can acquire them (as the professions do) from their life work as well as from after-school scholastic training.

I, myself, had not the advantage of going to a resident University. I had to go out too young. But, being lucky in my teachers and in possessing the "examination knack," I managed, when just twenty, to succeed in competing with university men of twenty-two to twenty-three, and entered the Civil Service by the upper door. (Later the minimum age was raised to twenty-two as likely to keep out non-university-men.) My then chiefs (themselves not university men) showed no prejudice against me and my university compeers very little. I mention these things to show how far I am liable to be prejudiced. Certainly my advocacy of promotion from the ranks did not arise from self-interest, or any personal grievance. It began because I was taught my job by men of the lower class under me; and I recognized that some of them could have filled my chair. As time went on, this feeling was strengthened, but I came to the opinion that the ranks did not then contain sufficient men to fill all the higher chairs competently.

In an article which I wrote many years ago I confidently estimated that half the upper posts could be satisfactorily filled by promotion from the ranks. After going through my career, my less confident estimate was "considerably more than half," but that the half could not be exceeded without a risk of finding too few men equal to the topmost posts.

The recent raising of the status of the intermediate class, and the increase contemplated in it, make me suspect that, in future, enough men to fill the administrative class might be obtained from it, so that the Civil Service would be recruited, like the professions, by youths who
make their hospital, office, etc., their University; but it would then cease to tap a source from which some brilliant officials have been obtained. When the university man has the right qualities for the service, he is particularly suited to it.

The desire to see justice done to my junior comrades was what first made me an advocate of their claims; but, as I rose in command, I had to face the question from the other side, and I found that their promotion was needed for the good of the Service; that scholarship was an unsure test of administrative capacity; that a number of the higher-educational entrants had it not, as a matter of fact; and that a number of the lower educational men had such capacity.

As Director of Army Accounts, forming a new organization, I had the opportunity of getting a number of the latter promoted, and had under me, in co-equal positions, some requiring much administrative tact, men entered in both ways. I had a further opportunity of rejudging the question when the war compelled many temporary advancements to higher work. And I say advisedly and earnestly that the proportion of the men entered by the upper door who do not prove fit for administrative work is considerable; that the promotion of these, faute de mieux, to higher posts seriously discounts the efficiency of the Service; and that the lower classes contain sufficient men to satisfactorily replace them.

The average "1st division man" succeeds upon administrative far more often than the average man of a lower grade would; but the selected lower-grade man who proves his higher capacity against the odds is as good as the best of the "1st division," in force of character, power of command, and width of outlook; and he generally knows the office and its real business better
than the higher-class man, who usually spends much of his junior time private-secretarying—the likeliest road to preferment but a one-sided training!

It is argued that, if the university man had to risk the competition of those who entered by the lower door, he would not come into the Service. I answer that a man with his advantages of education, public school and university training in manhood, and favourable start in the office need not fear the competition, if he is suited to higher official work. If he is not—and merely learned pedants are not—the Service would be better off without him.

THE PROBLEM OF PUBLIC CONTROL

I HAVE never belonged to any political party, for two reasons. It is desirable that a civil servant, who must loyally serve whichever party is in power, should avoid political bias; and judging the parties, as a civil servant naturally does, by their performance of the business of his department, I have seen no reason to prefer one to the others. But I cannot deal with the question of popular control over the Civil Service without referring to the party system, for obviously, any direct control must be exercised through representatives, and how far they represent any definite popular desire in matters of public business, must depend upon how they are chosen.

The only direct manner in which an elector can express his desire before the event is by his vote. Electors are formed into political parties, and the party which obtains the most votes, rules the country for the time being, so that only the will of the majority could be
effective, even if expressed. Individuals judge which party they will support, according to its views upon certain leading political points, expressed in election programmes.

They have to choose the programme which they like best upon the whole; e.g. a man may vote for a certain party because, before anything else, he wants protection for his industry, or free trade, as the case may be, though he does not care much about the rest of the programme; rather like a man bids for a job lot at an auction, because he wants the ivory chessmen, though he does not need the bird in a glass case or the obsolete almanac. The programme usually includes little about the real "business" of the State. The elector criticizes its performance after the event, by complaints through Members of Parliament, the Press, etc., and influences it, both before and after the event, by that mysterious thing, the breath of public opinion; but, in the main, he gives Parliament a free hand.

Barring such changes of the times as are dealt with in Parliament, and the provision of money which must be dealt with there, public business is delegated to the Cabinet; the most important persons (politically and not necessarily in "business" qualifications) of the party in power. The Cabinet exercises only a general supervision, and entrusts the rule of the public businesses—the Departments—to individuals selected from its number as Ministers of State.

In theory the power of the Minister is almost despotic. The effective control exercised by him depends upon the man. The average Minister exercises a considerable influence upon questions of the moment, but little upon the mass of work. The able Minister learns a good deal about "the job" from the permanent experts, and
becomes a real President of the "Board of Directors;" but a political test does not secure administrative capacity any more than an educational.

In principle the Minister determines the policy of a department, and the permanent heads execute it; but in fact most of the policy is age-old, and non-political; tacitly accepted by all parties. The rest is determined in consultation with the permanent heads. The civil servant is always consulted, has a powerful voice in determining even new policy, and a still more powerful voice in drafting the laws to carry it out, which makes a deal of difference in their substance.

While policy is practically in the hands of the Government and the Civil Service, the House of Commons jealously holds the power of criticizing performance. It has a little portion of the Civil Service assigned to it for its very own; the Comptroller and Auditor-General and his staff, who test the accounts of all departments, and report thereon. The report is considered by the Public Accounts Committee of the House of Commons, and debated in the House. So Parliament has the opportunity of considering and criticizing all financial transactions after the event, but, in the main, it relies upon the checks set up within the Service itself; the separate Finance Branches of the departments under the general overlordship of a special public department, the Treasury, which helps the Chancellor of the Exchequer in holding the purse strings.

These important arrangements secure the probity of the business, but come after the event, so far as Parliament is concerned, and do not sufficiently secure the big economy of stopping what is "not worth while." Once unwise or unprofitable expenditure is authorised, the internal criticism is stopped. Even the Comp-
troller and Auditor General cannot say it is foolish, only bring it to the notice of the House. The House of Commons rarely interferes with the Government, or the Government with its Minister, in the most important point of all: the wisdom and necessity of expenditure.

Though Parliament considers and passes the annual Budget, and its sanction is required to new expenditure of importance, services once sanctioned tend to go on with little review. Even new services are put insufficiently into competition between themselves. The selection is made by the Government; i.e. by representatives of the majority elected upon political grounds. So new expenditure is liable to arise to justify election promises made before the Government came into office and knew the "business's" needs, or with an eye to the next election.

It is becoming recognized that more non-political scrutiny is required of the objects upon which public money can most profitably be spent. The (non-party) Estimates Committee of the House of Commons is a first step in this direction. As yet it is in its infancy. Anyone who cares to spend 6d. upon "The First Report of the Select Committee on Estimates" (1927) will see that it does important work, but after the event. (See paragraph 19.)

What is really needed is that the Estimate Committee should advise Parliament before the event. At present the voice of the House in general upon this all-important matter is only raised in debates, upon pre-determined expenditure which the Government majority will certainly carry through. The discussion is mostly and the voting entirely upon party lines. Such debates can only result in occasional small improvements, unless
and until public administration, like public accounting, ceases to be a party matter.

THE PROBLEM OF ECONOMY

Within the Civil Service there is considerable review of expenditure before it is incurred, except in so far as its necessity has been pre-determined by the Government. If it has not been, the Minister joins with the Service, and, in my experience, acts as a business man not as a politician.

There are large departments whose work is akin to that of outside concerns; those (e.g. the Post Office) which perform service for payment, and are self-supporting, or those, like the Excise and Customs, whose objects are to make money. In these offices the Finance Branch is mainly an accounting section, because, in a way, the whole department is financial; but in the large spending departments, the Finance Branch, in addition to accounting, has the duty of criticizing new proposals. In certain cases financial concurrence is needed to doubtful expenditure. In all cases it may be, and often is, sought. In some instances the Executive are so anxious to cover themselves that they play for safety and refer to "Finance" too much, letting the control of executive business pass into the hands of the Finance Branch. This is very undesirable, for when the emergency comes you may find an Executive without self-reliance; or a Finance with too much. This was what the wise member of the Public Accounts Committee had in mind when he challenged my forgiving the young soldier for breaking his bayonet.
There is, at present, far too much reference in small matters, but financial criticism is not sufficiently effective upon large proposals, as it is frequently estopped from dealing with the main point: "are they worth while?" Departmental consideration is compartmental consideration! Questions cannot be adequately considered in water-tight compartments of policy, executive need and cost.

There is extreme jealousy of people going outside their compartment. I remember being angrily charged with going beyond my province as a financial officer in advising my Parliamentary chiefs that a certain faddy invention was unnecessary (which was the ultimate decision). *Per contra,* a financial officer once complained to me of an executive officer challenging his figures. "But they were wrong," I pointed out. "I know they were," he agreed; "but he'd no business to say so!" Being no longer a civil servant, I will put my view of the water-tight compartment theory of duty in unofficial English! Rot!

The general control of public expenditure, subject to the Cabinet, is assigned to the Chancellor of the Exchequer, always a person of great political and personal weight. He presides over and is advised by the Treasury, which is officered by civil servants, and in virtue of the power of the purse is the premier public office, and has a real, if somewhat vague and mostly custom-grown duty of seeing that the Service goes well as a whole.

It is laid down that expenditure of magnitude, or not left to the discretion of the department by authority or custom, requires the sanction of the Treasury. The *dictum* of the chief financial officer of a department that reference to the Treasury is required is practically
always accepted; but he is only entitled to require such sanction because a service is unauthorised or unusual, not because it strikes him as unnecessary or not worth while.

The Treasury, being a stage further from the business, is less able than the departmental finance officer to judge the necessity and wisdom of new services. It frequently informs itself by personal consultation with this finance officer. It is no use blinking at facts. Semi-official discussion between Treasury civil servants and the financial civil servants of departments is the power behind the scenes. So, whereas in each department finance is subordinate (except in audit), at the top it is all powerful. In matters not of the very first importance the real decision is often made in the room of a Treasury civil servant, by him and a finance officer of the department concerned, although it is conveyed to the department as the ruling of the Lords Commissioners of the Treasury.

The position of a conscientious finance officer in the matter is very difficult. He is the servant of his office, and desires to be loyal to it; but he is also the trusted outpost of its critic, the Treasury.

He has a personal responsibility, which may bring him into conflict with the Minister, to protest against unjustifiable expenditure, and, after the event, the Public Accounts Committee require him to attend and justify his account. He can say: "This was decided by the Minister as a question of policy"; but, for the convenience of public business, and out of respect to the Committee, it is usual for him to give the reasons (when they are known to him) which led to the decision, and even to support it as much as he can. He cannot avoid giving his personal opinion in the semi-official
conferences with the Treasury. They are a recognized habit of the Service. Ministers have often spoken to me about them, never objecting, but sometimes saying, "Look here, Flynn. Do your best for us at the Treasury"; or "Don't go and give us away at the Treasury."

I recur to the question which grew out of the trifling case of the young soldier who broke his bayonet. I would not fine him because the military objections to doing so seemed to me more important than the financial gain. "As a financial officer, was not it your business to take the financial side?" suggested the member of the Public Accounts Committee, in the (only partially recorded) discussion which followed. My excuses then, so far as I remember, were that someone must settle these small matters off-hand, and that finance gained more than it lost (I have no doubt of that) by my having the confidence of the executive through not ignoring executive considerations.

Looking at the matter now, from a higher plane than mere expediency, I should say something like this: "The appointment of a Financial Officer as Accounting Officer, with a duty to secure the propriety of expenditure, and the long-established Treasury practice of consulting him before deciding upon proposals from his office, make it impossible for him to do his duty properly and fairly unless he considers all sides of a question, including the executive, and upon occasions regards himself as representing the office, not merely its financial section."

I conclude that the necessity of expenditure, and whether it is worth the cost, are somewhat insufficiently considered, and in a somewhat roundabout way, and that its relative necessity to other expenditure is insufficiently considered.
THE PROBLEM OF HONESTY

HONESTY is of all parties, and politics never enter into its consideration. The honesty of expenditure is very strictly secured. The person who authorizes or makes it, is responsible for its regularity and correctness. There are auditors who rigidly examine his accounts and who will pass only what is duly authorized and vouched; and watchmen are set over the watchmen.

The primary watchman is the civil servant who is the accounting officer of the department incurring the expenditure. Of course he performs the work by a staff, but he is responsible for securing that the duty is properly carried out. No doubt a few errors slip through, but they are unimportant as a rule. The meshes of the Service accounting net are very small.

The Auditor cannot disallow a charge because the expenditure was foolish or unnecessary. He can tax the cab-fare, but he cannot say that the journey was futile, only require due certificate that it was necessary and authorized by due authority. Still he exercises a fraction of the power of the Accounting Officer, who, if he doubts the propriety of a charge, can ask for higher sanction, and in matters not purely for executive decision can carry the matter up to the Minister in charge of his department. If he considers that the charge is of such an exceptional nature as to require the sanction of the Treasury, he must formally protest against passing it without this, and warn the Minister that he will assume personal pecuniary responsibility if he nevertheless orders him to pass it. The certificate which the Accounting Officer gives upon the year’s account is
in such form that, in this case, he will be compelled to note the matter thereon which will bring it to the notice of Parliament.

The necessity for such formal protests is happily rare, and they are almost always heeded; but they are the rock upon which public accounting stands, so I will say a little more about them. After the discussion which followed my protest, as Accounting Officer, in certain matters, I think it unlikely that, in future, a Minister will refuse to apply to the Treasury when his Accounting Officer warns him that it is required; but, if Treasury sanction is given, the attention of Parliament need not be called to the matter. The Comptroller and Auditor-General—and, indeed, the Public Accounts Committee—usually accept the decision of the Treasury as final.

I suggest that the Committee might well lay down that its officer, the Comptroller and Auditor-General, should allude in his report to all such formal protests, even if they result in Treasury sanction being given; especially when it is the propriety rather than the regularity of the expenditure which is questioned. The objections which move an experienced Accounting Officer to take the rare step of formally protesting against the advised decision of his Minister must be very strong reasons. They will generally deserve the consideration of the Public Accounts Committee.

A protest places an Accounting Officer in a very difficult position with his Minister. There was no personal friction whatever in the instance to which I refer. I was lucky in having a Minister who was above resenting a man doing his unpleasant duty. (He conscientiously believed that I was wrong in holding that he was exceeding his powers.) But human nature being what it is, there would frequently be trouble.
I think the likelihood is increased and the exercise of the unpleasant duty of protest made less certain by the present practice of making the permanent head of the department, instead of the chief of its finance, the Accounting Officer. The actual Auditor's opinion is desirable rather than that of an officer who is the Minister's right hand, and whose main duties sometimes lead to a non-financial view of affairs.

