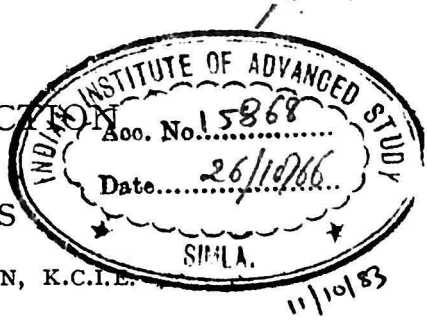

COMMERCIAL SECTION

INDIAN PORTS

By Sir George Buchanan, K.C.I.E.

India has a coast-line of over 4,500 miles, an area of over 1,800,000 square miles, and a population of 350,000,000, but chiefly due to physical conditions she has only five ports of any magnitude, Karachi and Bombay on the west coast, Madras and Calcutta on the east coast, and Rangoon for the Province of Burma.

It is believed that a brief review of the financial status and development of these ports since the war may be of interest, as although they differ considerably in the nature of their trade and facilities provided for its accommodation, there is sufficient similarity to warrant a comparison on broad lines.

The ports are, for example, chiefly terminals, as distinct from ports of call, such as Colombo, Hong Kong, and Singapore, and therefore the tonnage of shipping entering the ports is a fair indication of their actual sea-borne trade. They are also all worked under the general control of the Government, and their statutory constitutions and powers are similar.

There is, however, one difference between the ports of Bombay and Karachi on the west, and the ports of Calcutta and Rangoon on the east, inasmuch as the former are seaports proper, whilst the latter, being situated on the banks of rivers at a considerable distance from the sea, are committed to a considerable annual expenditure in lighting, buoying, surveying, river conservancy, and river pilotage.

In the year 1921-22 these five ports had an aggregate gross revenue of 597.55 lakhs of rupees, and expenditure of 750 lakhs of rupees, and a capital debt of 3,780 lakhs

of rupees; the registered tonnage of shipping entering the ports was 14,300,000, and during the year 17,268,979 tons of goods were handled.

India is primarily an agricultural and mineral country, exporting her produce in return for manufactured goods, but industries of all kinds are rapidly developing, and each year India becomes more self-supporting; cotton and jute mills are numerous, and the iron and steel works of Bihar and Orissa are the largest outside Europe and America.

The principal imports consist of building materials, iron, and steel, hardware, piece-goods, clothing, machinery, food-stuffs, and sugar.

The exports comprise cotton and cotton goods, wheat, rice, and other grain, seeds, jute and jute goods, tea, hides and skins, kerosene oil, coal, manganese ore, and lead.

Bombay is the principal port of shipment for cotton and cotton goods and manganese ore; Calcutta for jute and jute goods, tea, coal, and seeds; Rangoon for rice and rice products, timber, kerosene oil, and lead; Karachi for wheat.

The grain is bagged, there being no grain elevators in India, although their installation at Karachi, which is the great port of shipment for the Punjab, has been under consideration for many years.

The system of port administration in India is by means of self-contained, self-supporting Port Trusts, the members of which are in part elected by public bodies and in part nominated by Government. The Trusts are subject to the control of Government, especially in regard to finance, and all revenue-producing works have to be shown to be self-supporting in the near future and economically essential to the welfare of the port and the community before they are sanctioned, whilst in the case of non-revenue-producing works the Port Authority has to prove its capacity to pay interest and sinking fund on loans raised for their execution.

Proposals have recently been made to co-ordinate railways and ports by placing them under one control, and the

committee appointed in November, 1920, by the Secretary of State for India to enquire into the working and administration of Indian railways made the following remarks:

"We recommend that there be a Member of Council in charge of communications, whose portfolio should comprise railways, ports, and inland navigation, road transport (so far as it is under the control of the Government of India), and posts and telegraphs. Perhaps in making this recommendation we are going beyond the strict terms of our reference, which is concerned only with railways, but the connection of railways with other forms of communication is so close that we think we are entitled to make it.

"The advantages of a close relationship between railways, ports, water transport, and road transport are obvious. They need correlation by a common controlling authority; they are feeders to each other, but at the same time their conflicting interests as carriers necessitate expert supervision and protection; all methods of transport are necessary for the development of India, and all new schemes, whether for transport by rail, road, or water, require to be considered by the same authority as a part of a well-ordered general programme. Only imperial questions connected with road transport would, under our scheme, come under the immediate supervision of the Ministry, local road questions being left, as now, to local authorities.

"The only connection at present even between the railways and the ports which they serve is through the Member of Council, who is common to both. The Departments that deal with them are separate. And in many respects the ports are subject not to the Central Government at all, but to local governments.

