THE ALL-INDIA SWADESHI CONFERENCE.

PRESIDENTIAL ADDRESS

BY

LALA LAJPAT RAI.

Mr. President, Brother-Delegates, Ladies and Gentlemen,— I do not know how to thank you and my countrymen at large for the great kindness which you and they have shown to me. It is impossible to give an adequate expression to the feelings of gratitude and thankfulness that the wonderful reception accorded to me here, there, and everywhere have evoked in me. Ever since my return from my short and enforced exile I have been the fortunate recipient of so many manifestations of love and regard from my countrymen of all classes, that words seem to be too poor a vehicle to convey my feelings of gratefulness to them. Even if I had a hundred lives to sacrifice in the service of my country they could furnish but poor opportunities of doing adequate justice to the honour and esteem, of which I have been the recipient for the last five weeks. They have touched the deepest chords of my heart and have brightened my vision of the future of my countrymen. The extraordinary outburst of feeling for individuals which has found expression during the last two years throughout the length and breadth of our country is undoubtedly a striking and new spectacle. It cannot be satisfactorily explained by the public services of these men, as though some of them have rendered eminent services to the country, it cannot be said of all, and least of all of a humble individual like myself. In my eyes this outburst of feeling has deeper reason than the services of individuals. It is one indication of the growing consciousness of national unity. India was hitherto said to be only a geographical expression. It has now begun to aspire under the guidance of an all-wise Providence to a unified political existence and to a place in the comity of nations. The congress of nations that are said to inhabit this vast territory have after a long period of disunion and disorganisation begun to realise that after all they are one people, with one common blood running through their veins, with common traditions, a common history, and a common faith in the future. It is true that communities are divided from communities, sects from sects, and provinces from provinces by differences of religion, language and customs. The wave of western civilisation, however, with its unifying influences is levelling down these differences and creating a community of interests and feeling which is the precursor of a new dawn in our life. Some time ago people began to look back and find that, with all their differences, they were after all the branches of a common tree, descendants of the same stock, inheritors of the same civilisation, and, with local differences, practically speakers of the same language. Even Mahomedans, taken as a whole, could not say that, in their traditions, languages, and customs, they had nothing in common with the Hindus. This looking backwards made them compare their present position with the position of other people in other parts of the world and led them to look forward. This has awakened the rational consciousness which, for want of greater occasions, has begun to exhibit itself in demonstrations and ovations in honour of individuals who have, even by slight sacrifices, earned the distinction of being the servants of the country. Interpreting these

ovations in this sense, I feel I have every reason to rejoice over them. I join with you in congratulating myself as being the fortunate recipient of these marks of honour and respect, for which I thank you most sincerely and through you the other classes of my countrymen. It has, however, been dinned into my ears, ever since I reached Lahore, once more a comparatively free man, that a large number of my countrymen hate me, that my deportation was due principally to Mahomedan machinations, that a number of Hindu gentlemen also had combined, consciously or unconsciously, to bring about, what they considered to be, my ruin and that of the cause I had at heart, that a large number of my friends and co-workers deserted me in the hour of my troubles and purchased their safety, either by ignoring me, or by disowning me and my principles. I am told that, under the circumstances, the political amelioration of the country is a hopeless task for which I need waste no more of my time and energies. I am further told that, in the light of the experience of the last six months, it is futile to base any hope of political salvation on the union of Hindus and Mahomedans, that such union is impossible, that our people are an inert mass having no life to assert and too ignorant to understand their rights, and that the leading men are mostly corrupt, selfish, ease-loving, and cowardly, that while talking loudly of political emancipation and liberty, they are wanting in the courage of their convictions and are not prepared to suffer for their ideals, that the political ideas that obtained in the educated party and their conception of political rights were entirely foreign, borrowed bodily from the west without any reference to their suitability to the genius and traditions of the nation. and that, under the circumstances, the best interests of our people lie in directions other than political, and that we should be contented with the sort of government we have got, and should studiously avoid doing anything that may be offensive to the authorities. The incidents of the last three days have unfortunately lent colour to these pleadings and I am told that new, at any rate, I should have no doubt as to the incapacity of my countrymen for the political institutions of the west. however, is the language of despair to which I am not prepared to listen. Firstly, as to the misfortunes of the last six months, I cannot admit that they were entirely due to Mahomedan machinations. I am certain that the so-called Mahomedan machinations were supported and backed by a number of Hindu informers and sycophants, and it is not right to condemn a whole community for the sins of a few. It cannot be doubted for a moment that the country, as a whole, stood fairly well by the victims of official oppression. To me it is a marvel that such was the case, and that the number of traitors and black sheep was not larger than it was found to be. I have had numerous evidences of the sympathy of Mahomedans, other than the limited class of title-hunters and place-hunters and I still believe that, with the spread of education among Mahomedans, the combination of Hindus and Mahomedans for political purposes is not an impossibility. But how can I ever forget the numerous marks of grief and sympathy which I read on the faces of Mahomedan dhobies and other low caste people, when the latter happened to pass by meduring my walks in the Fort at Mandalay? Why, I saw some of them weeping and shedding tears out of sympathy for me. The authorities tried their level best to prevent my countrymen at Mandalay from showing any marks of respect towards me, but I can never forget that there were numbers who did not up to the last day yield to this pressure and continued to salaam me. The sympathy that I read on the