The Public Accounts Committee of the House of Commons, selected upon non-political lines, review the annual accounts of public expenditure, generally twelve to sixteen months after the year is closed, upon the Reports of the Comptroller and Auditor-General; the watchman over the departmental watchman. He tests the accounts at his discretion, always examining certain classes of transactions and important matters, and from time to time making a detailed scrutiny of particular votes or classes of expenditure. The Committee report to Parliament, and nowadays the report is debated there, normally, say eighteen months after the close of the year in question; two and a half years after the earliest transaction. Owing to the complexity of the business, the delay could not be lessened by more than a few months, so it would anyhow be too late to alter individual departmental decisions.

Most individual errors are set right much earlier upon the "Audit Query," and criticism of a general kind will have been considered upon these and upon the Comptroller and Auditor-General's report. The examination of Parliament must be a post mortem, or business could not go on. Fear of a post mortem deters the poisoner!

It should be understood that these checks are not merely upon the expenditure of money—e.g. the pur-
The problems of chase of provisions—but also upon expenditure in kind—e.g. that the provisions bought are duly accounted for as used only in proper quantities by those entitled to use them.

The checks upon expenditure after the event are perhaps somewhat over-elaborated. This arises partly from over-regulation of trifles which might be left to discretion, the remedy for which lies outside the Audit; but obviously there is a reduplication between the departmental check and that of the Comptroller and Auditor-General.

Some have advocated that this officer should be the only auditor and check fully, once and for all. A similar solution, which personally I would choose of the two evils, is that the departmental accounting officers should become the officers of Parliament. In either case the work must be performed within the department, and preferably at out-stations when the work goes on there. Otherwise there is a lack of touch and delay; wrong expenditure runs on, and there is either loss of public money, or the individual hardship of refunds. Being “in touch” enlightens an auditor and makes him human. Perhaps it makes him a little too human; but if he becomes a slightly worse auditor, he becomes a much better adviser upon the finance of the department. The Finance Branch of an office performs its duties much better, has much more “hold,” and secures many savings through the grip of the work obtained by including the audit. I do not believe it can be thoroughly efficient without doing so, that it would be listened to sufficiently if it were not part of the Office; or that Parliament would, or should, be satisfied by the Audit of an officer who advised upon the expenditure audited. So I see no satisfactory way of combining the two audits.
A departmental test-audit only of the less important details is sometimes considered sufficient; but my experience of "Partial Audit" is that it gives up half the safety to save a tenth of the less highly paid examining staff. True, there is very little disallowed by full audit, as my military colleague twitted me; but there would soon be plenty that ought to be disallowed, if it had a good chance of slipping through; and the loss would not be only in money. Opportunity makes dishonesty, and turns men hitherto good public servants into bad ones.

There is a distinct tendency to over-do Store accounting, and sometimes to have it both in money and in kind, on the ground that the money effect is sometimes required. This should not be allowed. It is sufficient to work sums when they are set, without calculating out all that might be set and rarely are! It should always be considered whether particular Store accounting is worth while. There is no object in keeping an account of clothing, etc., issued to the wearers. Their officers are responsible for seeing that they keep up their kit. Also it is no use prescribing accounts if they cannot be kept properly—e.g. by units in the field.

There is, in my judgment, a strong tendency to keep "expense accounts," or "cost accounts" in cases in which they are rarely, if ever, put to any practical use; just filed. It is no use recording the cost of a ship during its life. Whether it is justifiable to spend more money on it is not determined by past expenditure, but by professional officers considering whether it is worth while in view of its condition and absolescence. What a unit costs a year does not tell you very much about its administration, for all but a small fraction of the cost is rigidly determined by regulations. Moreover, a unit
may be cheap because it is unsatisfactory; too little pro-
ficiency pay earned, too many fines for misconduct, etc.

On the whole I consider service accounting good, and requiring only some reductions in detail, which the Departments should make for themselves.

THE PROBLEM OF GOVERNMENT UNDERTAKING

In the past, State intervention in the business life of the country has mainly taken the form of supervision to protect the community, or particular classes of it, from being exploited or oppressed by powerful sections. Latterly it has been importantly extended to ensure that certain important services are duly performed for all; but the direct undertaking of business has been practically limited to matters which require national performance on other than commercial grounds; defence, justice, postal service, a little warlike manufacture, etc. Nevertheless the constant demand for more supervision of industry, the perpetual conflict between labour and capital, the conversion of labour into a political party, and its frequent cry for a nationalization of some or all industries, makes it desirable to consider how these are or would be performed under government control.

Those who advocate wholesale nationalization do so upon social grounds; to secure a more equal distribution of wealth (their opponents say at the cost of having much less wealth to distribute). This is a political problem, and a civil servant must take politics as he finds them. I am not entitled, or competent, to advise upon the problem of making a new earth, only upon the merits and demerits of government under-
THE CIVIL SERVICE 295

taking while our country and its Civil Service are what they are—from which they change rather slowly. I fancy that the vast majority of sensible present-day people are in agreement to the following extent:—

(1) Some business, from its nature, and political argument apart, is best performed by the State (e.g. postal business).

(2) A limited amount of business may require State undertaking upon non-economical grounds (e.g. warlike manufacture, unless it is clear that private undertakings provide for sufficient expansion in war).

(3) The general interest demands the supervision of private business in certain respects (e.g. factory conditions, combinations, etc.).

(4) The State performance of any business (either manufacture or service) not justified upon the above grounds, must be determined by economical reasons; by relative cheapness in the sense of giving value for money.

I take the case of a trade or manufacture as the best example. It is simpler than that of a “service,” and I know more about it. What are the advantages of the State undertaking it?

(a) It charges no profit to the consumer, or, if it does, the profit comes back to the nation.

(b) The consolidation of a trade in one big concern leads to economy. Things are turned out cheaper in large quantities.

(c) The large national undertaking can afford to employ, or consult, the best experts in every line. It can have all the best appliances and machinery. It is able to spend money freely on experiment and research. So it should become more efficient.

(d) It avoids the losses of competition.

It would save many losses of people who embark their
capital in foolish enterprises, but I am not sure that the State would be much wiser. Some instance that it saves the loss of "clearance sales," which is recharged to the consumer upon other articles. (If any lady, with the determination of her determined sex, has persisted with the book so far, will she note this?) But I have had to deal with many Government surpluses, which became worthless through not having clearance sales! People are fond of saying that government undertaking would save the cost of advertising; but, if advertising were not necessary, "publicity" would be, or how would people know what was available? So I do not accept (d) as an argument of much weight.

It will be observed that all of these advantages, except the first, apply in full only to cases in which the Government takes over a whole line of business, and become less and less as its undertakings are smaller proportions of it. There is an advantage not subject to this qualification; that State work will be performed under the best conditions and with fair treatment of its employees; but State supervision can secure these important things in any private firms, which do not secure them of their own accord (many do).

The economical disadvantages include:

(e) The absence of competition, under a Government monopoly, removes what has been the chief factor in cheapening goods and services, and in suiting the varying individual taste.

(f) State business is over-regulated and red-tapey, reduplicates, checks and elaborates work and supervision. So it becomes expensive in staff.

(g) So far as the State caters for the Services, over-production tends to be covered up by using up obsolete articles. If it catered for the community it might not
make Jumper Pattern 2137 till all of Pattern 2136 had been got rid of; but what customers did not lose in money they would lose in satisfaction.

(h) Public sentiment is always on the side of the individual against any corporate body—e.g. against an Insurance Company—and especially when the Corporation is the State. A public department is greatly hampered in maintaining discipline, in reducing unnecessary staff, and in getting rid of "duds"; and the chiefs have not the same pressing personal motive for doing so. Being unable to get rid of indifferent men, the service multiplies overseeing, to secure that they do nothing wrong; and this kills some of the initiative and energy of the good men.

(i) Since public businesses cannot be judged in bulk by its dividend, but only by individual criticism, it spends vast labour upon getting every trifling transaction meticulously correct; which leads to shockingly elaborate and expensive systems of accounting. It cannot make the gains on the swings pay for the losses on the roundabouts, as a private concern very often does. It must have a cost account for each.

You would not bear with me while I explained what a laborious and complex thing accurate cost accounting is, but please note a point which may not have occurred to you. Manufacturing cost accounts depend largely upon guess. Even the material used is frequently subject to a calculated deduction for the value of the waste, or by-products. Even the direct labour is often a calculated share of the wages of the man tending a number of machines (perhaps making different articles, or sizes). The "on charges" for machinery and running it, the cost of the shop and of running it, the office, etc., are all calculated percentages. Such charges are known
in total; but the sharing of them has to be made by rule of thumb.

A private firm need not be too meticulous over this, so long as it makes a profit on the whole; and its prices are governed largely by its sales and the prices charged by competitors. A public undertaking must justify every price separately.

When a public business is not a monopoly, there is a special demand for cost accounting to compare with the charges of the private competitors, and expense accounts run riot; and when establishments, like dockyards, serve other purposes as well as those of manufacture there is important expenditure, the manufacturer's share of which is a very rough (and likely to be prejudiced) guess—e.g. docks, police, lighting, stores, railways, etc., used for the service of ship, as well as for that of manufacture.

I have had to examine the manufacturing accounts of one public department, and I have served upon important Committees to consider the system of two. My opinion, for what it is worth, is that direct public undertaking cannot be recommended upon economical grounds, unless the particular business is necessarily a monopoly, which would not have the usual advantages of private business. I refer you to the Report already mentioned of the Estimates Committee, paragraph fifteen, for an illustration in support of my view.

The economical arguments for and against the public undertaking of services susceptible of private performance are similar, but they vary in different cases. I ask you to note especially the fact that the public service always adds a large administrative machinery and a quantity of routine, both of which are expensive and worrying. (Help some poor person to get an old age pension and you will probably get a practical illustration of the worry!)
THE PROBLEM OF REFORM  
(FROM WITHIN)

I CONSIDER that present reform in Civil Service procedure is practicable in some important respects, including the following:

(1) Excessive amount of Returns, Records, Accounts, etc., and their over-elaboration.
(2) Over-supervision.
(3) Multiplication of consideration.
(4) Excessive writing; "minuting," as it is called.
(5) Over-regulation.
(6) Delays (a constant source of outside complaint).
(7) Insufficiently looking out for improvements, or encouraging the staff to suggest them.

I recommend a Treasury order to all departments to give very careful consideration to all these failings and remedy them so far as possible by their own action, prior to a review of the work of the department from outside. This internal review would undoubtedly lead to some improvement, e.g. it should stop delay in dealing with individual cases, which is due mainly to the staff not recognizing the hardship which it causes. Even under war conditions, when the load was sometimes too much for the willing horse, I found that much quickening up resulted from a minute which I wrote to my staff, somewhat to the following effect:

"I will accept no excuse for avoidable delay in dealing with ordinary personal cases. It distresses the poor person who is anxiously awaiting a decision, and it increases your own work and worries. The necessary labour has to be done, whether it is done now or next
month. By putting it off you add further work to yourselves and to your chiefs in dealing with reminders, complaints, and searching through accumulations of documents.

“If you will put in some extra work now, and get up to date, you will find that it is easier and more pleasant to do the day’s work in the day instead of that day week; and you will have the satisfaction of knowing that you are dealing humanely with your clients.”

Pi-jaw? Yes, but honest pi-jaw. Civil Servants listen to that, and some non-Civil Servants might benefit from considering my pi-jaw about delays.

I do not believe that the effect of the departmental consideration will be sufficient. An official cannot get out of his rut even when he tries to. I persistently tried; but it took a hint from a member of the Public Accounts Committee to lift me out of the rut of accounting in the Field: “Why make trouble for yourselves by professing to keep accounts when they cannot be kept?”

The Service needs these tips; and the number of its members ready to take them is too small. So I propose that, after the departmental review, these questions should be considered by a strong Committee, which, itself, should seek “tips” from any department which has specially reformed certain procedure and apply them to similar procedure in other departments.

The Committee must be given power to enforce reforms, be competent to wield this power, and have backbone enough to do so; and it must be firmly supported by the Government. Otherwise the result will be the same as that of past Committees; much expenditure of time in giving and taking evidence, and in rendering and receiving reports; much subsequent departmental consideration and writing down of the recommendations;
the Government following the departmental lead; things left nearly what they were before, and, in a few years, slipping quite back to it. If the departments are to say the last word, it is no use having the Committee. Its justification is that pressure and relief are required from without.

Note the “relief.” Some of the reductions of work will mean a little loss of safety secured at too great cost. Sometimes the Committee will find that the faults are due to bad law, or outside mis-direction. It must be prepared to say that a safeguard is not worth the present expensive machinery and that a little risk must be run, or that Parliament should alter a law, or the Treasury a direction.

Parliament, its Committees, and its Comptroller and Auditor-General, all have a tendency to accept the Treasury as unquestionable. It is a great office; but it is human; and it is far removed from the facts. It should not be exempt from the criticism of the Committee, which might especially consider whether the ultimate authority should be so one-sidedly financial, and whether it is sufficiently informed. The person who over-rules the expert head of a department is sometimes an official much junior to him, writing in the name of “My Lords.”

No one but a very competent man of strong and “pushful” character would be of any use upon the Committee. This being understood, I suggest a composition something like this:

A Cabinet Minister as Chairman.

Two M.P.’s (of other Parties); one who has held office and one who has not.

The Permanent Head of the Treasury.

The Permanent Head of a Department.
The Ex-Permanent Head of another (if one young enough and near enough to Service is available).

Two business men who have been working Managers of big concerns (not merely directors).

The serving officials should be relieved from their Departments for the time being, the ex-official put upon suitable full pay, and the others suitably remunerated as for a whole time job. It cannot be done in odds and ends of spare time. The Service vainly attempts to do it in that way. The general task of setting the Service right is more important to the public purse and the public welfare than the running of particular departments.

The Committee will need a staff to help, and should call in expert advisers and examiners as necessary; and after its work is done there should be a strong standing Committee to watch that things do not slip back into the old conditions, and to look out for further reforms. This is properly the business of the Civil Service. I would suggest a Service “Improvements Committee,” under the Estimates Committee, once things had been put right.

There is another large question which requires consideration and decision by a strong Committee; the Staff. I would put fewer heads of departments upon this Committee and include an ex-official who has risen high in the Service after starting in a lower class, and a representative of large “routine classes”—e.g. Post Office subordinates.