"All the witnesses whom we examined on this point agreed that there were strong reasons for a change. One instance will suffice. The Calcutta Port Authority are undertaking the enlargement and re-equipment of their Kidderpur docks to accommodate the rapidly growing traffic. They have in contemplation a large scheme involving the expenditure of many millions. They are also adding to the accommodation of their port railways. The lay-out of the docks cannot be settled till it has been decided how much of the necessary siding accommodation is to be provided respectively by the railways on railway property and by the Port Authority on dock property. The Port Authority cannot be certain what coal-tipping appliances to order till it is settled what form of coal wagons

the railways will use. The railways, on the other hand, cannot be certain that the appliances will be suitable for their wagons. There is no machinery for bringing together the various parties in interest, still less for deciding when the parties differ. The Department of Commerce, the Railway Department, two railway companies, the Calcutta Port Authority, and the Government of Bengal, all are involved and take a hand in the decision.

"The necessity for close co-ordination so as to dovetail together the work of the docks and the railways that serve them has long been recognized in England. In recent years—not without hesitation as to the propriety of strengthening railway monopoly—Parliament has allowed railway companies, in order that the two services might be in one hand, to acquire the docks in the first-class ports of Southampton and Hull. Still more recently private arrangements have secured the same result in the great port of Cardiff. And the Ministry of Transport Act, 1919, gives the Minister considerable powers to co-ordinate the facilities and methods of working between railways and such dock undertakings as are still independent."

Up to the present no effect has been given to the committee's recommendations, and the report is still "under consideration."

The Indian ports derive their chief revenues from dues on vessels and rates on goods, the proportion being approximately in the ratio of one-third vessels to two-thirds goods, and the rule, originally promulgated in the report of the Royal Commission on the Port of London, to the effect that everything which uses a port should contribute to its working and maintenance, is generally followed.

A considerable revenue is also derived from rents on lands, warehouses, and other buildings, on the port estate, this being usually a constant number which affords a useful reserve in case of fluctuations of annual receipts from other sources.

The ports are not intended to make a profit on their year's work, but are supposed to pay interest and sinking fund on loans raised, maintenance charges, working expenses, and general charges, whilst in the case of non-

revenue-producing works, such as breakwaters, river training works, etc., funds are raised by means of special dues on both vessels and goods, or occasionally by a Government grant in aid.

Bombay and Calcutta have their own harbour railways encircling the port and worked by the Port Authority, and railway companies or State railways, as the case may be, hand over the wagons at a certain point. Other ports have their own railways worked under an agreement by the railway companies. Calcutta and Rangoon have also the advantage of extensive water transport systems to the interior in addition to railways.

In one important respect Indian ports differ from home ports inasmuch as there is in India practically no competition for the trade which flows naturally to the one and only coast terminal serving a particular area, whilst in the home ports trade has sometimes half a dozen alternatives in the way of ports, and is able to pick and choose.

Calcutta, for instance, which is the natural and at present only outlet for the rich and densely populated valley of the Ganges, cannot help being a large port, and prospers, one might say, in spite of itself, because the history of port development in the past is not one of which Calcutta can be proud.

In the matter of accommodation and facilities, Indian ports differ considerably, and as this is not a technical paper, it may be as well to explain that by accommodation and facilities is meant the provision of dock-quays, wharves, or sheds, where steamers can come alongside in safety to discharge or receive passengers and goods, along with sheds and warehouses wherein the goods can be stored.

Vessels are berthed either at quays inside wet docks which are entered through gates and a lock, at wharves built on the banks of a river or inside sheltered harbours or jetties projecting into a river or harbour.

Bombay relies almost entirely on wet docks. The Prince's Dock, begun in 1875, and completed in 1880, has

a basin accommodation of 30 acres, and a depth at the entrance of 28 feet below H.W.O.S.T.

The Victoria Dock was put in hand in 1885 and completed in 1888, with a basin of 25 acres and an average entrance depth 2 feet lower than the Prince's Dock.

Lastly, the Alexandra Dock was begun in 1905 and completed in 1914, with a water area of 49½ acres and an entrance depth of 37¼ feet below H.W.O.S.T.

The Prince's Dock and Victoria Dock can accommodate 27 vessels of a length from 300 to 500 feet, and the Alexandra Dock 17 vessels of 500 to 525 feet, whilst there is one berth alongside the dock for mail steamers.

The Port Trustees are at present discussing further port accommodation either in the shape of another wet dock or wharves in the harbour.

Karachi has converted what in 1839 was a shallow more or less land-locked lagoon into a fine port with 8,600 feet of deep-water wharfage, equivalent to seventeen steamer berths, besides wharves for country craft and the coasting steamer trade.