faces of my countrymen while passing by me at Mandalay has left a deep impression on my mind and that impression bas been still deepened by what I have seen and felt since my return to my own native land. I do not believe, Gentlemen, that the idea of Hindu and Mahomedan unity is only a phantom, but even if it were so, are we representatives of 20 erores of Hindus in India to take things quietly as they are and allow our people to sink deeper and deeper into misery which can only lead them and us to complete national death, which is inevitable if the existing political and economic conditions are to continue for any length of time? I, on my part, Gentlemen, decline to give way to pessimism. Mine is a religion of hope and faith. I believe in struggle-a righteous, stern, and unyielding struggle. I am quite prepared for defeats and repulses. The colossal difficulties in the way of success, the discouraging circumstances relied on by the advocates of inactivity do not overwhelm me. In fact, I am inclined to take them as a greater reason for a more determined struggle. According to my political creed every repulse ought to furnish a fresh starting point for a renewed, more righteous, and more vigorous activity. The political principles which I believe in very strongly, are that nations are by themselves made and it is righteousness that exalts a nation. Under the circumstances, my countrymen, my humble advice to you is to be neither nervous nor hysterical, to maintain a dignified, firm, manly, but righteous, attitude amidst difficulties and storms; and to continue the struggle in the light of the experience gained, "with a heart for any fate, still achieving, still pursuing, learn to labour and to wait." Now a word as to our mutual relations. True to their instinct and traditions, our enemies are trying to bring about a schism among the patriotic party. Unfortunately their efforts have already met with success and a deplorable schism has already taken place which is extremely painful and humiliating to every patriotic Indian. For some time to come the efforts of every true son of India will have to be directed to bring about a reconciliation amongst brothers that have for the present parted. The latest move is to play Moderates off against Extremists and vice versa. To tell you the truth, I do not know whether these words truly represent the principles of the parties that are called after these names. I for one do not like these names, but if these words are to stick to us, I would beg of my Moderate friends not to play into the hands of the enemies, as to do so will be, in the words of the Hon'ble Gokhale, to make confusion worse confounded. It may be that some of the socalled Extremist methods are not to their liking, but for that reason to give them over to the enemy and to force them into the position of perpetual opponents by slighting them or holding them up to the persecution of the Government and the ridicule of the Anglo-Indian will not be wisdom. It would eventually involve us in difficulties and controversies, which might exhaust all the time and energy available for national work. To my Extremist friends I would respectfully appeal not to be impatient of the slowness of age and the voice of practical experience. It will be an evil day for the Hindus, the Mahomedans, and the Parsis, to allow all their national characteristics to be entirely swept away by Western manners and methods. Let us never forget that we are not an upstart people, having no traditions and no past to boast of. Respect for age, regard for seniority, reverence for ties of blood and relationship, constitute the most valuable heritage bequeathed to us by our forefathers and we shall be going backward, rather than forward, in exchanging them for the noisy and, at times,

undesirable and pushful manners of the West. In any case, it is absolutely necessary to observe and maintain discipline in public life. Without it we may be only confounding chaos with progress. I would, therefore, beg of you to do nothing which would hamper the growth of the responsible public life in the country. My Moderate and Extremist friends will not, I hope, misunderstand me. I do not say that they have done anything to deserve my remarks. Mine is only a danger signal. One word more and I have done. The country is now in the grip of a dire famine. The nation that we aspire to serve mostly lives in huts and cottages and is in great distress. The Government is doing its duty, or, at any rate, professes to do it, in providing relief to the unfortunate victims of famine. Shall we, the blood of their blood, lag behind and do nothing to relieve the distress of the aged and the poor? The highest dictates of patriotism require that our sympathies should go forth to the help of the destitute and the wretched and that by sharing what has been given to us with our countrymen in distress we should conclusively establish our claims to speak for them and to demand their co-operation with us in the ensuing struggle. Our claims to their regard and love should be based upon substantial services and not merely on lip-sympathy expressed in paper resolutions. I therefore appeal to my friends and co-workers to put their shoulders to the wheel, to organise a non-official famine relief campaign in the famine-affected provinces to collect funds and to carry sympathy and help to all homes and places in need of the same. The young, the aged, and the woman specially call to us for help, and it will be a shame if we decline to respond to this call and spend the whole stock of our energies in academic controversies and wordy warfare. I know that the work is tremendous and the difficulties still more so, but it affords the

most useful and most effective training for a disinterested patriotic life. Even partial success in this direction will be a very valuable moral asset and an object-leson to those who have to continue the work after us.

After the conclusion of his address he refered to Swadeshi and said that he had been Swadeshi all his life. They were indebted to the Bengalis for having installed Swadeshi on its proper pedestal and created an atmosphere in their Province which had permeated all classes, and unless they tried to extend the scope of Swadeshi, irrespective to caste and creeds, they could not hope for greater success. The spirit of Swadeshi ought to prevail in all departments of life subject to one condition, that whatever they had to learn from the West in order to maintain progress and secure prosperity on equal terms, they need not be ashamed to learn from the West. There was no use in going, back. They could only go back consistently with the national interests. Otherwise it would be suicidal. They could not but be affected by a predominant civilisation. They must learn to fight out the battle of nationality in modern times under modern conditions and try to use those weapons which were used against them. .

THE INDIAN INDUSTRIAL CONFERENCE.

PRESIDENTIAL ADDRESS

BY

DEWAN BAHADUR AMBALAL S. DESAI.

Late Chief Justice, Baroda State.

Gentlemen,—I thank you sincerely for asking me to preside at this important Conference. I cannot claim the practical experience of trade and industries possessed by my worthy predcessor, nor the literary eminence and broad econmic outlook of Mr. Romesh Chandra Dutt, the first President. My connection with industries is indirect, and my studies in Indian Economics are somewhat recent. I beg, therefore, that you will be good enough to take an indulgent view of any shortcomings in the observations that I offer for your consideration.

The fundamental facts of our economic situation are well-known: (1) Widespread and chronic poverty among a large proportion of the population; (2) dense ignorance of the masses; (3) an abundance of raw materials; (4) absence of scientific and technical knowledge, and practical skill; (5) a low state of commercial enterprise; (6) a large deficiency of capital. The question that we are called upon to consider is how to evolve a state of widespread industrialism out of the conditions just postulated.