This Committee should consider the system of recruiting and terms of the Service, and especially the class system; not merely in theory, or in the interests of higher education, or as satisfying the legitimate claims of the staff to have “a man’s chance to climb the ladder,” but also whether it adequately meets the needs of the
Service in practice. Among the points for consideration should be (a) the system of pensions, to what classes (if any) it should apply, and, if and when retained, whether it should not include provision for voluntary retirement before the age of sixty; and (b) whether the present practice of employing Service officials, often for long periods, as private secretaries to Parliamentary Officers, is for the good of the Service. I suggest that to use young M.P.'s would have the double advantage of training them to become Parliamentary Officials in the future, and leaving the Civil Servants free to learn their office.

I believe that reform in the respects mentioned would lead to reform of many of the underlying defects which I have mentioned; e.g. the reduction of supervision and reduplicated consideration would accustom men to take responsibility, and the simplification of the work would remove some of the red tape. It is already loosened by the growth of new ideas in the world, and therefore in Civil Servants. The feeling of fellowship induced by comradeship in fighting the war, and in suffering from it, leads us all to remember the fellow at the other end of the letter—and, I hope, of the book!

THE PROBLEM OF REFORM
(FROM WITHOUT)

THE peculiar defects of the Civil Service are not due to its being manned by any worse humanity than the average, but to the peculiar conditions under which it works. While these conditions remain, they will breed the same defects again. So a cure will only
be effective and lasting if the cause is removed. If this cause is outside—e.g. Parliament and its electors—the permanent remedy does not lie within the service. It is up to my friend in outside life and his representatives to do their bit towards making the Civil Service easier to run. The ordinary citizen can do something to help:

He can try to understand the tough job of the Service better, and criticize with more understanding.

He should recognize that it is impossible to provide in exactly the best way for every individual case, and avoid “raising Cain” over trifles. He and his fellows have to bear the cost of a large staff to deal with the trifles.

He should remember that the constant demand for more and more business to be undertaken by the State leads to more and more Civil Service, which is an expensive machinery (partly because its conditions lead to doing business more exactly than is really worth while), and either grumble less when the bill comes in, or avoid running it up.

He should demand plainer law and dealing; not vote merely upon popular election cries; watch how his representatives look after the actual business which he entrusts to them. How often have I sat in the official gallery at the House of Commons while a matter which I knew from A to Z was being discussed, and felt that it was not being got on with, and that only debating points were being scored; honours above the line instead of tricks towards game!

My friend the M.P., who becomes the spokesman of my friend the citizen, can do more than this.

First and foremost he can remember that he has a responsibility for looking after the public work; take
an interest in it, try to understand it, and understandingly influence it before the event; apply his business acumen to getting a good law made, instead of passing a bad one, and then criticizing its creaking operation. He can look upon the business side of the laws which come before him less politically; give the country the benefit of his individual knowledge and judgment, instead of merely giving his party his vote. He should insist upon more "free votes"; act as he acts upon a small Committee, when the country's business is under discussion in the House. Party politics are bad for business.

He could avoid hampering the business by so much discussion, and by "questions." I am sure no one outside the Service has any idea of the extent to which important work is slowed by them, and how largely they draw important officials off their pressing duties to deal with individual cases and small matters, and put the departments out of their stride. Political reasons apart, nine-tenths of the questions could be asked in an ordinary extra-parliamentary way, without doing so, and with just the same result; but, without the political advertisement, very many of them would not be asked at all. I venture to suggest that the M.P. could help the public business greatly in this matter.

He might worry the departments somewhat less with even extra-parliamentary questions; but the remedy for this lies rather with his constituent.

The good Minister does a deal now. He feels where the shoe pinches—e.g. the way he is called off from his first-rate work to deal with "questions," and unimportant points raised by important people, many of which have no proper call upon his valuable time. But he might remember, more, that things which are important in politics are often unimportant in the business of the
Office and draft higher officials off to them as little as possible.

The Cabinet can do one additional and very important thing. It did it largely in the War—form a smaller "business cabinet," which could call in advisers from the Civil Service; and from the opposition; use the valuable experience of the ex-Minister in the sensible non-oratorical discussion of matters. When he dies the leaders of the Government will get up and say that, political differences apart, he was a man of incorruptible public spirit, of supreme ability, sound and honest judgment, who saw far and did much good to his country. Why not own it while use can be made of these qualities?

When the civil servant is blamed for the business going badly he is often only Parliament's whipping-boy. History tells that the desire to save their subject's cuticle had an excellent effect upon ancient rulers. Perhaps our present rulers are susceptible to this appeal?

And so I end, as I began, with the assertion that, since Civil Service business is everybody's business, it requires the understanding and the help of all.
Wages in Manufacturing Industries
1899 to 1927

Research Series No. 6
Published by
AMERICAN FEDERATION OF LABOR
Washington, D. C.
1928
Price, 10 cents
CONTENTS

Foreword—By William Green, President, A. F. of L.

Chapter 1—The Wage Earner, Growth in Number—Occupations

Chapter 2—Wages in Manufacturing Industry as a Whole

1. Money Wages
2. Real Wages
3. Social Wages

Chapter 3—The Cost of Wages to the Manufacturer

Chapter 4—Wages in Individual Industries

Chapter 5—Wages of low- and high-paid Wage Earners

1. Wages in the North and in the South
2. Wages of Unskilled and Skilled Workers
3. Wages of Male and Female Workers
FOREWORD

Research Series No. 6 is published chiefly as a reference book. It is for the trade union officials, that they may have at hand in convenient form summaries of statistics on earnings of workers, together with an interpretation of a few important economic trends. Chapter 3 will be of practical use, as it contains statistical proof of labor's contention that higher wages do not necessarily mean higher labor costs.

The material was prepared for special use in wage negotiations and general discussion of wage standards. The pamphlet was written by Jürgen Kuczynski and Marguerite Steinfeld.

We hope this booklet may prove of value to organized labor.

[Signature]

President,
American Federation of Labor.
Chapter 1

The Wage-Earner,
Growth in Number—Occupations

At the beginning of the twentieth century, in fact on June 1, 1900, 29,073,233 persons were gainfully engaged in production or distribution of products. By 1910 this number had increased to 38,167,336 persons, or by 31 per cent, and from 1910 to 1920 it increased to 41,614,248 persons, or by 9 per cent. In the latter decade the increase was much smaller than in the former and since 1920 there has probably been no important increase at all.

But even the great increase from 1900 to 1910 and the quite considerable increase from 1910 to 1920

\[ \text{See 14th Census, Vol. IV. Population 1920, Occupations.} \]
were not abnormal, since the population also increased materially during the same period. The percentage of persons gainfully engaged among the total population ten years and over was:

<table>
<thead>
<tr>
<th>Year</th>
<th>Agriculture</th>
<th>Industry</th>
</tr>
</thead>
<tbody>
<tr>
<td>1900</td>
<td>36 Per cent</td>
<td>64 Per cent</td>
</tr>
<tr>
<td>1910</td>
<td>33 Per cent</td>
<td>67 Per cent</td>
</tr>
<tr>
<td>1920</td>
<td>26 Per cent</td>
<td>74 Per cent</td>
</tr>
</tbody>
</table>

If measured by the increase of population the increase in the number of persons gainfully engaged seems normal.

In which occupations were these people engaged? Roughly, one can distinguish between agricultural and industrial occupations. In these the distribution of the gainfully engaged population was the following:

The percentage of the population engaged in agricultural work has decreased from decade to decade. More and more people have turned to other trades.

Turning to other trades, however, means in the majority of the cases becoming an industrial wage-earner. No wonder that in the two decades under review the number of industrial wage-earners increased especially much. The total was:

<table>
<thead>
<tr>
<th>Year</th>
<th>Wage-earners manufacturing industries</th>
</tr>
</thead>
<tbody>
<tr>
<td>1899</td>
<td>4,712,763</td>
</tr>
<tr>
<td>1909</td>
<td>6,615,046</td>
</tr>
<tr>
<td>1919</td>
<td>9,096,372</td>
</tr>
</tbody>
</table>

The number of wage-earners in manufacturing industries thus increased from 1899 to 1909 by 40.4 per cent and from 1899 to 1919 by 93.0 per cent.

*By industrial wage-earner we will understand in this article only the manufacturing wage-earner.*

*See Biennial Census of Manufacturers, 1921.*
The following table compares the growth in the gainfully engaged population, excluding the manufacturing wage-earners, and the increase in the number of wage-earners in manufacturing establishments.

<table>
<thead>
<tr>
<th>Year</th>
<th>Manufacturing wage-earners</th>
<th>Other population gainfully engaged</th>
</tr>
</thead>
<tbody>
<tr>
<td>1899</td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td>1909</td>
<td>140.4</td>
<td>129.5</td>
</tr>
<tr>
<td>1919</td>
<td>193.0</td>
<td>133.5</td>
</tr>
</tbody>
</table>

Naturally, the percentage of wage-earners among the total gainfully engaged population increased. It was:

<table>
<thead>
<tr>
<th>Year</th>
<th>Manufacturing industries</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Percentage</td>
</tr>
<tr>
<td>1899</td>
<td>16.2</td>
</tr>
<tr>
<td>1909</td>
<td>17.3</td>
</tr>
<tr>
<td>1919</td>
<td>21.9</td>
</tr>
</tbody>
</table>
The relative increase in the manufacturing industries was in the second period higher than in the first.

The number of wage-earners is known for many more years than that of the gainfully engaged population. In the table below we give the number of wage-earners in manufacturing industries for all years for

<table>
<thead>
<tr>
<th>Year</th>
<th>All establishments</th>
<th>Establishments producing $5,000 value or more</th>
</tr>
</thead>
<tbody>
<tr>
<td>1899</td>
<td>4,712,750</td>
<td></td>
</tr>
<tr>
<td>1904</td>
<td>5,468,400</td>
<td></td>
</tr>
<tr>
<td>1909</td>
<td>6,615,050</td>
<td>6,896,200</td>
</tr>
<tr>
<td>1914</td>
<td>7,036,250</td>
<td>9,000,050</td>
</tr>
<tr>
<td>1919</td>
<td>9,096,350</td>
<td>9,288,050</td>
</tr>
<tr>
<td>1920</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1921</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1922</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1923</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1924</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1925</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1926</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1927</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
which reliable statistics are available. Since 1920 there has been no increase, but rather a decrease, and although 1920 was a year of exceptional activity, it can not be denied that in the last seven years there has been a striking stoppage in the increase of the number of industrial wage-earners.

In which industries do these wage-earners work? The following table gives a survey of the number of wage-earners in the three industries having the largest number of workers from 1899 to 1925:

---

'Census of Manufacturers; years not covered by Census investigations, 1920, 1922, 1924, 1926, 1927, are computed with the help of the index figures of employment in manufacturing industries constructed by the Federal Reserve Board. The figure for 1925 excludes wage-earners engaged in coffee roasting and spice grinding.

'Figures adjusted to the classification in the Census of 1919. The figure for textiles in 1925 excludes wage-earners engaged in the manufacture of asbestos textiles. The figures for lumber in 1923 and 1925 exclude wage-earners engaged in manufacturing “charcoal, not including production in the lumber and wood distillation industries.”

[12]
<table>
<thead>
<tr>
<th>Industries</th>
<th>Number of wage-earners</th>
<th>Percentage of all manufacturing wage-earners</th>
</tr>
</thead>
<tbody>
<tr>
<td>Textiles and their products</td>
<td>1,028,706</td>
<td>21.8</td>
</tr>
<tr>
<td>Iron and steel and their products</td>
<td>745,235</td>
<td>15.8</td>
</tr>
<tr>
<td>Lumber and its remanufactures</td>
<td>671,696</td>
<td>14.3</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>2,445,637</td>
<td>51.9</td>
</tr>
<tr>
<td><strong>1904</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Textiles</td>
<td>1,163,497</td>
<td>21.3</td>
</tr>
<tr>
<td>Iron and steel</td>
<td>868,634</td>
<td>15.9</td>
</tr>
<tr>
<td>Lumber</td>
<td>734,136</td>
<td>13.4</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>2,766,267</td>
<td>50.6</td>
</tr>
<tr>
<td><strong>1909</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Textiles</td>
<td>1,445,720</td>
<td>21.9</td>
</tr>
<tr>
<td>Iron and steel</td>
<td>1,026,553</td>
<td>15.5</td>
</tr>
<tr>
<td>Lumber</td>
<td>911,593</td>
<td>13.8</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>3,383,866</td>
<td>51.2</td>
</tr>
<tr>
<td><strong>1914</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Textiles</td>
<td>1,507,374</td>
<td>21.4</td>
</tr>
<tr>
<td>Iron and steel</td>
<td>1,061,058</td>
<td>15.1</td>
</tr>
<tr>
<td>Lumber</td>
<td>833,529</td>
<td>11.8</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>3,401,961</td>
<td>48.3</td>
</tr>
</tbody>
</table>
### Industries
<table>
<thead>
<tr>
<th>Year</th>
<th>Textiles</th>
<th>Iron and steel</th>
<th>Lumber</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>1919</td>
<td>1,611,309</td>
<td>1,585,712</td>
<td>839,008</td>
<td>4,036,029</td>
</tr>
<tr>
<td>1921</td>
<td>1,510,876</td>
<td>1,031,523</td>
<td>675,069</td>
<td>3,217,468</td>
</tr>
<tr>
<td>1923</td>
<td>1,719,434</td>
<td>1,526,552</td>
<td>896,135</td>
<td>4,142,121</td>
</tr>
<tr>
<td>1925</td>
<td>1,627,141</td>
<td>1,415,132</td>
<td>890,432</td>
<td>3,932,705</td>
</tr>
</tbody>
</table>

Two interesting facts should be noted: 1. From 1899 to 1925 the...
textile, iron and steel, and lumber industries are always ahead of all other manufacturing industries as to the number of wage-earners. 2. From 1899 to 1925 always about one-half of all manufacturing wage-earners are employed in these three industries; that means every second manufacturing wage-earner works either in the textile or the iron and steel or the lumber industry. The order of these three industries has not changed at all. The textile industry is always the first and the lumber industry is always the third. However, over the period as a whole, the lumber industry has lost, and the iron and steel industry seems to approach the textile industry.