The deep-water wharves have a depth of 28 feet alongside at H.W.O.S.T. which it is proposed to increase to 34 feet, and a comprehensive scheme for additional wharfage has been sanctioned and is awaiting finance.

Calcutta combines wet docks with river wharves. The wet docks at Kidderpur were completed in 1892, and contain eighteen berths for general produce and ten coal berths.

The river berths are used solely for the import trade, and are 4,750 feet long, or nine ships' berths.

A large new wet dock-system is at present under construction, and was inaugurated and named the "King George Dock" by H.R.H. the Duke of Connaught in February, 1921. The new dock will have a water area of 190 acres, 25,000 feet of quay-wall accommodating thirty-five steamers, and a depth of water at the entrance at highest high water of 45½ feet.

In addition to the wet docks, five additional jetties are being constructed in the river in the vicinity of the dock.

It is hoped that the new dock will be sufficiently advanced to be opened for nine berths in 1927, and the only criticism one can make is that if the Port Authority had had more foresight and imagination the dock would have been on the verge of completion in 1914, and would have cost little more than half the present rates.

Calcutta's greatest drawback is the unstable condition of its river, and at certain times the draught of vessels passing up at high water is limited to 27 to 28 feet.

Madras has been described as a challenge flaunted in the face of nature, as it is an artificial harbour formed of breakwaters thrust into the Bay of Bengal and exposed to the full force of the south-west monsoon. Deep-water wharves, sheds, and other appliances of a modern port have been constructed, but nevertheless, in the event of a gale, all commanders of vessels are recommended by the Port Authority to go out to sea as soon as the danger signal is exhibited on the port flagstaff.

Rangoon is the centre of the rice trade, and exports from 1,500,000 to 2,000,000 tons per annum, the outstanding feature being the simplicity, cheapness, and despatch with which the export trade is conducted. The paddy is brought from up-country by rail and water to the mills. Every mill is situated on the banks of a river or creek and has its own jetty, and when the paddy has been converted into rice and bagged for shipment, the bags are thrown into cargo-boats waiting alongside the mills and conveyed to the vessels moored in the stream, the river taking the place of wet docks in other ports; the work of loading can proceed on both sides of the vessels night and day, and there is no Eastern port where steamers get better despatch.

For the import trade deep-water wharves have been constructed on the banks of the river, and for the great up-river trade numerous floating landing-stages have been erected.

At the present time the world is largely occupied with schemes for conserving capital, and in port extension projects it is a general rule that wherever it is possible to do so deep-water wharves should be substituted for wet docks.

At Rangoon the bulk of the export trade does not even require deep-water wharves, as vessels lie at moorings in the river, but the Port Commissioners are obsessed with the idea that because Calcutta and Bombay, under quite different conditions, have wet docks they are a necessity for Rangoon, so a comprehensive and costly system of wet docks, complete with locks to pass through the largest steamers, have been designed, and H.R.H the Prince of Wales, when he visited Burma in 1922, was pleased to permit the proposed docks to be named the "Prince Edward Docks." Fortunately the naming of the docks does not confer sanction to the project or provide the necessary funds, and it is to be hoped that in the public interest wiser counsels will prevail, and that this crazy scheme for wasting public money and ruining the port of Rangoon will be postponed indefinitely.

Sir William Broodbank, in his interesting paper on "Problems in Port Administration," observes that in the provision of new accommodation and facilities for trade the main problem is how to anticipate future demands without unduly taxing the present users of the ports, and in comparing British and American engineering practice he points out that the American takes care so to construct his up-to-date facilities that by the time they get out of date the question of scrapping does not disturb his financial equilibrium, but that the Britisher makes his solid concrete quays and massive walls, and when the time comes to reconstruct he has to write off an enormously heavier capital.

There is, unfortunately, a very great deal of truth in Sir William Broodbank's remarks, as it is frequently overlooked by port officials that the port is made for the

convenience and assistance of trade, and that schemes magnificent in conception and execution, although highly creditable to the engineers, are useless if they are unnecessary or financially unsound.

The following tables and comments thereon show briefly the financial status and magnitude of the ports and extent of their trade in comparison with 1913-14, which was the last pre-war year and also the year when each port had reached its highest level of prosperity.

The figures are taken from the administration reports of the various ports, but as each port has its own way of keeping accounts and statistics and of compiling its annual reports, it is difficult to compare one with the other except on broad lines.