Some of the remedies suggested are those that have proved efficacious elsewhere; viz., a wide provision of elementary education; foundation of technical schools and scientific institutes; establishment of commercial schools, and acquisition of scientific and technical knowledge by students sent abroad. All these are comprised under one comprensive head,—Education. The efforts made till now to supply it have been spasmodic and feeble. But strong, systematic, and sustained exertions are indispensable. They ought to be continually reinforced by a strong national spirit, that is determined to achieve success at all costs, and is immovably steadfast in the pursuit of its high national aim of securing our industrial regeneration.

In the meanwhile, we must depend for our immediate progress on our resources as they now exist. Our merchants are indeed mostly ignorant of the intricate ramifications of modern industrial conditions, their vast extent, and the foundation on which they ultimately rest. Happily there arise now and then above our economic horizon a few persons of the towering eminence of the late Mr. Jamsedji Tata; and commercial enterprise on a considerable scale has existed in Western and North-Western India from time immemorial. Our traders have penetrated into East Africa, Persia, Turkey, and eastwards into China and Japan. Merchants of Gujerat have recently gone to England and opened agencies there for the purchase of British machinery and mill-stores. Hindu pear! merchants have lately established firms in Paris and London. The Indian Specie Bank of Bombay has quite recently opened a Branch under Indian management in the heart of the British Empire. It is to such agencies that we must look for the immediate help that we require in the shape of commercial enterprise.

CAPITAL.

Next to the want of commercial enterprise and industrial knowledge, the thing that stands in the way of our industrial

growth is the absence of the requisite capital. Nay it may be asserted that the want of capital is now our chief desideratum. It is true that the capital now employed in our cotton industry amounts to nearly 30 crores of rupees. But if we remember our final aim, viz., to clothe ourselves wholly with home-made fabrics, we must confess that we have only made a fair beginning for a general regeneration of our industry. The great problem awaiting a practical solution is that of raising the necessary funds.

The question admits of a satisfactory solution, provided our best minds apply themselves to the task. The Rupee debt of the Government of India held in India amounts to Rs. 105 crores; and of this Rs. 55 crores are held by Indians. It may not be possible to divert all this into the channels of trade and industry, but even if we could secure for the latter purpose 4th of it, say Rs. 14 crores, the impetus imparted to our industries would be very great. It is to be wished that Indian publicists will earnestly endeavour to create a public opinion in favour of the diversion. That it is quite within their power, I have no doubt. The higher returns of trade and industries ought to prove a strong argument in favour of the change.

There is another and a cognate source which may well be tapped by our enterprising men. The amount deposited in the Postal Savings Banks was for the year 1904-05, Rs. 14 crores. Nearly 13 crores out of this sum were purely private Indian savings. Now if we could succeed in getting even a half of this sum, say Rs. 6 crores, for our commercial purposes, an amount of strength would be imparted to our industrial activity, of which we have at present no adequate conception.

The best way of fulfilling the latter purpose, as well as that of getting at the money now locked up in Government Promissory Notes, would seem to be the establishment of Banking insti-

tutions all over the land. Efforts on a small scale have already been made, notably in Poona, Ahmedabad, Benares, Lucknow, Lahore and other places. But these are tiny beginnings of very large potentialities. There is no reason why every town of importance should not have a Bank of its own. These small institutions may establish connections with the bigger ones at large commercial centres, and the whole capital of the country will be thus utilized to the best advantages.

It may be here stated in passing that it is not at all a difficult thing for men of character to inaugurate such establishments. In fact, the great thing to be remembered is that there is no department of business for which Indians of the middle classes are better fitted by heredity, and past traditions, than that of Banking. Practical Bank management requires just those qualities in which we excel and which we have cultivated for generations, viz., patience, calculation, foresight, thrift and the like. We have further a natural advantage over our foreign rivals in this respect, viz., we possess an intimate acquaintance with local conditions, and with individual solvency.

A satisfactory beginning has already been made as regards large Banking institutions. Bombay has started two large Banks; Madras has launched its National Bank and Calcutta is following in the wake. These institutions have already proved of great value to trade; our Indian genius for banking is so far full of promise. We want now a network of small Banking establishments which will act as feeders to the bigger Banks. One of the principal functions of these small Banks will be to inspire confidence in the poorer population, and to attract the sums that now lie idle or concealed underground owing to distrust and ignorance. Education alone can finally remove the

economic blindness which favours hoarding. But small well-managed Banks can do a great deal in the meanwhile.

It is clear, however, to all who take a comprehensive view of the present industrial situation, that Indian productive industry requires more capital than all the ways just mentioned can be expected to secure. The question arises, whether we should resort to foreign countries for loanable capital, or prefer to wait till our resources grow equal to our wants. There is a strong feeling among a section of our people that foreign capital should be shunned. Similar was the feeling of some Japanese patriots formerly. The sentiment is natural. But our interests require that we should look at the matter from a purely business point of view. From this standpoint, the only reasonable rule of conduct to follow is that we should freely borrow money of foreigners for industrial purposes. The Government of India has been long doing this for railway construction. Very powerful nations go to the markets of London and Paris for war loans, or for naval construction, and also for industrial development. There is no reason why we should not do the same.

The Honourable Mr. Vithaldas, my worthy predecessor in this chair, urged the same view. "We cannot," he said, "do "without foreign capital. It will be extremely short-sighted to "reject it on sentimental grounds. We must avail ourselves "of it, but we must take care that we do not pay for it more "than other nations." This is sound advice. In this respect we might follow the example of eur fellow-subjects of Canada. Patriotic Canadians welcome the advent of American brains and money in the development of Canada; but they naturally prefer that the work now being done by the capitalists of the United States should be shared in a vastly greater degree than now by those of their own countrymen who have money to invest.

THE SWADESHI MOVEMENT.