One has, however, to keep in mind, that employing more wage-earners than another industry does not always mean creating a higher valued product or paying a larger amount of wages. In the following table we give a survey repeating the three industries employing the greatest number of wage-earners and adding the three industries creating the highest
<table>
<thead>
<tr>
<th>Wage earners</th>
<th>Value created</th>
<th>Amount of wages</th>
</tr>
</thead>
<tbody>
<tr>
<td>Textiles</td>
<td>1899: Iron and steel Textiles Lumber</td>
<td>Iron and steel Textiles Lumber</td>
</tr>
<tr>
<td>Iron and steel</td>
<td>1904: Iron and steel Textiles Lumber</td>
<td>Iron and steel Textiles Lumber</td>
</tr>
<tr>
<td>Lumber</td>
<td>1909: Iron and steel Textiles Lumber</td>
<td>Iron and steel Textiles Lumber</td>
</tr>
<tr>
<td>Textiles</td>
<td>1914: Iron and steel Textiles Food and kindred products</td>
<td>Iron and steel Textiles Lumber</td>
</tr>
<tr>
<td>Iron and steel</td>
<td>1919: Iron and steel Textiles Food</td>
<td>Iron and steel Textiles Lumber</td>
</tr>
<tr>
<td>Lumber</td>
<td>1921: Textiles Iron and steel Food</td>
<td>Textiles Iron and steel Food</td>
</tr>
<tr>
<td>Textiles</td>
<td>1923: Iron and steel Textiles Food</td>
<td>Iron and steel Textiles Food</td>
</tr>
<tr>
<td>Iron and steel</td>
<td>1925: Iron and steel Textiles Paper and printing</td>
<td>Iron and steel Textiles Lumber</td>
</tr>
<tr>
<td>Lumber</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

[16]
valued product (which is calculated by deducting from the value of the products the costs of materials), and the three industries paying the highest amount of wages.\footnote{Underlying figures adjusted to the classification in the Census of 1919.}

The industry paying the highest amount of wages does then not necessarily employ the highest number of wage-earners, nor does it always create the highest valued product; the three outstanding industries in the latter two columns then vary while they remain the same in the first column.

No investigation has ever been made as to the causes of these facts, and since we have to proceed to the discussion of the chief problems dealt with in this series of articles, we have to be satisfied with merely noting this situation. Very likely differences in the capital stock, in the degree of skill required for production, in the composition of the working force—children and women, or immigrants, or negroes—do account for this situation.
Chapter 2

Wages in Manufacturing Industry as a Whole

1. Money Wages

How much did these millions of manufacturing wage-earners earn? What was their share in the income of the Nation as a whole? How much did the individual wage-earner earn?

The table below gives the number of manufacturing wage-earners

<table>
<thead>
<tr>
<th>Year</th>
<th>Number of wage-earners</th>
<th>Total wages</th>
</tr>
</thead>
<tbody>
<tr>
<td>1899</td>
<td>4,712,750</td>
<td>2,008,361,100</td>
</tr>
<tr>
<td>1904</td>
<td>5,468,400</td>
<td>2,610,444,950</td>
</tr>
<tr>
<td>1909</td>
<td>6,615,050</td>
<td>3,427,037,900</td>
</tr>
<tr>
<td>1914</td>
<td>7,036,250</td>
<td>4,078,332,450</td>
</tr>
<tr>
<td>1919</td>
<td>9,096,350</td>
<td>10,533,400,350</td>
</tr>
<tr>
<td>1920</td>
<td>9,288,050</td>
<td>12,920,306,800</td>
</tr>
<tr>
<td>1921</td>
<td>6,946,550</td>
<td>8,202,324,350</td>
</tr>
<tr>
<td>1922</td>
<td>8,136,050</td>
<td>9,331,913,900</td>
</tr>
<tr>
<td>1923</td>
<td>8,778,150</td>
<td>11,009,297,750</td>
</tr>
<tr>
<td>1924</td>
<td>7,935,450</td>
<td>10,128,553,900</td>
</tr>
<tr>
<td>1925</td>
<td>8,384,250</td>
<td>10,729,968,950</td>
</tr>
<tr>
<td>1926</td>
<td>8,401,050</td>
<td>10,912,378,400</td>
</tr>
<tr>
<td>1927</td>
<td>8,076,550</td>
<td>10,510,004,550</td>
</tr>
</tbody>
</table>
and the total amount of wages paid to them.¹

The total national income is not known as far back as the total amount of wages paid to manufacturing wage-earners. For earlier years, therefore, comparisons are not possible. The following tables give the national income in billions of dollars for all years for which reliable figures as to the national income.

<table>
<thead>
<tr>
<th>Year</th>
<th>National Income</th>
</tr>
</thead>
<tbody>
<tr>
<td>1909</td>
<td>28.8</td>
</tr>
<tr>
<td>1914</td>
<td>32.5</td>
</tr>
<tr>
<td>1919</td>
<td>67.3</td>
</tr>
<tr>
<td>1920</td>
<td>74.2</td>
</tr>
<tr>
<td>1921</td>
<td>62.7</td>
</tr>
<tr>
<td>1922</td>
<td>65.6</td>
</tr>
<tr>
<td>1923</td>
<td>76.8</td>
</tr>
<tr>
<td>1924</td>
<td>79.4</td>
</tr>
<tr>
<td>1925</td>
<td>86.5</td>
</tr>
<tr>
<td>1926</td>
<td>89.7</td>
</tr>
</tbody>
</table>

¹ Census of Manufactures; years not covered by Census investigations, 1920, 1922, 1924, 1926, 1927, are calculated with the help of the index figures of employment and pay rolls in manufacturing industries constructed by the Federal Reserve Board.
as well as to the total amount of wages paid are available.²

The manufacturing wage-earners' income made up the following percentage of the total national income:

<table>
<thead>
<tr>
<th>Year</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>1909</td>
<td>12</td>
</tr>
<tr>
<td>1914</td>
<td>13</td>
</tr>
<tr>
<td>1919</td>
<td>16</td>
</tr>
<tr>
<td>1920</td>
<td>17</td>
</tr>
<tr>
<td>1921</td>
<td>13</td>
</tr>
<tr>
<td>1922</td>
<td>14</td>
</tr>
<tr>
<td>1923</td>
<td>14</td>
</tr>
<tr>
<td>1924</td>
<td>13</td>
</tr>
<tr>
<td>1925</td>
<td>12</td>
</tr>
<tr>
<td>1926</td>
<td>12</td>
</tr>
</tbody>
</table>

In the first years under review, the percentage of the wage income increases continuously, in the later years it fluctuates and stays below the peak of 1920. However, these figures do not mean so very much, since, if the number of wage-earners increases comparatively more than the total population, their share in the

national income should increase, and vice versa. In order to find out whether the share of labor in the national income really has increased or decreased we have to take into account the relation between the number of manufacturing wage-earners and the total population. The following table gives the "real percentage" of the manufacturing wage-earners' income in the total national income—the relation between the number of wage-earners and the population being taken into account:

<table>
<thead>
<tr>
<th>Year</th>
<th>Per cent</th>
</tr>
</thead>
<tbody>
<tr>
<td>1909</td>
<td>12</td>
</tr>
<tr>
<td>1914</td>
<td>13</td>
</tr>
<tr>
<td>1919</td>
<td>13</td>
</tr>
<tr>
<td>1920</td>
<td>15</td>
</tr>
<tr>
<td>1921</td>
<td>15</td>
</tr>
<tr>
<td>1922</td>
<td>14</td>
</tr>
<tr>
<td>1923</td>
<td>13</td>
</tr>
<tr>
<td>1924</td>
<td>13</td>
</tr>
<tr>
<td>1925</td>
<td>12</td>
</tr>
<tr>
<td>1926</td>
<td>12</td>
</tr>
</tbody>
</table>

The table shows that the percentage of the manufacturing wage-earners' income of the total national income has not changed substantially

*Figures of the population from "Statistical Abstract of the United States, 1926."
during the period under review. That means that the economic position of the manufacturing wage-earner compared with that of all other citizens has not improved since 1909.

The following table shows the yearly income of the individual manufacturing wage-earner. It was:

<table>
<thead>
<tr>
<th>Year</th>
<th>Income</th>
</tr>
</thead>
<tbody>
<tr>
<td>1899</td>
<td>$426.15</td>
</tr>
<tr>
<td>1904</td>
<td>477.37</td>
</tr>
<tr>
<td>1909</td>
<td>518.07</td>
</tr>
<tr>
<td>1914</td>
<td>579.62</td>
</tr>
<tr>
<td>1919</td>
<td>1,157.98</td>
</tr>
<tr>
<td>1920</td>
<td>1,391.07</td>
</tr>
<tr>
<td>1921</td>
<td>1,180.77</td>
</tr>
<tr>
<td>1922</td>
<td>1,146.98</td>
</tr>
<tr>
<td>1923</td>
<td>1,254.17</td>
</tr>
<tr>
<td>1924</td>
<td>1,276.37</td>
</tr>
<tr>
<td>1925</td>
<td>1,279.78</td>
</tr>
<tr>
<td>1926</td>
<td>1,298.93</td>
</tr>
<tr>
<td>1927</td>
<td>1,301.30</td>
</tr>
</tbody>
</table>

The money wage income of the individual wage-earner in manufacturing industries has increased from 1899 to 1920 in each year under review. Since then it decreased in two consecutive years and the increases in the following years did not lift the

*Computed by dividing the total number of wage-earners into the total amount of wages paid to them.*
money wage income to the 1920 level.

The true significance of these increases and decreases, however, cannot be realized without relating the money wage income to prices and production. We shall deal, therefore, in the next section with real wages, that means money wages related to prices. Real wages are indicative for the purchasing power of wages, the purchasing power over individual commodities.

2. Real Wages

We relate the money wage income to the cost of living and use as index of cost of living that constructed by Carl Snyder. He used the cost of living index of the Federal Bureau of Labor Statistics and interpolated with the index constructed by the Massachusetts Commission on the Necessaries of Life. The index of the cost of living runs as follows:

---

*Carl Snyder, Business Cycles and Business Measurements, New York, 1927: The index of cost of living for the years 1899 to 1909 is based on estimates from retail food index of the U. S. Department of Labor.
Real wages and their index were as follows:

<table>
<thead>
<tr>
<th>Year</th>
<th>Real wages</th>
<th>1899–1927 index</th>
</tr>
</thead>
<tbody>
<tr>
<td>1899</td>
<td>$426.15</td>
<td>100</td>
</tr>
<tr>
<td>1904</td>
<td>$427.75</td>
<td>100.4</td>
</tr>
<tr>
<td>1909</td>
<td>$392.77</td>
<td>92.2</td>
</tr>
<tr>
<td>1914</td>
<td>$384.62</td>
<td>90.3</td>
</tr>
<tr>
<td>1919</td>
<td>$424.95</td>
<td>99.7</td>
</tr>
<tr>
<td>1920</td>
<td>$446.43</td>
<td>104.8</td>
</tr>
<tr>
<td>1921</td>
<td>$457.66</td>
<td>107.4</td>
</tr>
<tr>
<td>1922</td>
<td>$471.04</td>
<td>110.5</td>
</tr>
<tr>
<td>1923</td>
<td>$503.08</td>
<td>118.1</td>
</tr>
<tr>
<td>1924</td>
<td>$518.01</td>
<td>121.6</td>
</tr>
<tr>
<td>1925</td>
<td>$504.65</td>
<td>118.4</td>
</tr>
<tr>
<td>1926</td>
<td>$512.20</td>
<td>120.2</td>
</tr>
<tr>
<td>1927</td>
<td>$519.07</td>
<td>121.8</td>
</tr>
</tbody>
</table>

The real wage income thus did not increase in the pre-war period of
this century, but has increased since then. Roughly, the wage-earner can buy today 20 per cent more commodities than in 1899.

Closely connected with the problem of real wages is that of the family budget. Was the income of the manufacturing wage-earner high enough to permit him and his family to live a decent and healthful life? Did he get a living wage?

The United States Department of Labor has constructed a "Minimum Health and Decency Budget" "necessary to maintain a family of five at a level of health and decency" for one year. This budget, however, covers not more than the minimum quantity of commodities, and in addition is computed only on a quantitative base without giving the budget in dollars. From this quantity budget The Labor Bureau, Inc., New York, has constructed for nine cities a dollar amount budget. And from these budgets we compute here an aver-

---

The average budget for the United States as a whole. The budget is in dollars:

<table>
<thead>
<tr>
<th>Year</th>
<th>Budget</th>
</tr>
</thead>
<tbody>
<tr>
<td>1899</td>
<td>$940.00</td>
</tr>
<tr>
<td>1904</td>
<td>1,050.00</td>
</tr>
<tr>
<td>1909</td>
<td>1,240.00</td>
</tr>
<tr>
<td>1914</td>
<td>1,410.00</td>
</tr>
<tr>
<td>1919</td>
<td>2,560.00</td>
</tr>
<tr>
<td>1920</td>
<td>2,920.00</td>
</tr>
<tr>
<td>1921</td>
<td>2,420.00</td>
</tr>
<tr>
<td>1922</td>
<td>2,280.00</td>
</tr>
<tr>
<td>1923</td>
<td>2,340.00</td>
</tr>
<tr>
<td>1924</td>
<td>2,310.00</td>
</tr>
<tr>
<td>1925</td>
<td>2,380.00</td>
</tr>
<tr>
<td>1926</td>
<td>2,380.00</td>
</tr>
<tr>
<td>1927</td>
<td>2,350.00</td>
</tr>
</tbody>
</table>

How does the average income of the manufacturing wage-earner compare with this budget? It constitutes in per cent of this minimum income required to maintain a family at a level of health and decency: (See table p. 27.)

The table shows: In the first twenty years very probably no progress at all has been made in advancing the yearly income to an amount

which would secure a family budget allowing an adequate level of health and decency. Since 1920 some progress has been made, but even in the peak year 1927 the actual average yearly income is still 45 per cent below the income necessary to maintain a family at a level of health and decency.

It is no exaggeration to say that about three-fourths of the population of the United States have not the possibility to live a family life of health and decency.

*Objection to: Calculations with the Minimum Budget

The quantity budget of the Bureau of Labor Statistics was calculated for 1918-1919. The standard of living of a family, of course,
3. Social Wages

Real wages and family budgets do not give the full picture of the wage-earner's economic and social position. Let us assume that from one year to another real wages of the manufacturing wage-earner increase by 10 per cent. That means he can buy in the second year 10 per cent more commodities than in the first year. Let us assume that at the same time production increases by 20 per cent. This means that 20 per cent more commodities are offered on the market. If the wage-earner's real wages have increased only by 10 per cent he can not share the full amount

changes from year to year with changing fashion, civilization, culture. Therefore, one is not fully justified in calculating a minimum budget for 1909 or 1927 by multiplying the quantity budget of 1913-1919 by the index of prices of 1909 or 1927.

Objection to: Relating the average income of one individual wage-earner to the minimum budget of a whole family.