BOMBAY

Year.	Ordinary Revenue.	Ordinary Expenditure.	Establishment.	Interest and Sinking Fund.	Net registered Tonnage of Vessels entering the Port.	Total Tonnage of—		Total.
						Imports.	Exports.	
	Lakhs.	Lakhs.	Lakhs.	Lakhs.	Tons.	Tons.	Tons.	Tons.
1913-14	98.79	79.27	16.83	53.49	4,656,515	Not	available	
1919-20	196.90	194.42	—	—	4,221,530	3,139,000	3,114,000	6,253,000
1920-21	222.97	221.57	—	80.68	4,822,510	3,322,000	2,750,000	6,072,000
1921-22	217.17	227.80	53·88	85.81	5,401,178	3,978,000	2,747,000	6,725,000

Bombay was India's principal war port, and therefore did not suffer financially from the war.

The revenue has increased, in 1921-22, 119·8 per cent. since 1913-14, but the expenditure has increased 188 per cent., and the establishment 220 per cent. This is to a great extent due to the working expenses of the new docks, which were only opened in 1914.

The deficit of 10 lakhs in 1921-22, with a greatly increased tonnage both of shipping and goods, is largely due to a decrease of 36¾ lakhs in receipts from ground and shed rents.

KARACHI

Year.	Ordinary Revenue.	Ordinary Expenditure.	Establishment.	Interest and Sinking Fund.	Net registered Tonnage of Vessels entering the Port.	Total Tonnage of—		Total handled.
						Imports.	Exports.	
	Lakhs.	Lakhs.	Lakhs.	Lakhs.	Tons.	Tons.	Tons.	Tons.
1913-14	48.22	39.00	2.91	14.71	2,056,379	1,483,069	1,067,004	2,550,073
1920-21	58.31	59.39	7.86	15.36	2,108,346	820,641	330,357	1,150,998
1921-22	63.18	62·70	7.70	15.69	2,346,617	434,277	696,309	1,130,586

As compared with 1913-14, the tonnage handled at Karachi shows a great falling off in 1921-22, mainly due to the stoppage of wheat exports. Working expenses have, however, increased, and it has been necessary to raise rates. Fortunately, as it was a war port, Karachi was able to pay its way during the war years.

In 1921-22, out of the total revenue, 6.13 lakhs was met by surcharge and 6.30 lakhs was arrears due by Government.

CALCUTTA

Year.	Ordinary Revenue.	Ordinary Expenditure.	Establishment.	Interest and Sinking Fund.	Net registered Tonnage of Vessels entering the Port.	Total Tonnage of—			Grand Total Goods handled.
						Imports.	Exports (general).	Coal Exports.	
	Lakhs.	Lakhs.	Lakhs.	Lakhs.	Tons.	Tons.	Tons.	Tons.	Tons.
1913-14	151.28	156.61	29.92	60.05	4,256,987	1,800,673	1,231,589	3,017,180	6,049,442
1919-20*	223.55	225.51	—	60.90	2,941,846	1,366,812	1,146,479	2,264,976	4,778,267
1920-21	266.08	251.61	53.90	62.60	4,017,514	1,098,347	1,133,719	3,046,400	5,278,466
1921-22	219.17	240.39	60.13	63.35	3,446,021	1,319,772	974,783	1,687,222	3,981,777

In tonnage of vessels entering the port and in tonnage of goods handled, Calcutta has not yet reached pre-war standard; the ordinary revenue has, however, increased 44·8 per cent., and the ordinary expenditure 53·5 per cent. over 1913-14 figures.

The increase in revenue is largely accounted for by increases under the heads rentable lands and buildings and by raising certain rates and dues.

The expense of working the port has increased hugely under every head of account—cost of establishment having gone up 100·9 per cent.

* Special war surcharge of 64.66 lakhs.

MADRAS

Year.	Ordinary Revenue.	Ordinary Expenditure.	Registered Tonnage of Vessels entering the Port.	Total Tonnage handled.
	Lakhs.	Lakhs.	Tons.	Tons.
1913-14	15.27	11.39	1,777,470	797,665
1920-21	29.58	22.13	1,662,444	848,756
1921-22	25.43	23.21	1,943,159	874,080

Madras has in 1921-22 got well past the 1913-14 figures of trade, and has a surplus of revenue over expenditure.

RANGOON

Year.	Ordinary Revenue.	Ordinary Expenditure.	Establishment.	Interest and Sinking Fund.	Net registered Tonnage entering the Port.	Exports and Imports. Total Tonnage handled.
	Lakhs.	Lakhs.	Lakhs.	Lakhs.	Tons.	Tons.
1913-14	51.84	37.03	6.95	15.58	2,946,774	4,557,401
1920-21	54.61	54.12	11.10	17.94	2,800,513	4,037,923
1921-22	59.33*	65.95	14.00	19.98	3,098,509	4,562,094

In 1921-22 Rangoon had just exceeded the pre-war tonnage of shipping entering the port and of goods handled.

The ordinary revenue was 59.33 lakhs compared to 51.84 lakhs in 1913-14, but the ordinary expenditure had advanced from 37.03 lakhs to no less than 65.95 lakhs.