The new propaganda termed the *Swadeshi* movement requires some remarks. The aim of this movement is the establishment of new industries in India, by means of Indian "capital, if possible, so that the Indian people may be, as far as is practicable, self-contained and independent of the foreign imports that now flood the land.

The justification of the movement consists in the fact that the country has been impoverished during the last century by the inroads of outside manufactures on its old industries, so that it is now unable to supply its population even with the necessaries of life. The foreign goods now imported are not, economically speaking, indispensable. The materials of many of them are produced in the country, and an ample supply of labour is ready to hand. The Swadeshi movement ultimately seeks to call into existence the directing capacity, the technical skill, and the requisite capital, so that our own labour and money may convert our raw materials into the commodities which we now import.

There is a general consensus of opinion that the endeavour to establish new industries in India is very laudable in itself. The Government of India favours it. Every new factory established, every banking institution created, every steamship launched, is hailed by men of all shades of opinion. Scholarships for obtaining technical instruction outside the country are given, to a small extent, by the Government of India, to a larger extent by public bodies and public spirited citizens, while many enterprising and high-spirited youths go abroad at their own expense to acquire high technical proficiency. So far there is no radical difference of opinion.

Honest and patriotic men all over the country are trying their best to induce our countrymen to abjure the use of foreign goods altogether, in favour of indigenous ones of the same description. These earnest efforts, which are gradually spreading over all parts of the land, are viewed differently by different persons. So far as the methods are accompanied by unlawful acts of violence and intimidation, they deserve to be severely condemned. But unlawfulness apart, there is nothing in them that any honest man can seriously object to. The economic ideas of men differ in many points and a difference on this one is allowable. But no candid man ought to stigmatize these patriotic efforts as dishonest. They are perfectly legitimate.

But the statement may be ventured that even, from an economic point of view, they are not only justifiable but urgently needed. The protection of new or nascent industries by means of high import duties, and by bounties is held to be allowable by some of the highest authorities of the free trade school of Political *Economy. If the State in India had been identified in economic interests with the Indian people, some measure of protection might have been adopted by it long ago. But the Government of India being the representative in India of free trade. Britain is not at liberty at present to afford economic protection in any form to Indian industries. The people of India ought, therefore, to step into the vacuum, and do by voluntary protection what the State might have achieved in an easier way by tariffs and bounties. Thus the Swadeshi propaganda is, in essence, an endeavour to reinforce the cause of Indian industries by enlisting the Indian patriotic sentiment on its behalf. It is difficult to see how any objection can exist against such a move. Organized voluntary efforts are specially needed now in all departments of national activity. The Swadeshi movement is the application of this principle to that of national industrial regeneration.

In finally determining the utility of the movement our view need not be restricted to the free trade formulæ of English economists. Almost all the independent nations of Europe and America are at the present day encouraging their own industries by means of high tariff barriers and bounties. Germany and America are the two most prominent instances before us. Why should not Indians do by voluntary effort what these two nations are doing by the collective action of their States?

That this line of conduct is correct is proved by actual ex-The Finance Minister in his Budget statement last March recognized that the Swadeshi movement had resulted in the contraction of imports of cotton goods to the tune of more than a crore of rupees, indigenous manufactures having replaced them. An impetus is given to the handloom industry in Bengal and elsewhere, such as it had not felt for nearly a century, and large numbers of our countrymen have obtained a living thereby." There is an all-round industrial revival due to the Swadeshi propaganda. Fifteen Banks with a total capital of nearly 4 crores have sprung into existence. Five navigation companies with a capital of 121 lakhs have been started, 22 new cotton mills with a capital of nearly 2 crores have been established. Two jute mills, several oil-pressing mills, sugar factories, and mining and mineral companies, besides many that are not known, have been launched. (These figures are taken from R. B. Lala Baijnath's speech at the U. P. Conference.) In the department of cotton spinning and weaving, the number of spindles has risen from 50 to 60 lakhs and of looms from 45 to 60 thousand. These gratifying results are largely attributable to the Swadeshi propaganda, and to the Swadeshi spirit which it has aroused. In the face of these results, it is not reasonable to cavil at the Swadeshi movement.

There are well-meaning people who urge that the propaganda imposes an extra burden on the poor, or that it deteriorates taste and workmanship. Now, it is not always true that any extra burden is suffered by our poorer countrymen on account of the Swadeshi movement. In several cases, the propaganda has been only the means of advertising widely Indian goods of admirable quality and cheapness which were languishing for want of support. In some cases the preference for our own goods has indeed implied a small and often imperceptible sacrifice. But all protection implies such a sacrifice. When a State imposes a high tariff against foreign imports to bolster up a nascent industry, the sacrifice is equally real. Why should it be grudged because it is voluntarily borne? As to taste and quality, it is not always the case that the Indian article is inferior to the foreign. Often the reverse is the fact. The element of durability again is generally in favour of our products, and often goes far to counterbalance the loss in point of superficial finish. Lastly, there is no ground for the fear that patronizing crude articles will cause a permanent deterioration of our workmanship. Such patronage can, at the best, be very temporary, and competition among our own producers is bound, in the long run, to keep up the quality. The poor ultimately gain by the extended employment that arises for their labour.

Of the four elements of national manufacturing prosperity, viz., raw materials, technical skill, capital, and demand, the demand is the dominating factor which gives direction, shape and substance to productive activity. Now, our resources in raw materials are abundant. Technical skill can be created gradually, and for our immediate purposes we can rely upon importing it from outside. I have already dwelt upon the question of augmenting our capital. As to demand, it is very extensive in

India. Thus all that is necessary to do at present is to make the demand flow in such a way that it may fertilize native industries instead of foreign ones. All the foremost nations of the world are endeavouring at present to get wider and wider markets for their goods. Their political action is largely governed by this policy. In their mutual jealousy and competition they insist on an open door for all—notably in the vast Asiatic countries. The ordinary weapon used by these nations, is that of making their goods cheap to the consumer, of lessening the cost of transport by subsidizing shipping lines, of practising economies in production and utilising scientific inventions. They rely in the last resort on an appeal to the avarice of the foreign consumer.