One could object by pointing out that in many wage-earner families several members of one family earn money. These earnings, however, do not amount to very much in most cases.
of the more production of 20 per cent. It is true he can buy 10 per cent more commodities than he could buy the year before, but he has helped to produce 20 per cent more commodities than all the commodities produced the year before. His share in the more production is one-half, the other half of his share in the opportunities which this more production offers either goes to other consumers in addition to their own increased share or is not used at all, which means that a certain part of the national product has to remain unsold, that stocks increase and that industrial prosperity is menaced. The social position of the wage-earner, his share in growing opportunities which increasing production offers, his purchasing power measured by national production then has declined. It is in order to measure the social position of the worker, his share in growing opportunities, his purchasing power in relation to the national product, that we calculate social wages, i.e., money wages related to prices and production.
The following table gives an index of the total amount of wages and of the total value of the manufactured product.9

<table>
<thead>
<tr>
<th>Year</th>
<th>Amount of wages</th>
<th>Value of production</th>
</tr>
</thead>
<tbody>
<tr>
<td>1899</td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td>1904</td>
<td>130</td>
<td>130</td>
</tr>
<tr>
<td>1909</td>
<td>171</td>
<td>181</td>
</tr>
<tr>
<td>1914</td>
<td>203</td>
<td>213</td>
</tr>
<tr>
<td>1919</td>
<td>524</td>
<td>547</td>
</tr>
<tr>
<td>1920</td>
<td>643</td>
<td>687</td>
</tr>
<tr>
<td>1921</td>
<td>408</td>
<td>383</td>
</tr>
<tr>
<td>1922</td>
<td>465</td>
<td>499</td>
</tr>
<tr>
<td>1923</td>
<td>548</td>
<td>531</td>
</tr>
<tr>
<td>1924</td>
<td>504</td>
<td>466</td>
</tr>
<tr>
<td>1925</td>
<td>534</td>
<td>550</td>
</tr>
<tr>
<td>1926</td>
<td>543</td>
<td>550</td>
</tr>
<tr>
<td>1927</td>
<td>523</td>
<td>511</td>
</tr>
</tbody>
</table>

9 Index of “Amount of Wages” based on statistics from the Census of Manufactures. Figures for years not covered by Census investigations—1920, 1922, 1924, 1926, 1927—are calculated with the help of the index figures of payrolls in manufacturing industries, constructed by the Federal Reserve Board. Index of “Value of Production” based on statistics from Census of Manufacturers. Figures for years not covered by Census investigations—
The development seems not so unfavorable to Labor. There are some years which indicate an increase in the value of production higher than that for wages; but there are other years which indicate an increase of wages higher than that of the value of production. However, these figures deceive, since they do not take into account changes in the number of wage-earners and in the population. It is obvious that ten million dollars in wages mean one thing to ten thousand wage-earners and another to five thousand. It is obvious that a hundred million pairs of shoes mean one thing to a population of ninety million and another to a population of a hundred and twenty million. We must, therefore, modify the index of wages according to the number of workers who receive them.

1920, 1922, 1924, 1926, 1927—are calculated by multiplying the index of the physical volume of production (constructed by the Federal Reserve Board) by the index of wholesale prices of non-agricultural commodities (constructed by the U. S. Bureau of Labor Statistics).
and the index of production according to changes in the population.¹⁰

<table>
<thead>
<tr>
<th>Year</th>
<th>Amount of wages</th>
<th>Value of production</th>
</tr>
</thead>
<tbody>
<tr>
<td>1899</td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td>1904</td>
<td>112</td>
<td>117</td>
</tr>
<tr>
<td>1909</td>
<td>122</td>
<td>150</td>
</tr>
<tr>
<td>1914</td>
<td>136</td>
<td>162</td>
</tr>
<tr>
<td>1919</td>
<td>272</td>
<td>390</td>
</tr>
<tr>
<td>1920</td>
<td>326</td>
<td>483</td>
</tr>
<tr>
<td>1921</td>
<td>277</td>
<td>264</td>
</tr>
<tr>
<td>1922</td>
<td>300</td>
<td>340</td>
</tr>
<tr>
<td>1923</td>
<td>294</td>
<td>356</td>
</tr>
<tr>
<td>1924</td>
<td>300</td>
<td>307</td>
</tr>
<tr>
<td>1925</td>
<td>300</td>
<td>356</td>
</tr>
<tr>
<td>1926</td>
<td>305</td>
<td>351</td>
</tr>
<tr>
<td>1927</td>
<td>305</td>
<td>321</td>
</tr>
</tbody>
</table>

At once the picture looks different. There is only one year now—1921—in which the index of wages is higher than the index of the value of production. If now we divide the index of the total value of production into the index of the total amount of

²⁰ Figures as to the number of wage-earners from Census of Manufactures and the Federal Reserve Bulletin. Figures as to the population from Statistical Abstract of the United States, 1926. The population for 1927 is estimated.
wages, we will get an index of social wages (wages measured by prices and production, that is by the total value of production), an index of the social position of the manufacturing wage-earner which shows even more clearly than the two indices above the very unfavorable development during the twentieth century. The index of social wages runs: 11

11 Against the index as a whole the following objections might be made: The wage-earner does not buy all products produced in manufacturing industry, but only a part of them; he does not buy locomotives, nor does he buy cement. He buys only those products which are offered on the retail market. In addition, he does not buy at wholesale but at retail prices. Therefore one should not investigate the purchasing power of Labor over the wholesale product but over the retail product. The objection is entirely justified. But there is no reliable statistical material which would permit such an investigation. However, it is not very probable that the changes in the purchasing power over the retail product are very different from those over the wholesale product, and we may assume that the index of Labor's purchasing power over the wholesale product is fairly indicative of Labor's purchasing power over the retail product.

As to the index constructed for the years not covered by Census investigations the following has to be borne in mind: The index
<table>
<thead>
<tr>
<th>Year</th>
<th>Index</th>
</tr>
</thead>
<tbody>
<tr>
<td>1899</td>
<td>100</td>
</tr>
<tr>
<td>1904</td>
<td>95</td>
</tr>
<tr>
<td>1909</td>
<td>81</td>
</tr>
<tr>
<td>1914</td>
<td>84</td>
</tr>
<tr>
<td>1919</td>
<td>70</td>
</tr>
<tr>
<td>1920</td>
<td>68</td>
</tr>
<tr>
<td>1921</td>
<td>105</td>
</tr>
<tr>
<td>1922</td>
<td>79</td>
</tr>
<tr>
<td>1923</td>
<td>83</td>
</tr>
<tr>
<td>1924</td>
<td>98</td>
</tr>
<tr>
<td>1925</td>
<td>84</td>
</tr>
<tr>
<td>1926</td>
<td>87</td>
</tr>
<tr>
<td>1927</td>
<td>95</td>
</tr>
</tbody>
</table>

The table reveals the fact that social wages in 1927 are just as high of the physical volume of production of manufactures represents only fluctuations in production of important basic commodities for which monthly statistics are available. Because of the basic nature of these products, the index is indirectly representative of the production of a larger number of products.

The indices of employment and payrolls include a number of industries not represented in the production index—notably, machinery, wearing apparel, furniture, bakery products, and chemicals. The employment index also includes all workers whose names appear on the payroll and makes no allowances for changes in the degree of skill or in occupations of workers.

The index of wholesale prices of non-agricultural commodities is also made up chiefly of basic commodities and does not include a large number of products of manufacture for which current price quotations are not obtainable. This index also includes a number of commodities which are not produced in manufacturing establishments.
as in 1904, and somewhat lower than in 1899. Social wages decreased from 1899 to 1904, and from 1904 to 1909. From 1909 to 1914, they increased a little, but decreased again sharply from 1914 to 1919 and a trifle from 1919 to 1920. In 1920 they have reached their lowest point; they were 32 per cent lower than in 1899. From 1920 to 1921 social wages increased materially, reaching a level by 5 per cent higher than that in 1899. From 1921 to 1922 they decrease again, but increase from 1922 to 1923 and from 1923 to 1924. From 1924 to 1925 there is again a decrease, but increases take place from 1925 to 1926 and from 1926 to 1927.

In most of the years social wages were lower than at the beginning of the twentieth century. Today, however, they have nearly reached the 1899 level; that is, wages have increased almost as much as prices and production.

In concluding these studies of money, real and social wages in manufacturing industry as a whole, com-
pare the development of these three types of wages in the following table:

<table>
<thead>
<tr>
<th>Year</th>
<th>Money</th>
<th>Real</th>
<th>Social</th>
</tr>
</thead>
<tbody>
<tr>
<td>1899</td>
<td>100</td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td>1904</td>
<td>112</td>
<td>100</td>
<td>95</td>
</tr>
<tr>
<td>1909</td>
<td>122</td>
<td>92</td>
<td>81</td>
</tr>
<tr>
<td>1914</td>
<td>136</td>
<td>90</td>
<td>84</td>
</tr>
<tr>
<td>1919</td>
<td>272</td>
<td>100</td>
<td>70</td>
</tr>
<tr>
<td>1920</td>
<td>326</td>
<td>105</td>
<td>68</td>
</tr>
<tr>
<td>1921</td>
<td>277</td>
<td>107</td>
<td>105</td>
</tr>
<tr>
<td>1922</td>
<td>269</td>
<td>111</td>
<td>79</td>
</tr>
<tr>
<td>1923</td>
<td>294</td>
<td>118</td>
<td>83</td>
</tr>
<tr>
<td>1924</td>
<td>300</td>
<td>122</td>
<td>98</td>
</tr>
<tr>
<td>1925</td>
<td>300</td>
<td>118</td>
<td>84</td>
</tr>
<tr>
<td>1926</td>
<td>305</td>
<td>120</td>
<td>87</td>
</tr>
<tr>
<td>1927</td>
<td>305</td>
<td>122</td>
<td>95</td>
</tr>
</tbody>
</table>
Chapter 3

The Cost of Wages to the Manufacturer

The income of industry is distributed in wages, purchases of raw materials, profits, taxes, advertising, and so on. If we leave out of consideration the part of the income spent for raw materials, industry spends about half its income for wages. The table on page 38 shows the total amount of wages spent and the value created by industry, the sale of which brings the income which is spent for wages, profits, taxes and all other items in the budget of an industry with the exception of raw materials.¹

If we divide the value added into the total amount of wages paid we get the percentage that wages are of all expenditures (except those for raw materials). The percentage is: (See table p. 38.)

It is very interesting to note that the relative cost of wages has fluctuated very little. They were high-

¹ Compare Census of Manufactures.
<table>
<thead>
<tr>
<th>Year</th>
<th>Wages</th>
<th>Value added by manufacture</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>In millions of dollars</td>
<td>In millions of dollars</td>
</tr>
<tr>
<td>1899</td>
<td>2,008</td>
<td>4,831</td>
</tr>
<tr>
<td>1904</td>
<td>2,610</td>
<td>6,294</td>
</tr>
<tr>
<td>1909</td>
<td>3,427</td>
<td>8,529</td>
</tr>
<tr>
<td>1914</td>
<td>4,078</td>
<td>9,878</td>
</tr>
<tr>
<td>1919</td>
<td>10,533</td>
<td>25,042</td>
</tr>
<tr>
<td>1921</td>
<td>8,202</td>
<td>18,332</td>
</tr>
<tr>
<td>1923</td>
<td>11,009</td>
<td>25,850</td>
</tr>
<tr>
<td>1925</td>
<td>10,730</td>
<td>26,778</td>
</tr>
</tbody>
</table>

**Percentage of Labor Costs**

<table>
<thead>
<tr>
<th>Year</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1899</td>
<td>.416</td>
</tr>
<tr>
<td>1904</td>
<td>.415</td>
</tr>
<tr>
<td>1909</td>
<td>.402</td>
</tr>
<tr>
<td>1914</td>
<td>.413</td>
</tr>
<tr>
<td>1919</td>
<td>.421</td>
</tr>
<tr>
<td>1921</td>
<td>.447</td>
</tr>
<tr>
<td>1923</td>
<td>.426</td>
</tr>
<tr>
<td>1925</td>
<td>.401</td>
</tr>
</tbody>
</table>

Est in 1921 and smallest in 1925. In 1921 profits were very small, that is, the expenditures for profits were very low and profits decreased much more than wages. (You can run a factory for some time with no profits, even with a loss, but you can not employ workers without paying anything to them or by receiving pay-
ment from them.) So, in 1921, the percentage of wages was greater than in the year of prosperity, 1925, when profits were high. In 1921 the expenditures for wages were 11 per cent higher than in 1925. The greatest fluctuation occurred from 1919 to 1921, when the costs of wages fluctuated by over 6 per cent. In 1925 the costs of wages were about the same as in 1909. No decided tendency of an increase or decrease of the costs of wages can be observed.

On the other side we know that wages of the individual worker have fluctuated widely in the years under review. Money wages have increased very much, real wages have decreased at first and then increased, being today about 20 per cent higher than in 1899 and about 30 per cent higher than in 1914, social wages have decreased in the beginning of the century and recovered quite a bit in recent years. This contrast in the development of wages and of their relative cost to the manufacturer leads to this curious question: Is
there any relation between changes in real wages, changes in social wages and changes in the cost of wages? That is, has an increase of real or social wages resulted in an increase of the cost of wages for the manufacturer? has a decrease in real or social wages resulted in a decrease of the cost of wages to the manufacturer?

The following table gives the index of real wages and the index of the relative costs of wages to the manufacturer:

<table>
<thead>
<tr>
<th>Year</th>
<th>Real wages</th>
<th>Costs of wages</th>
</tr>
</thead>
<tbody>
<tr>
<td>1899</td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td>1904</td>
<td>100.4</td>
<td>99.8</td>
</tr>
<tr>
<td>1909</td>
<td>92.2</td>
<td>96.6</td>
</tr>
<tr>
<td>1914</td>
<td>90.3</td>
<td>99.3</td>
</tr>
<tr>
<td>1919</td>
<td>99.7</td>
<td>101.2</td>
</tr>
<tr>
<td>1921</td>
<td>107.4</td>
<td>107.5</td>
</tr>
<tr>
<td>1923</td>
<td>118.1</td>
<td>102.4</td>
</tr>
<tr>
<td>1925</td>
<td>118.4</td>
<td>96.4</td>
</tr>
</tbody>
</table>

The percentage of the changes in real wages and cost of wages from year to year is:
The result of this comparison is striking. From 1899 to 1904 real wages increase a trifle, while the relative cost of wages decrease a trifle. From 1904 to 1909 real wages decrease by over 8 per cent, while the cost of wages decrease only by about 3 per cent. From 1909 to 1914 real wages continue to decrease, while the cost of wages increases. From 1914 to 1919 real wages increase by 10.4 per cent, while the cost of wages increase only by 1.9 per cent; that is, not quite one-fifth of the increase of real wages. From 1919 to 1921 real wages and the cost of wages increase by about the same amount. From 1921 to 1923 real wages in-

<table>
<thead>
<tr>
<th>Years</th>
<th>Real wages</th>
<th>Cost of wages</th>
</tr>
</thead>
<tbody>
<tr>
<td>1899/1904</td>
<td>+0.4</td>
<td>-0.2</td>
</tr>
<tr>
<td>1904/1909</td>
<td>-8.2</td>
<td>-3.2</td>
</tr>
<tr>
<td>1909/1914</td>
<td>-2.1</td>
<td>+2.8</td>
</tr>
<tr>
<td>1914/1919</td>
<td>+10.4</td>
<td>+1.9</td>
</tr>
<tr>
<td>1919/1921</td>
<td>+7.7</td>
<td>+6.2</td>
</tr>
<tr>
<td>1921/1923</td>
<td>+10.0</td>
<td>-4.7</td>
</tr>
<tr>
<td>1923/1925</td>
<td>+0.3</td>
<td>-5.9</td>
</tr>
</tbody>
</table>
crease by 10 per cent, while the cost of wages decreases by almost 5 per cent. And while real wages continue to increase from 1923 to 1925, the cost of wages continues to decrease.