* Plus 15.85 lakhs surcharge.

EDUCATIONAL SECTION

EDUCATION IN CHINA

By Dr. S. Lavington Hart

That the subject which I have the honour to discuss is a large one is evident from the fact that there are in the elementary schools of China, apart from all other grades of institutions, more than four million scholars. If for a moment or two we try to envisage this huge number, and reflect that before long there will be many more; while at the same time we remember that the education of all these masses is in a state of transition and that the next few years will be the formative period during which the character must finally be given to the instruction of one-quarter of the human race, we must be driven to the conclusion that there are very few questions that can exceed it in magnitude.

Even if our survey of this theme prove of necessity to be but partial, it may be that it will help us at some further time to enter upon a fuller and more comprehensive study. The subject is certainly worth it.

The revolution dates back, as everyone knows, to the days after the war with Japan and the Boxer rising.

But revolutions are never produced suddenly, nor are they spontaneous. However rapid the outburst and sweeping the changes, there is always a long time of preparation. The accumulation of conditions which make the old impossible, and the spreading of the spirit which ushers in the new, are there long before the arrival of the circumstances which force on the revolution.

The unexpected failure of the Chinese army when confronted with Japan, and the tragic ending of the Boxer endeavour for freedom from the presence of foreign in-

fluences, these constituted the needed circumstances. The conditions which were gradually though imperceptibly rendering a continuation of the old régime impossible it is not for us to consider here; but with the new spirit that had been at work and at last gave direction to the outburst for freedom, we as educationalists are concerned.

For more than a half-century it had been spreading and growing, like the leaven in the meal or the seed in the ground.

Robert Morrison was there early, even perhaps earlier than R. S. Brown, who opened a school at Macao in 1839. Although not on Chinese soil, Morrison's Anglo-Chinese school at Malacca was for the Chinese, and as soon as possible—that is, in 1842—it was removed to Hong Kong.

Another equally striking and significant beginning was made in the early forties at Ningpo by Miss Aldersey, an English lady, who must have been gifted with the rarest enterprise and fortitude to have been able to conduct a school for girls in that city so long ago, and to succeed in having some sixty scholars, the majority of whom were boarders. It must never be forgotten that the education of girls will prove the crucial point in the history of China, as in every other country. How much is owing to Miss Aldersey for the new departure she originated eighty years ago it would be hard to estimate.

Many others went forth who had continued in their narrow spheres. Need we mention the names of the founders of the schools that have influenced China? St. John's University; Nan Yang University; Pei Yang University at Tientsin; the Tung Wen Kuan; the origin of the Government University, in Peking, and the Pei Yang Medical College in Tientsin; all these were founded by men, let it be remembered, who had gone to China as Christian missionaries. Names like Boone, W. A. P. Martin, Kenneth Mackenzie, Timothy Richard, and those of many others still living, will long be remembered.

One of the earliest results was that Chinese students,

amongst them T'ang Shao-yi, Liang Ming-ting, and their comrades, were sent abroad, to the United States for the most part. This small beginning of a very large movement was due to the foresight of statesmen like Li Hung Chang, and if his example had been more freely followed, the changes introduced by the Revolution would have come more peacefully to China. For although the educational reformation in itself was bloodless, it was not possible that some should not have to pay the price, and this they did right nobly. My first years in China were spent at Wuchang. The grandson of T'an, the governor of that city, was brought under the new influences, and alone in all his entourage he was being prepared for martyrdom. K'ang Yu-wei, profoundly impressed by the necessity for radical reforms, had found in the Emperor Kuang Hsü a ready convert, for his heart also had proved fertile soil for the new seed. The famous edicts were issued in 1898, and among other reforms was the proposal for the organization of modern schools throughout the whole Empire wherein Chinese and Western learning should be taught. There were to be district schools and colleges in the prefectural cities and provincial capitals, all leading up to the University in Peking. Though the old system of literary examinations was still to continue, its days could not but be numbered, for through the edict it was plain that the State considered it to be its duty to educate and not only to examine.

Opposition to radical changes of this order was certain, and the celebrated *coup d'état* showed how strong the opposition was. The young Emperor found himself a prisoner in his own palace, and the Reformers had to flee for their lives. K'ang Yu-wei escaped through the help of his friend Timothy Richard, but young Mr. T'an and some of his comrades in the movement were seized and put to death.

Just as he was condemned, T'an said some memorable words: "I am glad," he declared, "to die for my country;

but be assured that for every one of us who die here to-day there will arise ten thousand to carry on the work." Prophetic words that have proved true indeed, for through the death of T'an and his friends was born *Young China*, and the success of the revolution was assured!