Now, it is permissible to inquire why a nation situated like ours, and deprived of all means of enforcing its will by collective action, may not seek to extend its industries by appealing to a higher sentiment than avarice, viz., patriotism. Even royal personages have commended such an appeal and enforced it by their example.

RAILWAY TRANSPORT.

The question of a cheap and quick transport of our manufactured goods and machinery from one part of the country to another has not received the attention it deserves. It is, however, of vital importance to the growth of our industries. The utter collapse of the carrying capacity of the principal railway lines last season is fresh in our minds. It caused enormous losses to traders and producers and a serious dislocation of all commercial arrangements. A sufficient supply of rolling stock on each line is a sine qua non of railway efficiency, and ought to be insisted on. Smooth working arrangements for interchange of waggons between

the various lines are also badly needed. The railway staff ought to be imbued with the spirit of business. The Railway Board has succeeded indeed in effecting a few minor improvements, but is still far from coming up to the expectations of business-men. The delay in the despatch and handling of goods after arrival are often scandalous. For example, it generally takes 8 days before goods loaded in Bombay reach the hands of the consignees at Ahmedabad, which is only 300 miles from Bombay. The loading and unloading arrangements at bye-stations are defective, and add to the delay. Mr. Morley made a boast that the railway rates in India are very cheap. They may be cheap. But there is great room for improvement still. Now it costs nearly 15 Rs. (all charges included) per bale of varn or cloth sent from Ahmedabad to Cawnpore or Calcutta; while it can be sent to the latter place by rail and sea combined · for nearly half the sum. The railways yield a large surplus revenue after deducting interest and wear and tear of the fixed capital. Why should not this surplus be utilized to reduce the freight charges on all internal manufactures? A reduction in freights acts on trade like fresh capital or a new market. It is as new blood to a living organism. It is by cheap and quick transport that America has athieved her industrial pre-eminence. Indian manufactures need very cheap freights and rapid transport. I would commend this point to the earnest consideration of the Conference.

UNIFORM WEIGHTS AND MEASURES.

Somewhat akin to the question of cheap railway freights and quick transport is that of having for the whole country a common currency, and common weights and measures. The existence of important Native States, some with a standard coin of their own, accounts for the difficulties that confront us in the

way of getting a common medium of exchange. Political considerations are here interwoven with the economic problem. Maharaja Sayaji Rao of Baroda has generously adopted the British coin; and it is to be hoped that equally broad views will influence the counsels of Gwalior, Hyderabad and the Rajputana States in this important matter. It is the poor people of the Native States and travellers that suffer most from the existence of a separate local currency. There is less reason, however, for maintaining the present confusing labyrinth of weights and measures. Big traders can always protect their interests; and it is the poor and the ignorant that suffer most. The necessity of developing the domestic commerce of our vast country makes the question of a common currency and common weights and measures one of national importance.

AGRICULTURAL INDUSTRY.

I will now, with your permission, proceed to offer a few remarks on some of our leading industries, and among these. Agriculture first demands our attention. It stands at present at the head of all our other industries. An extension of purely industrial occupations will no doubt reduce its relative magnitude. But it will be a long time before its place becomes secondary, asin England. It behaves us, therefore, to pay special attention to The greatest impediments to its growth are—(1) the ignorance of the peasant; (2) his heavy indebtedness; (3) the irregularity of the rainy seasons; (4) the absence of irrigational facilities; and (5) the land policy of the Government. The charge of blind conservatism brought against our cultivator is not fully justified. He has always shown a readiness to produce crops that pay him best, and due regard being bad to his indebtedness he cannot be expected to do more. The Government of India have of late taken some steps to improve the returns of agricul-

ture. But, as usual, they have begun at the top instead of at the bottom. Something more is needed than having big central institutions or associations. Big central associations have failed in Bengal and cannot expect a better fate elsewhere. The theory that knowledge will filter down to the peasant in his village from the central institution or bureau is not supported by actual experience. There are thick impervious strata intervening, which prevent the desired percolation. The villager ought to be approached in his home and placed in possession of the knowledge which he lacks. For this village committees should be formed, and model farms ought to be established for every small group of villages. Trained Indian experts ought to be brought into direct contact with the peasant. Lastly, the interposition of the Revenue agency ought to be sedulously shunned. As regards the peasant's indebtedness, a further expansion of the . Co-operative Credit Associations ought to be encouraged. In the matter of irrigation, large works are good in their way, but the old system of having a good storage tank for every village deserves to be revived. Free education, and that of the right sort, must be placed within the reach of the agricultural population. Finally, the present land policy of periodical settlements must be abolished, and a permanent land tax ought to be fixed.

THE COTTON INDUSTRY.

The cotton industry is next in importance, but stands on a different footing altogether. We get almost all the raw material for it in our own country, and spare some of it for foreigners. Egyptian and American cotton is now annually imported in small quantities, and these imports will increase during the present year. The cultivation of the new Sind cotton promises, thanks to the liberal initiative and help of the Bombay Government, to give great impetus to our staple industry. Our Mill-

owners' Association may fairly be expected to show a practical appreciation of the efforts of Government by offering prizes to growers of long-stapled cotton in other parts of the country. Meanwhile, it is agreeable to note that the cotton industry is now on a firm basis, though we are yet far behind our legitimate place in the production of cotton fabrics. The system of paying the managing agents huge commissions calculated on the outturn alone is happily getting into public disfavour, and a more sensible one is gradually taking its place. The labour supply is unsatisfactory from a variety of causes, plague being the main one. The public can now justly demand that the excise duties on cloth which have trebled during the last 10 years and now amount to nearly 30 lakhs of rupees per annum should be abolished. increasing revenue from excise on cotton cloths involves a new danger to the industry to which the attention of all publicists might be invited. At present the interests of Lancashire form . the sole pretext for the impost. But if the revenue from it grows at the present rate, considerations of finance are likely to be utilized for its continuance. It will be said that the amount is too large to be at once remitted. This is an additional reason for taking concerted action now to get this obnoxious tax removed. At the same time we have a right to expect that the industry shall not be allowed to be threatened with new artificial restrictions on any grounds whatever. Whilst on the subject we must thankfully acknowledge that the composition of the Factory Commission now sitting is quite satisfactory. We may be permitted to hope that the interests of India alone will dominate its final recommendations.