What does that mean? It means that an increase of real wages does not necessarily result in an increase of the cost of wages to the manufacturer. Real wages increased from 1921 to 1925 by over 10 per cent, but the cost of wages decreased at the same time by over 10 per cent. This shows that changes in the cost of other items, such as profits, or equipment, or the productivity of labor play a much more important rôle than changes in real wages. If it is possible that real wages increase by 10 per cent while the cost of wages decreases by 10 per cent, a manufacturer can no longer say: "An increase in real wages is impossible because it would increase my expenditures correspondingly." There are so many ways of compensating for an increase of wages; and increases of wages have so often been compensated by increasing productivity or in-
creasing efficiency with the result that the relative cost of wages even decreased while real wages increased, that the manufacturer's chief argument either against increases of wages or for decreases of wages must become invalid. It simply is not true that an increase of real wages must mean an increasing burden upon industry or that a decrease of real wages relieves industry.

How about the relation of social wages and the cost of wages? The following table gives the index of social wages and the index of the relative costs of wages to the manufacturer:

<table>
<thead>
<tr>
<th>Year</th>
<th>Social wages</th>
<th>Cost of wages</th>
</tr>
</thead>
<tbody>
<tr>
<td>1899</td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td>1904</td>
<td>95</td>
<td>100</td>
</tr>
<tr>
<td>1909</td>
<td>84</td>
<td>97</td>
</tr>
<tr>
<td>1914</td>
<td>84</td>
<td>99</td>
</tr>
<tr>
<td>1919</td>
<td>70</td>
<td>101</td>
</tr>
<tr>
<td>1921</td>
<td>105</td>
<td>107</td>
</tr>
<tr>
<td>1923</td>
<td>83</td>
<td>102</td>
</tr>
<tr>
<td>1925</td>
<td>84</td>
<td>96</td>
</tr>
</tbody>
</table>
The following table gives the percentage of the changes in social wages and cost of wages:

<table>
<thead>
<tr>
<th>Years</th>
<th>Social wages</th>
<th>Cost of wages</th>
</tr>
</thead>
<tbody>
<tr>
<td>1899/1904</td>
<td>-5</td>
<td>-0</td>
</tr>
<tr>
<td>1904/1909</td>
<td>-15</td>
<td>-3</td>
</tr>
<tr>
<td>1909/1914</td>
<td>+3</td>
<td>+3</td>
</tr>
<tr>
<td>1914/1919</td>
<td>-17</td>
<td>+2</td>
</tr>
<tr>
<td>1919/1921</td>
<td>+50</td>
<td>+6</td>
</tr>
<tr>
<td>1921/1923</td>
<td>-21</td>
<td>-5</td>
</tr>
<tr>
<td>1923/1925</td>
<td>+2</td>
<td>-6</td>
</tr>
</tbody>
</table>

As with real wages, so, also, with social wages, there seems to be no relation between the changes in social wages and the cost of wages. From 1899 to 1904 social wages decrease by 5 per cent, while the cost of wages remains practically unchanged. From 1904 to 1909 social wages decrease about five times as much as the cost of wages to the manufacturer. From 1909 to 1914, social wages and the cost of wages increase by about the
same amount, but from 1914 to 1919 social wages decrease by 17 per cent, while the cost of wages increases by 2 per cent. From 1919 to 1921 social wages increase by 50 per cent, while the cost of wages to the manufacturer increases only by 6 per cent. From 1921 to 1923 social wages decrease more than four times as much as the cost of wages to the manufacturer, and from 1923 to 1925 social wages increase, while the cost of wages continues to decrease.

We see that often a decrease of real wages or of social wages is accompanied by an increase in the cost of wages to the manufacturer. And again; often an increase of real wages or of social wages is accompanied by a decrease of the cost of wages to the manufacturer.

The figures do not bear out the theory that an increase of wages must result in an increase of the relative cost of wages to the manufacturer or that a decrease of wages will diminish the cost of wages. For there are other factors which have a
greater influence in diminishing or increasing the burden of industry. Scientific or wasteful management, able or unable salesmanship, increasing or decreasing productivity might and do easily compensate increases or decreases of wages.
Chapter 4

Wages in Individual Industries

After having dealt in the second chapter with wages in industry as a whole, we survey in this fourth chapter wages in individual industries. First we shall give the statistics of wages and then show tendencies in their development.

In order that the meaning of the figures may be clear from the beginning on, we will state already here the chief results:

Wages in industries paying a high income to the worker such as the automobile or the chemical industry increased up to 1921 at a slower rate than wages in industries paying a low income such as the textile and food industries, for instance. That is, up to 1921 there prevailed a tendency to level wages. From 1921 on, however, there is a reaction and those industries paying a high income also increased wages more than those industries which pay a low income to the worker. That is, from 1921 on up today there prevails a tendency
to widen the difference between high wages and low wages. This holds true for money wages as well as for real wages.

In spite of the difference in the increase of wages, the rank of the industries according to the income they pay to the worker has not changed materially. The reason for this is the great difference in wages. Even if the textile industry, for instance, increases wages by 10 per cent more than the automobile industry does; the wages of textile workers are still much lower than those of the automobile workers, because the wages in the automobile industry to start with are so much higher.

1. Money Wages.

The following table gives for nine important industrial groups the number of wage-earners, and the yearly money wage income per individual wage earner.¹

¹ Figures for 1899 to 1925 adjusted to classification of Census of Manufacturers, 1925. The adjustment did not fully succeed in the following cases:

Food and Kindred Products: 1899 figure excludes “Peanuts, grading, roasting, cleaning and shelling.”
### Automobiles

<table>
<thead>
<tr>
<th>Year</th>
<th>Wage-earners</th>
<th>Yearly income per individual wage-earner</th>
</tr>
</thead>
<tbody>
<tr>
<td>1899</td>
<td>2,241</td>
<td>$589</td>
</tr>
<tr>
<td>1904</td>
<td>12,049</td>
<td>594</td>
</tr>
<tr>
<td>1909</td>
<td>75,721</td>
<td>643</td>
</tr>
<tr>
<td>1914</td>
<td>127,092</td>
<td>802</td>
</tr>
<tr>
<td>1919</td>
<td>343,115</td>
<td>1,431</td>
</tr>
<tr>
<td>1921</td>
<td>212,777</td>
<td>1,498</td>
</tr>
<tr>
<td>1923</td>
<td>404,886</td>
<td>1,630</td>
</tr>
<tr>
<td>1925</td>
<td>426,110</td>
<td>1,675</td>
</tr>
<tr>
<td>1927</td>
<td>393,129</td>
<td>1,603</td>
</tr>
</tbody>
</table>

### Chemicals and Allied Products

<table>
<thead>
<tr>
<th>Year</th>
<th>Wage-earners</th>
<th>Yearly income per individual wage-earner</th>
</tr>
</thead>
<tbody>
<tr>
<td>1899</td>
<td>208,129</td>
<td>$484</td>
</tr>
<tr>
<td>1904</td>
<td>259,632</td>
<td>529</td>
</tr>
<tr>
<td>1909</td>
<td>301,955</td>
<td>565</td>
</tr>
<tr>
<td>1914</td>
<td>349,154</td>
<td>645</td>
</tr>
<tr>
<td>1919</td>
<td>460,641</td>
<td>1,195</td>
</tr>
<tr>
<td>1921</td>
<td>314,231</td>
<td>1,287</td>
</tr>
<tr>
<td>1923</td>
<td>384,493</td>
<td>1,304</td>
</tr>
<tr>
<td>1925</td>
<td>381,075</td>
<td>1,329</td>
</tr>
<tr>
<td>1927</td>
<td>392,279</td>
<td>1,419</td>
</tr>
</tbody>
</table>

*Lumber and Allied Products: 1899, 1904, and 1909 figures include "Pulp wood."

Figures for 1927 calculated with the help of the index figures of employment and pay rolls constructed by the Federal Reserve Board.*
### Food and Kindred Products

<table>
<thead>
<tr>
<th>Year</th>
<th>Wage-earners</th>
<th>Yearly income per individual wage-earner</th>
</tr>
</thead>
<tbody>
<tr>
<td>1899</td>
<td>312,991</td>
<td>$420</td>
</tr>
<tr>
<td>1904</td>
<td>370,717</td>
<td>469</td>
</tr>
<tr>
<td>1909</td>
<td>434,811</td>
<td>512</td>
</tr>
<tr>
<td>1914</td>
<td>527,887</td>
<td>566</td>
</tr>
<tr>
<td>1919</td>
<td>723,124</td>
<td>1,059</td>
</tr>
<tr>
<td>1921</td>
<td>617,736</td>
<td>1,193</td>
</tr>
<tr>
<td>1923</td>
<td>672,472</td>
<td>1,168</td>
</tr>
<tr>
<td>1925</td>
<td>664,760</td>
<td>1,194</td>
</tr>
<tr>
<td>1927</td>
<td>658,645</td>
<td>1,226</td>
</tr>
</tbody>
</table>

### Iron and Steel

<table>
<thead>
<tr>
<th>Year</th>
<th>Wage-earners</th>
<th>Yearly income per individual wage-earner</th>
</tr>
</thead>
<tbody>
<tr>
<td>1899</td>
<td>222,490</td>
<td>$543</td>
</tr>
<tr>
<td>1904</td>
<td>242,640</td>
<td>583</td>
</tr>
<tr>
<td>1909</td>
<td>278,505</td>
<td>674</td>
</tr>
<tr>
<td>1914</td>
<td>278,072</td>
<td>759</td>
</tr>
<tr>
<td>1919</td>
<td>418,384</td>
<td>1,707</td>
</tr>
<tr>
<td>1921</td>
<td>254,213</td>
<td>1,394</td>
</tr>
<tr>
<td>1923</td>
<td>424,913</td>
<td>1,640</td>
</tr>
<tr>
<td>1925</td>
<td>399,914</td>
<td>1,651</td>
</tr>
<tr>
<td>1927</td>
<td>393,555</td>
<td>1,662</td>
</tr>
</tbody>
</table>
### Leather and Its Manufactures

<table>
<thead>
<tr>
<th>Year</th>
<th>Wage-earners</th>
<th>Yearly income per individual wage-earner</th>
</tr>
</thead>
<tbody>
<tr>
<td>1899</td>
<td>248,626</td>
<td>$408</td>
</tr>
<tr>
<td>1904</td>
<td>264,459</td>
<td>457</td>
</tr>
<tr>
<td>1909</td>
<td>309,766</td>
<td>501</td>
</tr>
<tr>
<td>1914</td>
<td>307,060</td>
<td>552</td>
</tr>
<tr>
<td>1919</td>
<td>349,362</td>
<td>1,040</td>
</tr>
<tr>
<td>1921</td>
<td>280,071</td>
<td>1,123</td>
</tr>
<tr>
<td>1923</td>
<td>344,545</td>
<td>1,128</td>
</tr>
<tr>
<td>1925</td>
<td>315,288</td>
<td>1,130</td>
</tr>
<tr>
<td>1927</td>
<td>302,204</td>
<td>1,122</td>
</tr>
</tbody>
</table>

### Lumber and Allied Products

<table>
<thead>
<tr>
<th>Year</th>
<th>Wage-earners</th>
<th>Yearly income per individual wage-earner</th>
</tr>
</thead>
<tbody>
<tr>
<td>1899</td>
<td>708,513</td>
<td>$367</td>
</tr>
<tr>
<td>1904</td>
<td>761,772</td>
<td>447</td>
</tr>
<tr>
<td>1909</td>
<td>946,210</td>
<td>456</td>
</tr>
<tr>
<td>1914</td>
<td>865,009</td>
<td>516</td>
</tr>
<tr>
<td>1919</td>
<td>863,937</td>
<td>995</td>
</tr>
<tr>
<td>1921</td>
<td>703,309</td>
<td>953</td>
</tr>
<tr>
<td>1923</td>
<td>931,748</td>
<td>1,033</td>
</tr>
<tr>
<td>1925</td>
<td>921,145</td>
<td>1,062</td>
</tr>
<tr>
<td>1927</td>
<td>837,782</td>
<td>1,107</td>
</tr>
</tbody>
</table>
### Paper, Printing, and Related Industries

<table>
<thead>
<tr>
<th>Year</th>
<th>Wage-earners</th>
<th>Yearly income per individual wage-earner</th>
</tr>
</thead>
<tbody>
<tr>
<td>1899</td>
<td>298,820</td>
<td>$471</td>
</tr>
<tr>
<td>1904</td>
<td>351,689</td>
<td>530</td>
</tr>
<tr>
<td>1909</td>
<td>416,119</td>
<td>582</td>
</tr>
<tr>
<td>1914</td>
<td>453,006</td>
<td>655</td>
</tr>
<tr>
<td>1919</td>
<td>510,049</td>
<td>1,107</td>
</tr>
<tr>
<td>1921</td>
<td>467,256</td>
<td>1,364</td>
</tr>
<tr>
<td>1923</td>
<td>527,019</td>
<td>1,410</td>
</tr>
<tr>
<td>1925</td>
<td>536,766</td>
<td>1,501</td>
</tr>
<tr>
<td>1927</td>
<td>553,138</td>
<td>1,572</td>
</tr>
</tbody>
</table>

### Textiles and Their Products

<table>
<thead>
<tr>
<th>Year</th>
<th>Wage-earners</th>
<th>Yearly income per individual wage-earner</th>
</tr>
</thead>
<tbody>
<tr>
<td>1899</td>
<td>1,028,706</td>
<td>$334</td>
</tr>
<tr>
<td>1904</td>
<td>1,163,497</td>
<td>363</td>
</tr>
<tr>
<td>1909</td>
<td>1,445,720</td>
<td>412</td>
</tr>
<tr>
<td>1914</td>
<td>1,506,197</td>
<td>449</td>
</tr>
<tr>
<td>1919</td>
<td>1,610,067</td>
<td>920</td>
</tr>
<tr>
<td>1921</td>
<td>1,509,789</td>
<td>975</td>
</tr>
<tr>
<td>1923</td>
<td>1,715,361</td>
<td>1,017</td>
</tr>
<tr>
<td>1925</td>
<td>1,627,141</td>
<td>1,017</td>
</tr>
<tr>
<td>1927</td>
<td>1,584,998</td>
<td>1,027</td>
</tr>
</tbody>
</table>
This survey embraces about 65 per cent of all manufacturing wage-earners. It gives a fairly representative picture of all kinds of development in the income of manufacturing wage-earners. There are industries which pay to the individual wage-earner an income above the average, and industries which pay below the average. There are industries in which the income increases more than the average of manufacturing industry as a whole, and industries in which it increases less than the average. In order to make comparisons easier we will group the individual

<table>
<thead>
<tr>
<th>Year</th>
<th>Wage-earners</th>
<th>Yearly income per individual wage-earner</th>
</tr>
</thead>
<tbody>
<tr>
<td>1899</td>
<td>132,526</td>
<td>$362</td>
</tr>
<tr>
<td>1904</td>
<td>159,406</td>
<td>393</td>
</tr>
<tr>
<td>1909</td>
<td>166,810</td>
<td>416</td>
</tr>
<tr>
<td>1914</td>
<td>178,872</td>
<td>435</td>
</tr>
<tr>
<td>1919</td>
<td>157,097</td>
<td>789</td>
</tr>
<tr>
<td>1921</td>
<td>149,985</td>
<td>806</td>
</tr>
<tr>
<td>1923</td>
<td>146,337</td>
<td>823</td>
</tr>
<tr>
<td>1925</td>
<td>132,132</td>
<td>844</td>
</tr>
<tr>
<td>1927</td>
<td>120,756</td>
<td>857</td>
</tr>
</tbody>
</table>
industries according to some of the features mentioned. The following table groups the industries according to the amount of the income of the individual wage-earner in 1899, beginning with the industries paying the highest income.