All this was before the Boxer troubles. After the failure of this rising the Empress Dowager showed that she had learnt some wisdom, for in 1901 she issued an edict furthering the plans already proposed by Kuang Hsü. The examination halls were to be turned into colleges, but the examination system was to continue. However, at last, in 1905, the age-honoured old-style literary examinations were abolished.

The political revolution of 1911 added still more radical changes, for the new provisional government eliminated the study of the classics from the primary schools, and ordered the preparation of new textbooks, which were to be in harmony with the new spirit of the age.

But enough of dates and bare recapitulation of facts.

To me, and I hope to most, the significant thing about these changes is not that certain edicts were issued in Peking, or that such and such a far-seeing statesman promulgated certain reforms, but that the spirit of the people themselves was changed, and that instead of the old-style scholar there was rising fast in every part of the Empire the new Chinese student. And China owes as much to-day to the new student as the Empire did in the former days to the well-known classical scholar.

I noticed this change in the attitude towards Western learning very forcibly, for just before the Boxer troubles I had ventured on certain very mild suggestions for alteration in the curriculum of a small school in Tientsin; indeed, it was merely the addition of arithmetic to the Chinese abacus system, which was already being taught. A teacher, himself a distinctly bright and clever Chinese scholar, deprecated the innovation, which he spoke of as

being stupid. The innovation was not much of a success, I am bound to admit.

I came home in 1899, and returned soon after things were beginning to settle down after the shock of the anti-foreign uprising. I found everything changed: people were thinking differently; instead of having to suggest in a tentative way that some Western learning might prove useful, I discovered that there was an eagerness to learn on the part of even those who had held aloof before. It was then that the college over which I have had the honour to preside was started; and I, for one, must always consider the founding of this institution as a direct outcome of the change in the popular estimate of the value of the new learning. At the suggestion of two eminent Chinese scholars the Chinese name of "Hsin hsüeh," new learning, was given to it, and this title helps one to remember to-day that in 1901 the education which is now so common and widespread in China was a new thing, but a new thing to which the people with unexpected favour turned most readily; for the revolution in education was not a matter of official dictation, it was essentially a desire on the part of the Chinese man in the street. This fact needs to be pointed out; for we have to assert that "China" is, not the the Government nor the Tuchuns, but the people. And if we spell this word with a capital P, we can allow to the people of China the famous words of Le Grand Monarque: "L'État—c'est moi!"

I am far from wishing, while speaking of purely educational matters, to slip into national or political questions; but it is allowable to point out one lesson, that all might learn with advantage, from the readiness I have been referring to on the part of the people of China to alter their standpoint on a matter which had always been held of the first importance in that country—namely, the instruction and education of their young men and the preparation of their rulers and officials.

It is a proof of the alertness of the nation, of the juve-

nility, one might say, of this ancient race, that they can show themselves capable of understanding the signs of the times and profiting from almost overwhelming disaster, turning even their reverses into gains because of the elasticity of their national life. It is not difficult to give way to pessimistic views when considering the present position of China ; but these reflections on the power of China to recover and improve her position, which, I believe, follow naturally from the review of the intellectual revolution of the early days of this century, should help to stay our yielding to despair, and give us fresh stimulus to offer any help in our power to a country so well fitted to profit from our aid.

It must also be remembered that the revolution was a perfect reversal of things held inviolable and sacred up till then.

Tradition was ignored. The whole policy of trusting their nation to the highest of their classical scholars, indeed, the system itself of making all instruction turn on the gaining of the time-honoured classical degrees—all this was given up.

If we try to picture what a similar change might mean in this country, we shall understand the change more fully. Think of the institutions in Great Britain which are hoary with age and endowed with the richest tradition; for instance, the training and the degrees at Oxford and Cambridge, the public school life of Eton or Harrow and other great schools, not to speak of all the primary instruction throughout the land, being given up as out of date and sacrificed in order to introduce a new plan from abroad. Would we ever prove willing, even when faced with the gravest national peril ?

Anyhow, there is some room for us to reflect on the suggestive comparison as we close this first part of our review, the revolution in education of twenty-five years ago.

The next point to consider is the fear of denationalization, or, shall I say at once, the *alleged* fear of de-

nationalization? For I fear that even if I have succeeded in bringing you with me so far in our survey, ways may begin to part just at this point, for there has been not a little controversy as to the existence of this danger.

Not that anyone will be found who is anxious to denationalize; we are all against such a process, be it for China or any other country. The controversy lies not there, but in the actual question as to whether there is fear or not that modern education, as it is at present and as it is going to be, is likely to weaken the strong characteristics of the Chinese people.

Care must be exercised as to the precise meaning we attach to the word, and also as to the special direction which the dreaded process is supposed to take.