IRON, COAL AND MANGANESE.

It is a pleasing feature of the new industrial spirit that Indian merchants are turning their attention to the mining of

coal and manganese. It is gratifying that recently a few coal and manganese concerns have been launched by Indians with Indian capital. Ignorance had hitherto hindered our progress. To ensure future progress it would be well if steps were taken to train Indian experts in Geology, Mining and Metallurgy. The suggestion put forward last year by the Hon'ble Mr. Vithaldas, viz., that all companies formed outside India for mining should be compelled by Government to reserve a portion of their stock for Indian investors, is worthy of consideration. The difficulty lies in the fact that rich foreign capitalists are satisfied with a smaller return than Indian investors, and that the latter generally fight shy of uncertain investments. The Tata Iron Works mark an epoch-making advance in mining and metal-lurgy, and are pregnant with very far-reaching results.

THE SUGAR INDUSTRY.

The United Provinces of Agra and Oudh supply half the home-grown sugar. But it is now becoming clear that our sugar production is losing ground in competition with that of Java, Mauritius, and Germany. The Swadeshi agitation is trying to enlist the religious scruples of the people in favour of native sugar, but the practical question of extending the indigenous industry remains unsolved. Perhaps Mr. Hadi's new way of making sugar may aid in the solution. More irrigation works may hasten the desired result. The difficulty of getting sugarcane all the year round is at the root of the question. It is not easy to suggest a remedy. The refinement of molasses, however, pays fairly well, if the manufacture of rum as a bye-product is permitted by the State. Our patriotic countrymen are, however, in earnest, and Madras is going to have a sugar factory soon.

JUTE AND SILK.

The jute and silk industries are at present confined to Bengal, but the jute mills are financed and managed by Europeans. We, on this side of India, are unable fully to understand the latter phenomenon. There is no reason why awakened Bengal should not claim a share in this thriving industry. In the article of silk, Bengal has a practical monopoly, though Kashmir is preparing itself to enter the lists. Praiseworthy efforts are made in Mysore to produce silk on a commercial basis. Mahraja Sayaji Rao, the enlightened ruler of Bareda, has taken the question in hand for the benefit of Gujerat. A Deccan Brahmin who has returned from Japan after studying sericulture in all its branches has, it is stated, started a small and successful factory of his own in the Konkan. It is to be hoped that his bold example will find enterprising imitators elsewhere.

LEATHER AND PAPER AND OTHER INDUSTRIES.

The leather industry is gradually spreading, though no impression seems to have been made on the imports as yet. The efforts of Mr. Chatterton, of Madras, in this direction are deserving of great praise. But the field for leather manufactures is still very extensive, for we export skins and hides of the value of Rs. 14 crores. A factory at Navsari and another at Bombay, both lately started, are doing good business. There is no reason why every province should not have a leather factory of its own. The new Alembic Chemical Works at Bombay mark a valuable departure, which is pregnant with important results in the immediate future. The glass works at Umballa, Dehra Dun and Bankipur are among the offspring of the new Swadeshi spirit in British India. Cheap railway freights are especially necessary in the case of

glassware. Enamelled ware and pottery have been taken in hand by patriotic Bengali gentlemen, and the Victoria Technical Institute at Bombay trains young men in enamelling. Surgical tools of excellent finish are now produced locally in Bombay and sold at a reasonable price. A tobacco factory near the same place must be reckoned among the progressive works of the year. There is, of course, abundant room for these industries all over the country.

HOME INDUSTRIES.

The question of creating home-industries for our rural areas is one deserving of serious consideration. For more than 6 months in the year almost the whole agricultural population of unirrigated tracts is absolutely without any employment. It might greatly improve ther material condition if some handicrafts suitable to their needs could be successfully introduced into our rural areas. The handloom may answer the purpose in many cases. Knitting and lacemaking also suggest themselves. The matter is very important, and suggestions or papers dealing with it ought to be invited.

EDUCATION.

No review of national industries can be complete without a reference to the subject of Education. I have touched upon the deficiency of the labour supply for factories. Agriculture makes the same complaint. Plague is no doubt one of its principal causes, but there are others of a deeper kind. The labourer in the principal industrial centres gets higher wages than he can dispose of according to his present ideas. He is very ignorant and his wants are few. He squanders a considerable proportion of his earnings on liquor and also on flimsy foreign finery. If he still has money left he deliberately absents himself from work till his pocket is

again empty. In the meanwhile, his dwelling continues to be insanitary, his load of debt remains undiminished, and his food also remains the same as before. It is absolutely necessary, if his condition is to be really elevated, that he should receive a sound elementary education. It is the duty of the State as well as of the rich to provide this as extensively as possible. From an industrial point of view, it is as much needed as from any other. The quality of this ought to be such as will make him physically robust, and mentally and morally equal to his foreign competitor.