<table>
<thead>
<tr>
<th>Industries</th>
<th>The wage-earner's income in 1899</th>
</tr>
</thead>
<tbody>
<tr>
<td>Automobiles</td>
<td>$589</td>
</tr>
<tr>
<td>Iron and steel</td>
<td>543</td>
</tr>
<tr>
<td>Chemicals</td>
<td>484</td>
</tr>
<tr>
<td>Paper and printing.</td>
<td>471</td>
</tr>
<tr>
<td>Manufacturing industry as a whole</td>
<td>426</td>
</tr>
<tr>
<td>Food</td>
<td>420</td>
</tr>
<tr>
<td>Leather</td>
<td>408</td>
</tr>
<tr>
<td>Lumber</td>
<td>367</td>
</tr>
<tr>
<td>Tobacco</td>
<td>362</td>
</tr>
<tr>
<td>Textiles</td>
<td>334</td>
</tr>
</tbody>
</table>

The automobile industry paid the highest income and the textile industry paid the lowest income. The industries manufacturing food, leather, lumber, tobacco, and textile products paid below the average for manufacturing industry as a whole.

Has this order changed in the course of the years? The two next tables give the individual industries
according to the income they paid to the individual wage-earner in 1921 and in 1927.

<table>
<thead>
<tr>
<th>Industries</th>
<th>Income in 1921</th>
</tr>
</thead>
<tbody>
<tr>
<td>Automobiles</td>
<td>$1,498</td>
</tr>
<tr>
<td>Iron and steel</td>
<td>1,394</td>
</tr>
<tr>
<td>Paper and printing</td>
<td>1,364</td>
</tr>
<tr>
<td>Chemicals</td>
<td>1,287</td>
</tr>
<tr>
<td>Food</td>
<td>1,193</td>
</tr>
<tr>
<td>Manufacturing industry as a whole</td>
<td>1,181</td>
</tr>
<tr>
<td>Leather</td>
<td>1,123</td>
</tr>
<tr>
<td>Textiles</td>
<td>975</td>
</tr>
<tr>
<td>Lumber</td>
<td>953</td>
</tr>
<tr>
<td>Tobacco</td>
<td>806</td>
</tr>
</tbody>
</table>

If we compare this table with the previous one, showing the wages for 1899, we note that only minor changes have taken place. As in 1899, so in 1921 the highest paying industries are the automobile, the iron and steel, the chemical and the paper and printing industry. The food industry in 1921 pays an income somewhat higher than the average income of the worker in manufacturing industry as a whole. The textile industry in 1921 pays higher wages than the lumber and tobacco industry and has advanced from the last to the third last rank.
### Industries

<table>
<thead>
<tr>
<th>Industry</th>
<th>Income 1927</th>
</tr>
</thead>
<tbody>
<tr>
<td>Iron and steel</td>
<td>$1,662</td>
</tr>
<tr>
<td>Automobiles</td>
<td>1,603</td>
</tr>
<tr>
<td>Paper and printing</td>
<td>1,572</td>
</tr>
<tr>
<td>Chemicals</td>
<td>1,419</td>
</tr>
<tr>
<td>Manufacturing industry as a whole</td>
<td>1,301</td>
</tr>
<tr>
<td>Food</td>
<td>1,226</td>
</tr>
<tr>
<td>Leather</td>
<td>1,122</td>
</tr>
<tr>
<td>Lumber</td>
<td>1,107</td>
</tr>
<tr>
<td>Textiles</td>
<td>1,027</td>
</tr>
<tr>
<td>Tobacco</td>
<td>857</td>
</tr>
</tbody>
</table>

The table again looks not very different from that for the year 1899 and is very similar to that for the year 1921. We see, as to the rank of the industries according to the income they pay to the worker, not many changes have taken place in this century.

That does, however, not mean that wages in all industries increased or decreased at the same rate. There have been great differences in the increases.

The comparison of these differences in the wage increases in the individual industries is facilitated by the following table which gives the index of the yearly income of wage-earners.
in the individual industries from 1899 to 1927, beginning with the income which increased most.

### Index of the Yearly Income of the Individual Wage-Earner

<table>
<thead>
<tr>
<th>Year</th>
<th>Paper and printing</th>
<th>Textiles</th>
<th>Iron and steel</th>
<th>Mfg. industry</th>
</tr>
</thead>
<tbody>
<tr>
<td>1899</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td>1904</td>
<td>112.5</td>
<td>108.7</td>
<td>107.3</td>
<td>112.0</td>
</tr>
<tr>
<td>1909</td>
<td>123.6</td>
<td>123.4</td>
<td>124.2</td>
<td>121.6</td>
</tr>
<tr>
<td>1914</td>
<td>139.1</td>
<td>131.4</td>
<td>139.7</td>
<td>136.0</td>
</tr>
<tr>
<td>1919</td>
<td>235.0</td>
<td>275.4</td>
<td>314.3</td>
<td>271.7</td>
</tr>
<tr>
<td>1921</td>
<td>289.6</td>
<td>291.9</td>
<td>256.7</td>
<td>277.1</td>
</tr>
<tr>
<td>1923</td>
<td>299.4</td>
<td>304.5</td>
<td>302.0</td>
<td>294.3</td>
</tr>
<tr>
<td>1925</td>
<td>318.7</td>
<td>304.5</td>
<td>304.0</td>
<td>300.3</td>
</tr>
<tr>
<td>1927</td>
<td>333.8</td>
<td>307.5</td>
<td>306.0</td>
<td>305.4</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Year</th>
<th>Lumber</th>
<th>Chemicals</th>
<th>Food</th>
<th>Leather</th>
</tr>
</thead>
<tbody>
<tr>
<td>1899</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td>1904</td>
<td>121.9</td>
<td>109.3</td>
<td>111.7</td>
<td>112.0</td>
</tr>
<tr>
<td>1909</td>
<td>124.3</td>
<td>116.7</td>
<td>121.9</td>
<td>122.8</td>
</tr>
<tr>
<td>1914</td>
<td>140.6</td>
<td>133.3</td>
<td>134.8</td>
<td>135.3</td>
</tr>
<tr>
<td>1919</td>
<td>271.1</td>
<td>246.9</td>
<td>252.1</td>
<td>254.9</td>
</tr>
<tr>
<td>1921</td>
<td>259.7</td>
<td>265.9</td>
<td>284.0</td>
<td>275.2</td>
</tr>
<tr>
<td>1923</td>
<td>281.5</td>
<td>269.5</td>
<td>278.1</td>
<td>276.5</td>
</tr>
<tr>
<td>1925</td>
<td>289.4</td>
<td>274.6</td>
<td>284.3</td>
<td>277.0</td>
</tr>
<tr>
<td>1927</td>
<td>301.6</td>
<td>293.2</td>
<td>291.9</td>
<td>275.0</td>
</tr>
<tr>
<td>Year</td>
<td>Automobiles</td>
<td>Tobacco</td>
<td></td>
<td></td>
</tr>
<tr>
<td>------</td>
<td>-------------</td>
<td>---------</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1899</td>
<td>100</td>
<td>100</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1904</td>
<td>100.8</td>
<td>108.6</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1909</td>
<td>109.2</td>
<td>114.9</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1914</td>
<td>136.2</td>
<td>120.2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1919</td>
<td>243.0</td>
<td>218.0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1921</td>
<td>254.3</td>
<td>222.7</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1923</td>
<td>276.7</td>
<td>227.3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1925</td>
<td>284.4</td>
<td>233.2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1927</td>
<td>272.2</td>
<td>236.7</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

This table is extraordinarily interesting. It shows that neither the industries paying the highest income nor those paying the lowest income have most increased their payments. Among the industries which have paid an income with the smallest increase from 1899 to 1927 are the automobile industry and the industry manufacturing tobacco products, the first always paying the highest or second highest income in the years reviewed before, the other always paying the lowest or second lowest income. Among those paying incomes which have increased very much from 1899 to 1927 are the paper and printing industry, which in the years
reviewed before paid an income al-
ways above the average of manufac-
turing industry as a whole, and the
textile industry, which paid an income
always below the average of manu-
facturing industry as a whole. There
is no tendency to lessen the differ-
ences between industries by paying
to the lower-paid workers incomes in-
creasing at a greater rate than that
of the higher-paid workers.

However, the situation has not al-
ways been so unfavorable to the
workers receiving a comparatively
low income. The table on page 60
compares the industries as to the
amount of income paid in 1899 and
as to the increase in the income up to
1921, in the one case starting with
the industry paying the highest in-
come, in the other with the industry
paying the most increased income.

The table shows that up to 1921
there was a process of adjustment.
The income in industries paying a
high one increased less than that in
industries paying a small one. Out
of the five industries paying in 1899
a comparatively low income three be-
long in 1921 to the four industries having a comparatively high increase in the income paid. Out of the four

<table>
<thead>
<tr>
<th>Income in 1899</th>
<th>Increase to 1921</th>
</tr>
</thead>
<tbody>
<tr>
<td>Automobiles</td>
<td>Textiles</td>
</tr>
<tr>
<td>Iron and steel</td>
<td>Paper and printing</td>
</tr>
<tr>
<td>Chemicals</td>
<td>Food</td>
</tr>
<tr>
<td>Paper and printing</td>
<td>Mfg. ind. as a whole</td>
</tr>
<tr>
<td>Mfg. ind. as a whole</td>
<td>Leather</td>
</tr>
<tr>
<td>Food</td>
<td>Chemicals</td>
</tr>
<tr>
<td>Leather</td>
<td>Lumber</td>
</tr>
<tr>
<td>Lumber</td>
<td>Iron and steel</td>
</tr>
<tr>
<td>Tobacco</td>
<td>Automobiles</td>
</tr>
<tr>
<td>Textiles</td>
<td>Tobacco</td>
</tr>
</tbody>
</table>

industries paying in 1899 a comparatively high income three belong in 1921 to the five industries having a comparatively small increase in the income paid.

We observe that up to 1921 a tendency prevails to level wages, to increase the income of workers receiving a low one more than the income of workers receiving a high one. After the industrial depression of 1921 this tendency not only has been stopped, but it has been reversed, and those receiving a high income got higher increases than those receiving a low income.
2. Real Wages.

How did the development of money wages compare with that of retail prices? How did real wages develop? The following table gives the index of real wages in the individual industries dealt with before:

<table>
<thead>
<tr>
<th>Year</th>
<th>Automobiles</th>
<th>Chemicals</th>
<th>Food</th>
<th>Iron and steel</th>
<th>Leather</th>
</tr>
</thead>
<tbody>
<tr>
<td>1899</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td>1904</td>
<td>90.3</td>
<td>97.9</td>
<td>90.1</td>
<td>96.2</td>
<td>100.4</td>
</tr>
<tr>
<td>1909</td>
<td>82.8</td>
<td>88.5</td>
<td>89.4</td>
<td>94.1</td>
<td>93.1</td>
</tr>
<tr>
<td>1914</td>
<td>90.4</td>
<td>88.5</td>
<td>92.5</td>
<td>92.7</td>
<td>89.8</td>
</tr>
<tr>
<td>1919</td>
<td>89.2</td>
<td>90.6</td>
<td>89.4</td>
<td>115.3</td>
<td>93.5</td>
</tr>
<tr>
<td>1921</td>
<td>98.6</td>
<td>103.1</td>
<td>110.1</td>
<td>99.5</td>
<td>106.7</td>
</tr>
<tr>
<td>1923</td>
<td>111.0</td>
<td>108.1</td>
<td>111.6</td>
<td>121.1</td>
<td>110.9</td>
</tr>
<tr>
<td>1925</td>
<td>112.1</td>
<td>108.3</td>
<td>112.1</td>
<td>119.9</td>
<td>109.2</td>
</tr>
<tr>
<td>1927</td>
<td>108.6</td>
<td>117.0</td>
<td>116.4</td>
<td>122.0</td>
<td>109.7</td>
</tr>
</tbody>
</table>

If we compare the years 1899 and 1927 we find that real wages have increased in all industries except in that manufacturing tobacco products. The increases vary from 8.6 per cent in the industry manufacturing automobiles to 33.1 per cent in the paper and printing industry.