Generally speaking, what is meant is that the scholar or student becomes unfitted by his studies and his life in the school for the ordinary occupations that lie before him and the plain duties of citizenship. The result of education in such a case is that he is either removed from his proper surroundings or feels himself above them because of the new ideas he has received.

Now, to be quite fair, one must recognize that this charge may be levied against any school or any education if it is at all "modern," whether the school be under foreign or Chinese supervision.

Indeed, in this sense similar accusations might be brought against education at home, for the same results can be seen at times in this country. And yet who would wish to condemn educational endeavours on this ground?

"Denationalization" of this order is not confined, however, to education. The same phenomenon is in clear evidence as the natural result of "modern" commerce. It is distinctly a breaking away from the honoured past when, instead of the old-fashioned and harmless water tobacco-pipe, cigarettes are indulged in, or other articles of foreign origin are bought and used to the detriment of the indigenous produce.

A remarkable commentary on this charge of denationalization is, however, found in the fact that quite recently—that is, within the last two or three years—a determined effort has been made by the leaders of associated schools under Christian management to supply a new type of school altogether for the large country districts. In these new institutions education would be given to the children of farmers so as to fit them for remaining on the land as agriculturists, but with enlarged views as to their calling and fresh insight into their duties as citizens.

The very reverse of denationalization!

At times, however, another meaning is attached to the word, and as the question is sufficiently important, it may be well to enquire into it further.

Do we mean that there is danger that through modern education in China there will be produced a loss of love of country or a neglect of national customs? Or is the fear founded on the dread that the new learning will lead to slackness in the cultivation of the language of China?

It is not necessary to say anything on the first of these three causes for alarm. It has been proved again and again during the last decade that of all the classes of the people the student class is the most patriotic, the most willing to think out the great problems of the country, and the most willing to sacrifice interests and prospects in order that the country may be saved.

And this is true not only of those who are studying in their own country and see its need with their own eyes. It is especially true of the students who are studying away from their home—for instance, those at work in this country. Where are there any more enthusiastic believers in the pre-eminence of China than the Chinese living here in Great Britain? Where are there any, even among the ranks of the old-style scholars, who are so confident that China will pull through or so determined to help her do it? No; there has been no loss of patriotism through the pursuit of the most modern education.

Now as to the second of the indictments. Is it true that educationalists are responsible for changes in the habits of the people, and even for neglect of some of the national customs?

We plead guilty to the charge, and, moreover, would do so again if the need and the opportunity arose.

Not that all the customs are to be changed; perhaps none know better than educationalists the excellence of the ancient practices and quiet virtues that happily abound still in China; but many things have changed, and if the responsibility is laid at our doors, we do not refute the charge. Let me be a little more precise. Everyone knows, for instance, the fashion of the old-style scholar in China: a little ponderous, slow-moving, with most conscious dignity and impressive importance. Was this to continue? In 1911 the Government emphasized the need of physical exercises for students, and recommended the practice of games and sports. But years before this became a matter of official recommendation, we had decided upon this very course in our own college as in many other colleges.

It was in 1904, if I remember right, that we decided upon having an athletic meet in our college, the events of which were to be open to all students in Tientsin. These were the first sports for Chinese students to be held in that place, as far as I know. The results were far from bad, though I remember that we became quite excited when one of our fellows cleared 6 feet 6 inches at the pole vault competition. We did not anticipate then that one of his successors would prove the champion at the same event in the Far Eastern Olympic meeting at Tokyo, and win the place for his country with a far higher record.

Some Chinese officials were present, and in his kindness at the end of the meeting one of them declared to me that we were doing a splendid thing for China that day.

But not all were so free to appreciate the new thing

in the life of students. One of our men had brought his uncle to see the sports. The old gentleman was a fine example of the Chinese scholar, with a high literary degree. He witnessed a part of the proceedings, and then went off in high dudgeon, declaring to his nephew that he had always heard of the cruelty of the foreigners, but had never been willing to believe in it; but now he knew that it was true, for he had seen foreigners that day drive Chinese students so that they had to run like horses and jump like dogs!

In those days we were breaking through certain customs roughshod; nevertheless, it had to be done, and we are glad to-day that we had a part in bringing the new and very sturdy Chinese athlete into existence. He will have to be reckoned with, not only in Far Eastern competitions, but here at home and in America.

One of the beautiful things in China is the spirit of reverence towards seniors and especially towards teachers. When our college began a little over a score of years ago, that spirit was freely shown to me and others—that is, it was shown in the old and recognized way.