The need of technical education on a broad scale is now equally acknowledged. The Government might be reasonably expected to take the lead, but the question is a national one and the whole nation ought to combine to provide it. It is our own problem, and we should apply our shoulders to the wheel to bring about the desired result. The difficulty of getting the funds is . not so great as is imagined. How to begin is practically a more difficult matter than the raising of funds. Each province, in fact each district, ought to decide the lines of industry for which it will provide industrial and technical training for itself. Bengal, for instance, might select the industries of silk, jute, tea, and indigo; the United Provinces sugar, glass, and woollen manufactures; Bombay cotton, and woollen, and so forth. The manufacture of leather ought to be taught in all the provincial schools. Similarly mechanical engineering, electrical engineering, and industrial chemistry might form the subject-matter of instruction in all our technical schools. The point to be constantly kept before the eye in all these endeavours is that there ought to be a living connection between the technical school of a district or province and its actual or projected industries. When each province has at least one technical school of its own it will be time

to think of a big and all-embracing polytechnic institute for the whole of India. Further, all industrial progress ultimately depends on scientific knowledge. It is to be hoped that the Tata Research Institute will serve as the head reservoir that will perpetually replenish all the technical institutions of the country with the freshest achievements of science and art.

The requirements of the productive industry will be met by a provision for a course of education as just indicated, but to complete our national equipment industrially, a school or college providing a full commercial course is very much needed. Among the subjects that may be taught in such an institution may be included national and cosmopolitan political economy, private and public international law, commercial law, the commercial policy of the leading nations, one or two foreign languages, commercial and political geography, and statistics of trade and commerce, agriculture, manufactures, and mining; and lastly currency

CONCLUDING REMARRS.

The usefulness of this Conference is now placed beyond question. It effectually focusses the interest of the public in our industries which are a matter of vital importance to the whole nation. The very able papers written by gentlemen possessing special expert knowledge which this Conference has been the means of evoking, form by themselves a mine of valuable information. The Directory of Indian Goods, which may be claimed as the special work of our indefatigable Secretary and his staff, is a production of great practical utility. By making it the medium of advertisement for our producers and Swadeshi consumers, its scope will be greatly enlarged. The exhibition of Indian products, which has been abandoned this year for unavoidable reasons, will, it is hoped, always form an adjunct to our

annual gathering. It is a question whether the annual exhibition may not be taken up by the Conference, of course with the help and active co-operation of the Congress Reception Committee. The idea that the Exhibition is a mere show is not borne out by facts. Producers exhibiting their goods have obtained a degree of publicity for them which would have been otherwise hardly attainable. Further, it makes the materials for a comprehensive directory of Indian goods easily accessible. While a considerable proportion of the visitors must be sight-seers, there is always an important but increasing minority who benefit by it even commercially. A few foreign rivals may perhaps derive advantage from it. But industrialism is now an international race, in which the fittest will win. At the same time, we are always ready to adopt suggestions for making it widely beneficial.

It will be well if each separate province is able to have its Industrial Conference as the United Provinces had lately. There is much that is common to all the provinces, besides certain matters that are more or less local. It is for the National Industrial Conference to deal with the general topics, and also to offer suggestions even to local Conferences.

While the lines of work hitherto pursued may be continued with advantage, it will arouse and sustain general interest, if practical aims are associated with our labours. The prizes for an improved handloom are very appropriate. The Conference may similarly encourage the acquisition of specialized practical knowledge in directions suggested by those who are in touch with industries. The encouragement may take the shape of scholarships, of prizes for proficiency in advertised subjects, or for monographs on particular industries that now await practical action. For these and other purposes that may be named, large

funds are needed. Is it patriotic to wish them to come from outside sympathisers? Can they come from other people? Has any nation ever been industrially regenerated by external help? There are many here who, I am sure, would proudly spurn the idea of receiving such assistance. Let us never forget that nations are made by themselves. In this as in all our other activities, self-help and self-sacrifice ought to be our watchwords. Let every patriotic Indian who feels the existing poverty of his country honestly contribute his mite, and exert his best to get others to do the same. To quote His Highness Maharaja Sayaji Rao's words: "To help in the industrial movement of the present day is a duty which devolves on all equally." Let us then earnestly act in this spirit, and ample funds will be always at our disposal.

WELCOME ADDRESS

BY

PROF. T. K. GAJJAR.

Chairman of the Reception Committee of the Third Industrial Conference, Surat, 1907.

Brother-Delegates, Ladies and Gentlemen.—Before I proceed to discharge the duties assigned to me by the Reception Committee of the Third Industrial Conference. I must offer my apology for my inability to do justice to the responsible work entrusted to me. I have often been invited by kind-hearted friends to speak on the topics connected with my favourite lines of work. I have, however, been obliged to decline the invitations, as I have always felt myself diffident about venturing on public platforms. I have no hereditary aptitude for the art of public speaking, being born of an artisan family, and have, therefore, contented myself with doing whatever other work lay within my power. But the citizens of Surat-the place of my birth-nominated me to the proud privilege, for which I am thankful to them, of according to you all—the representatives of Industrial India-a hearty welcome worthy of the city which was the greatest industrial and commercial centre on this side of India under the Moghuls, and I could not decline the nomination. It was here at Surat that our present rulers got a footing as traders after roaming over seas, and it was here that they established the factory which developed, in the course of centuries, into a great Empire. Surat then was in the zenith of her glory. Skill, intelligence, enterprise and commerce combined to shed lustre over it. But alas! now its glory has gone and its energy and activity have declined. The world-renowned arts of Surat now lack the spirit of progress and linger behind the advances of Science. At this place then, gentlemen, I give you a most cordial welcome.