*Real wages are calculated with the help of Carl Snyder's index of cost of living.*
The following table gives the individual industries arranged according to the increase of real wages from 1899 to 1927:

### Real Wages in 1927

<table>
<thead>
<tr>
<th>Industries</th>
<th>Index 1899 = 100</th>
<th>Increase over 1899</th>
<th>Per cent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Paper and printing</td>
<td>133.1</td>
<td>33.1</td>
<td></td>
</tr>
<tr>
<td>Textiles</td>
<td>122.7</td>
<td>22.7</td>
<td></td>
</tr>
<tr>
<td>Iron and steel</td>
<td>122.0</td>
<td>22.0</td>
<td></td>
</tr>
<tr>
<td>Manufacturing industry as a whole</td>
<td>121.8</td>
<td>21.8</td>
<td></td>
</tr>
<tr>
<td>Lumber</td>
<td>120.3</td>
<td>20.3</td>
<td></td>
</tr>
<tr>
<td>Chemicals</td>
<td>117.0</td>
<td>17.0</td>
<td></td>
</tr>
<tr>
<td>Food</td>
<td>116.4</td>
<td>16.4</td>
<td></td>
</tr>
<tr>
<td>Leather</td>
<td>109.7</td>
<td>9.7</td>
<td></td>
</tr>
<tr>
<td>Automobiles</td>
<td>108.6</td>
<td>8.6</td>
<td></td>
</tr>
<tr>
<td>Tobacco</td>
<td>94.4</td>
<td>-5.6</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Year</th>
<th>Lumber</th>
<th>Mfg. industry</th>
<th>Paper printing</th>
<th>Textiles</th>
<th>Tobacco</th>
</tr>
</thead>
<tbody>
<tr>
<td>1899</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td>1904</td>
<td>109.2</td>
<td>100.4</td>
<td>100.8</td>
<td>97.4</td>
<td>97.3</td>
</tr>
<tr>
<td>1909</td>
<td>94.2</td>
<td>92.2</td>
<td>93.7</td>
<td>93.6</td>
<td>87.1</td>
</tr>
<tr>
<td>1914</td>
<td>93.3</td>
<td>90.3</td>
<td>92.3</td>
<td>89.2</td>
<td>79.8</td>
</tr>
<tr>
<td>1919</td>
<td>99.5</td>
<td>99.7</td>
<td>86.2</td>
<td>101.1</td>
<td>80.0</td>
</tr>
<tr>
<td>1921</td>
<td>100.7</td>
<td>107.4</td>
<td>112.2</td>
<td>113.1</td>
<td>86.3</td>
</tr>
<tr>
<td>1923</td>
<td>112.9</td>
<td>118.1</td>
<td>120.1</td>
<td>122.1</td>
<td>91.2</td>
</tr>
<tr>
<td>1925</td>
<td>114.1</td>
<td>118.4</td>
<td>125.7</td>
<td>120.1</td>
<td>92.0</td>
</tr>
<tr>
<td>1927</td>
<td>120.3</td>
<td>121.8</td>
<td>133.1</td>
<td>122.7</td>
<td>94.4</td>
</tr>
</tbody>
</table>
The development was a very different one in the different industries. Some of the industries paying a high money wage income also paid a real wage income increasing at a comparatively great rate, but so did some of the industries paying a low money wage income. The paper and printing industry, for instance, pays usually a high money wage income and real wages in this industry have increased greatly. But so did real wages in the textile industry which pays usually a low money wage income.

But if we look closely at the development from one period to another we make the same observation as with the development of money wages: Up to 1921 a tendency prevails to increase real wages of workers who receive a low income more or to decrease them less than real wages of workers employed in industries paying a comparatively high income. But after the industrial depression of 1921 this tendency not only has been stopped, but it has been reversed, and those receiving a high income got higher increases in real wages that those receiving a low income.
Chapter 5

Wages of Low- and High-Paid Wage-Earners

1. Wages in the North and in the South

Do wages of low paid workers increase more than those of high paid workers? Or do they increase less? Is the standard of living of low paid workers rising faster and more than that of high paid workers or not?

It is a well-known fact that wages in southern manufacturing industries are usually lower than those in northern. Have wages in southern industries increased more than in northern industries? The following table gives the average yearly income of wage-earners in manufacturing industries in the South and in the North.1

1 The states in the South are: Delaware, Maryland, District of Columbia, Virginia, West Virginia, North Carolina, South Carolina, Georgia, Florida; the states in the North are: New York, New Jersey, Pennsylvania. The figures are calculated by dividing the number
At first sight, we observe that the index of southern wages has increased up to 1927 more than that of northern wages; that means that conditions in the South have improved more than in the North. However, the situation is not quite as clear as it seems. The following index of the
increase of southern compared with that of northern wages will show why:

<table>
<thead>
<tr>
<th>Year</th>
<th>Index of relative increase of southern wages over northern wages</th>
</tr>
</thead>
<tbody>
<tr>
<td>1899</td>
<td>100</td>
</tr>
<tr>
<td>1904</td>
<td>108.9</td>
</tr>
<tr>
<td>1909</td>
<td>109.5</td>
</tr>
<tr>
<td>1914</td>
<td>117.0</td>
</tr>
<tr>
<td>1919</td>
<td>125.6</td>
</tr>
<tr>
<td>1921</td>
<td>112.8</td>
</tr>
<tr>
<td>1923</td>
<td>104.6</td>
</tr>
<tr>
<td>1925</td>
<td>104.2</td>
</tr>
<tr>
<td>1927</td>
<td>103.7</td>
</tr>
</tbody>
</table>

We see, up to 1927 southern wages have increased by 3.7 per cent more than northern wages, but if we look back, we will find that up to 1919 southern wages had increased 25.6 per cent more than northern wages. In the last years, therefore, southern wages have increased less than northern wages; northern wages—that is, the wages of the better paid workers—have increased more than those of the worse paid workers. In 1927 the situation of the southern workers compared with that of northern workers is almost as bad as in the
beginning of the century. Doubtless, the southern workers also have shared in the prosperity of the last years, but not in the same degree as the northern workers.

2. Wages of Unskilled and Skilled Workers

How did wages of skilled and unskilled workers develop? Unfortunately, there are no reliable statistics that tell the story of all the workers, but the Bureau of Labor Statistics has published a series of wage studies for quite a few individual industries, among which we choose the study of the cotton industry. The development of the relation of wages of lower and higher paid workers in the United States as a whole is fairly represented by the relation of wages of speeder tenders (comparatively unskilled) and loom fixers (skilled) in the cotton industry. The average hourly earnings of those workers are:²

We see, that up to 1926 the index of wages of speeder tenders—that is, of lower paid workers—has increased more than that of loom fixers or of the higher paid workers. Conditions among the lower paid workers have improved more or deteriorated less than among the higher paid workers. However, one reservation has to be made, as the following index, giving the increase of wages of lower paid workers,

<table>
<thead>
<tr>
<th>Year</th>
<th>Speeder tenders</th>
<th>Loom fixers</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Dollars</td>
<td>Index</td>
</tr>
<tr>
<td>1910</td>
<td>0.13</td>
<td>90.3</td>
</tr>
<tr>
<td>1911</td>
<td>0.14</td>
<td>93.1</td>
</tr>
<tr>
<td>1912</td>
<td>0.14</td>
<td>97.9</td>
</tr>
<tr>
<td>1913</td>
<td>0.15</td>
<td>100.0</td>
</tr>
<tr>
<td>1914</td>
<td>0.15</td>
<td>105.5</td>
</tr>
<tr>
<td>1916</td>
<td>0.17</td>
<td>120.0</td>
</tr>
<tr>
<td>1918</td>
<td>0.27</td>
<td>182.8</td>
</tr>
<tr>
<td>1920</td>
<td>0.53</td>
<td>367.6</td>
</tr>
<tr>
<td>1922</td>
<td>0.36</td>
<td>246.9</td>
</tr>
<tr>
<td>1924</td>
<td>0.39</td>
<td>271.7</td>
</tr>
<tr>
<td>1926</td>
<td>0.34</td>
<td>236.6</td>
</tr>
</tbody>
</table>
workers over those of higher paid workers will show:

<table>
<thead>
<tr>
<th>Year</th>
<th>Index of relative increase of hourly earnings of lower paid workers over those of higher paid workers</th>
</tr>
</thead>
<tbody>
<tr>
<td>1910</td>
<td>102.5</td>
</tr>
<tr>
<td>1911</td>
<td>104.1</td>
</tr>
<tr>
<td>1912</td>
<td>99.2</td>
</tr>
<tr>
<td>1913</td>
<td>100.0</td>
</tr>
<tr>
<td>1914</td>
<td>102.8</td>
</tr>
<tr>
<td>1916</td>
<td>108.9</td>
</tr>
<tr>
<td>1918</td>
<td>106.2</td>
</tr>
<tr>
<td>1920</td>
<td>121.8</td>
</tr>
<tr>
<td>1922</td>
<td>112.1</td>
</tr>
<tr>
<td>1924</td>
<td>111.5</td>
</tr>
<tr>
<td>1926</td>
<td>109.8</td>
</tr>
</tbody>
</table>

Up to 1916 wages of lower paid workers did not increase much more or much less than those of higher paid workers. But from 1916 on to 1918 and from 1918 to 1920 wages of the lower paid workers increased much faster than those of the higher paid workers. In 1920, however, this fast increase stopped, and in the following years the index of relative superiority of lower paid workers over those of higher paid workers declined continuously. That means the money wages of the higher paid workers decreased less or increased more than those of the lower paid workers.
workers. The lower paid workers lost quite a part of the advantages they had won over the higher paid workers. They did not share in the opportunities which increasing real wages in the last years offered to the worker in the same degree as the higher paid workers. Doubtless, the lower paid workers also have shared in the industrial prosperity of the last years, but not in the same degree as the higher paid workers.

3. Wages of Male and Female Workers

The development of the relation between women's and men's wages has been quite similar to that between unskilled and skilled workers' and southern and northern wage earners' wages. Unfortunately there are no reliable general statistics of wages for men and women, and again we have to be contented with a comparison of two occupations. The following table gives the wages of combertenders, very low paid female workers; and of loom fixers, highly paid
skilled male workers, in the woolen and worsted goods manufacturing industry.\textsuperscript{3}

<table>
<thead>
<tr>
<th>Year</th>
<th>Loom fixers</th>
<th>Comber tenders</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Dollars</td>
<td>Index</td>
</tr>
<tr>
<td>1910</td>
<td>0.11</td>
<td>94.9</td>
</tr>
<tr>
<td>1911</td>
<td>0.11</td>
<td>93.2</td>
</tr>
<tr>
<td>1912</td>
<td>0.12</td>
<td>99.1</td>
</tr>
<tr>
<td>1913</td>
<td>0.12</td>
<td>100.0</td>
</tr>
<tr>
<td>1914</td>
<td>0.12</td>
<td>101.7</td>
</tr>
<tr>
<td>1916</td>
<td>0.18</td>
<td>151.3</td>
</tr>
<tr>
<td>1918</td>
<td>0.26</td>
<td>220.5</td>
</tr>
<tr>
<td>1920</td>
<td>0.48</td>
<td>408.5</td>
</tr>
<tr>
<td>1922</td>
<td>0.39</td>
<td>329.1</td>
</tr>
<tr>
<td>1924</td>
<td>0.42</td>
<td>357.3</td>
</tr>
<tr>
<td>1926</td>
<td>0.38</td>
<td>323.1</td>
</tr>
</tbody>
</table>

The index of wages of the female workers stands at 323.1 in 1926, while that of the male workers has increased only to 271.7. That indicates that wages of female workers have increased more than those of male workers; that the relative posi-

\textsuperscript{3} Compare Bulletin No. 443 of the U. S. Bureau of Labor Statistics.
tion of women has improved; that they have gained more than men. However, there was a time when women were comparatively still better off, as the following index giving the increase of wages of female workers over those of male workers will show.

### Index of relative increase of hourly earnings wages of female workers over those of male workers

<table>
<thead>
<tr>
<th>Year</th>
<th>Index</th>
</tr>
</thead>
<tbody>
<tr>
<td>1910</td>
<td>101.1</td>
</tr>
<tr>
<td>1911</td>
<td>100.6</td>
</tr>
<tr>
<td>1912</td>
<td>95.6</td>
</tr>
<tr>
<td>1913</td>
<td>100.0</td>
</tr>
<tr>
<td>1914</td>
<td>96.8</td>
</tr>
<tr>
<td>1916</td>
<td>117.9</td>
</tr>
<tr>
<td>1918</td>
<td>118.6</td>
</tr>
<tr>
<td>1920</td>
<td>124.7</td>
</tr>
<tr>
<td>1922</td>
<td>129.6</td>
</tr>
<tr>
<td>1924</td>
<td>122.0</td>
</tr>
<tr>
<td>1926</td>
<td>118.9</td>
</tr>
</tbody>
</table>

Until 1914 there is no considerable change as to the relative position of women; their wages increase at about the same rate as those of men. But in the following period, from 1914 to 1916, from 1916 to 1918, from 1918 to 1920 and from 1920 to 1922, wages of female workers increase continuously more than those of male workers: the lower paid fe-
male workers improve their position relative to that of the higher paid male workers. In recent years, however, the female workers lose again and lose steadily. They, too, like the southern workers and like the unskilled workers, do not share in prosperity in the same degree as the higher paid workers.

We observed: during the war and first post-war years wages of lower paid workers increased more than those of higher paid workers; in the last years, however, they decreased more or increased less. This holds true for all three groups for which we have made comparisons: for southern and northern, for unskilled and skilled, for female and male workers.

Why did this development occur? No exhaustive studies of this problem have been made, and we can not fully explain this development by giving one single cause, nor can we give all causes which lead to such a development of wages. However, we wish to call attention to at least one
fact, which embodies at least one cause for this development.

During the war and in the first years after the war real wages were very low, the standard of living was scarcely higher than in most of the pre-war years. Now it is clear, that if there is a tendency not to increase or rather to decrease real wages, wages of higher paid workers can decrease more than those of lower paid workers, since the standard of living of lower paid workers is in most cases a minimum standard, which cannot be lowered further. In the later years, however, from 1922 to 1927 real wages increased considerably and steadily, and while in times of decreasing real wages the lower paid workers are more apt to lose less, just because of their low wages which are minimum wages, in times of increasing real wages, the higher paid workers are more apt, to take advantage of increasing prosperity and thus to improve their position more than the lower paid workers.
RESERCH SERIES

No. 1. ORGANIZED LABOR'S MODERN WAGE POLICY, William Green. Price, 10 cents.

No. 2. WAGES AND LABOR'S SHARE, Jürgen Kuczynski and Marguerite Steinfeld. Price, 20 cents.

No. 3. A STUDY OF ACTUAL EARNINGS IN PHILADELPHIA TYPOGRAPHICAL UNION, No. 2, Jürgen Kuczynski. Price 10 cents.

No. 4. WAGES AND LABOR'S SHARE IN THE VALUE ADDED BY MANUFACTURE. Price, 50 cents.

No. 5. RECORDS FOR TRADE UNIONS.

No. 6. WAGES IN MANUFACTURING INDUSTRIES, 1899 TO 1927, Jürgen Kuczynski and Marguerite Steinfeld. Price, 10 cents.