If a student saw me while he was riding in his rickshaw, he would of his own free will and in obedience to the fine feeling I am referring to stop his rickshaw at once and jump off, so as not to be seen riding when his teacher was afoot. And if he was wearing his spectacles, off they would come. To-day these things are not to be seen. Is it that the feeling of respect has grown less? Many would say so; I do not. Now our scholars are riding, not only in rickshaws, but, as most do, on bicycles, and especially motor-cycles. Or else it is the electric tramcar. Shall I be foolish enough to expect my students in the midst of fast, busy traffic to stop and descend from motor-bicycles or tramcars? Naturally not. I look for the respect, which I know they are only too willing to give, not along the old lines, but along the new, which must prevail under the changed conditions of modern life.

Forgive my labouring this self-evident point. It is but an example of much that has to be done to-day. We must cease judging by the criterion of the past; we must look for the reality, and be willing to admit a complete change in form. To-day, and it may be to-morrow, we must exercise understanding leniency, for it is hard for a whole nation to change within a few years its standards of what is right and seemly. Much has changed, and we educationalists have had no small part in bringing it about.

But there remains the last criticism—namely, the lessening love and study of the language of China.

Now this is confessedly a difficult subject. Nor is the solution easy to find.

It must be admitted that if Western learning is to be added to the study of Chinese literature and language, there must be less time for the acquisition of that proficiency in Chinese which is both the admiration and the envy of even Sinologists.

As a well-known Chinese, a member of one of the former Cabinets, said to me recently: "Something must be done about the study of Chinese; boys cannot be expected now to give the time they used to devote years ago; besides, it may be seriously questioned whether the absorption of the mind of the child or young student in a single pursuit for such a length of time can be justified from an educational standpoint."

Modernists among both teachers and students have been accused of sacrificing the interests of Chinese studies for better proficiency in mathematics or some other branch of Western learning. While this may be true in a few cases, it is to be doubted whether it is generally true; and where the impeachment has to be admitted, the pressure of a too full curriculum is to blame rather than any lessening of the regard for the language of China or a failure to recognize the beauty of its literature.

That those who have drunk deeply at the well of Western learning have not lost their love for Chinese lore

is evident from the great part that has been taken by Chinese trained abroad or on modern lines in China in the recent revival of thought and writing that is one of the outstanding features of the third decade of this century: I refer to the Renaissance Movement.

Apart from the greatness of the topics discussed in this new movement, it seems that from it will come a new language to China, a language that will serve to unite the country and express in a living way the mind of this new China. The hope must be expressed that in this way some lightening of the task of acquiring a thorough understanding, and a capacity for clearness of expression, may come to those on whom the double burden rests of being masters of their own tongue and of at least one foreign language as well.

Perhaps the question might be asked: Why not give up English then? If we on this side of the world could agree that this would be the wisest course, it is much to be doubted if in China the step would be taken. English has come and come to stay, for better or for worse. It is our duty to ensure that it shall be for better, for better mutual understanding, better mutual intercourse, better international relations.

It is hopeless to expect that in this country there will be a turning towards Chinese as a vehicle of thought; it is almost too much to expect that Britons in China will do much in business or other walks of life through their proficiency in Chinese, though happily there is marked improvement in that direction. If China and Great Britain are to understand one another, if we are mutually to learn from one another, it follows that all this must come through the knowledge the Chinese gain of our language, while we passively sit still and allow others to work out the approach. Let us for all our sakes hope that the knowledge of English will spread and increase in China; much depends on it, even in the region of politics and international relations.

So we who have been at it may plead in extenuation of

some of our grave faults that we have done something for both countries, though at times it seemed as if we were merely there for teaching the A B C.

What enthusiasm there was for it when once the tide turned!

We had a number wishing to be taught as soon as we opened the college early in 1902. Men as well as youths came, and we did our best to accommodate them all. The result was that classes were somewhat mixed; young and old had to be put together. There is a story told of those early days in our own college. As everyone here knows, the number of surnames in China is somewhat restricted, so that many must be called by the same name. There are many Wangs, or Lius, or Changs, and so on.

Two students of the same surname Wang were in one of these early classes, a young fellow, and one distinctly his senior. They went on with their studies day by day until the examination, when unfortunately the junior passed and the senior did not. This might not matter much in ordinary circumstances, but in this case it was fatal, for they were father and son! And when they got home, so the story runs, the son caught it well at the hands of his father. The story may be apocryphal, but I fear that it is true.

English has come to stay, and so has Western learning in all its branches. But there is no fear that through this spread of learning from abroad the Chinese are going to lose the valuable characteristics which have marked them out from other races. They will absorb a great deal; but all the learning they will absorb will be assimilated and adapted to their own special purposes, and the national traits, though they change somewhat in form, will remain always characteristically Chinese.

Whenever there has been known a process of absorption and assimilation in which both Chinese and foreigners have been involved, it has never yet been the Chinese who has been absorbed.