It is in the fitness of things that this Conference should meet at a place which furnishes an object-lesson of our present economic situation and which should consequently inspire and stimulate the sacred work we have undertaken. It was a happy idea of the Benares Exhibition Committee to organise, in connection with the Industrial Exhibition, an Industrial Conference. In doing so they took the practical step without which. according to the penetrative observation of the Hon. Dr. Rash Behari Ghose, exhibitions were useless. The practical genius of the great Ranade also had perceived the necessity of industrial conferences, which were consequently held in Poona in the years 1891-92-93. But this movement did not continue after the elevation of Mr. Ranade to the bench of the Bombay High Court. Its spirit lay dormant. It was reserved for a Gujarati colonist of Upper India, the Hon. Munshi Madho Lal, with the able co-operation of Mr. R. N. Mudholkar, to revive the movement and secure the cooperation and sympathy of all workers-whether official or non-official-in the cause of India's industrial progress. The Conference was launched at a very opportune moment, a moment when India experienced travails caused by the birth of far-reaching movements-a moment when the Swadeshi movement swept over the whole continent, welcomed and supported by all people, -rich or poor, literate or illiterate.

The national spirit embodied in the sessions of the Indian National Congress gave a tangible shape in 1901 to our industrial endeavours by the institution of an Industrial Exhibition at Calcutta under the organising talent of the Hon. Mr. J. Chaudhri. The sessions that followed organised these shows on a more or less grand and comprehensive scale. But it must be said they were not pervaded with the spirit and insight which advanced industrial nations have manifested in the exhibitions held by them. Instead of making arrangements to show the processes of manufacture our raw products pass through in foreign countries, or suggesting lines of development for our existing industries, we collected samples of articles manufactured in India to give an opportunity to the agents of foreign manufacturers to take minute notes of them and prepare their cheap machine-made imitations to replace our manufactures in our own market. These remarks will, I hope, be borne in mind when, such aims and exhibitions are organised in future.

The short time at our disposal has not enabled us to exhibit Indian-made articles on these grounds. We have tried to meet this deficiency by holding a small but excellent exhibition of handlooms, including some from Surat itself. This is the first time, therefore, that our Conference meets without its parent institution. This break, let us however hope, will conduce to a modification of the ideals of future exhibitions.

Brother-delegates, we have assembled here to deliberate with a view to take practical steps for the vital question of the industrial regeneration of ourselves, on which all other questions—political, social, religious—depend to a greater or less extent. This platform of science and industry makes room for all classes of the people to meet together, laying aside personal ambition, political animosity, religious prejudices and State officialism.

so that they could all combine in an unanimous effort to raise every class in society to a higher condition of personal excellence and usefulness, and extinguish class distinctions by diffusing equal education. We have taken in hand this most vital question and we cannot allow any further time to pass by, without organised action, to raise our nation to the rank from which it has fallen.

I may now crave your indulgence for a brief reference to the great problems on which the industrial efficiency of a nation depends. Keeping aside the political, geographical and sociological factors, we may touch the economic factors which have been repeatedly pointed out in lucid and definite language as being available in our country. Our fertile lands, rich mines, vast forests and hidden treasures, the natural forces pent up in the mighty waterfalls of the rivers that irrigate India—the capital hoarded in temples and invested in non-industrial transactions—the abundant labour that can be obtained on easy terms—have not arrested the decay and poverty with which we are overwhelmed. Our ignorance and apathy, and the influence exerted by foreign manufacturers on our fiscal policy, have reduced us to such a state.

For the last so many years we have been working for the progress of our nation, but, I must say, without a proper grasp of the methods and aims of that progress. We have neglected the lines of the solution of economic problems followed by the foremost nations of to-day. Some of our national problems would ere now have been solved to a great extent, if systematic technical education along with general education had been introduced throughout India. Japan adopted technical education 25 years after our benign Government initiated the present educational system in India, and during such a short period she has become

a comparatively trained nation, trained to think, trained to do the best along any line that may turn up and has grown into a world-power whose friendship and goodwill are sought by other nations. But what has been our fate? Our indigenous industries have been crippled by foreign competition or have languished for want of a proper application of the modern industrial methods. The nation that proudly called herself the workshop of the world, allowed our country to be degraded into one of the chief markets of the world. Foreign syndicates make use of India's natural forces to deprive her of mineral wealth, in the absence, among other causes, of enterprise and adequate training on the part of the people.

For example, the Mysore Government is generating electric power in the Cauvery at a tremendous outlay of its people's money and has leased it to a foreign syndicate to exploit the mineral wealth of the State in return for a small royalty. The resources of the State are doubtless developed thereby, but its people have not been profited to the extent they ought to have been, and have not acquired any aptitude for scientific mining or for making use of the natural forces.

What is thus happening in Mysore also operates more or lessall over the country. The Indian Government is trying to develop the mineral resources of India, but it must be borne in mind that the development of a country is quite different from that of its people. The exploitation of America, Africa and Australia has resulted in the extinction or serfdom of the original inhabitants.* The present Amir of Afghanistan

^{* &}quot;If," adds Mr. Clark, "the Government would grant railway and mining concessions to foreigners, the country would develop rapidly, for its mines alone would attract many prospectors and, if found to be as extensive as currently believed, much capital would follow. The Government and people, however, are united in opposing any concessions to foreigners."—The Indian Trade Journal, Dec. 12, 1907.

fully realises this difference and does not grant concessions to foreign capitalists to work the rich mineral deposits in his country, but engages foreign experts to train his subjects to develop the resources of the country themselves. This shows that the Amir cares more for the permanent interests of his subjects, than for the temporary gain to his treasury from concessions to foreign syndicates on easy terms.

The charge of this neglect of duty, however, does not wholly attach to our Government. We must share it in part, because the pioneers of modern industries in India have not combined their energies together to devise ways and means for organising a system of technical education managed by and for them.

We shut our eyes to the benefits other nations have reaped through an efficient educational system in their countries. Our very bones and marrow (oilseeds) are exported to fertilise other lands, and our corn is exported to feed others when our people barely get one meal per day. Our raw products are sent to foreign countries and imported as manufactured goods. Thus the large margin of profit that should have served to feed our own brethren goes to enrich the foreign manufacturer.

All this happens under our own eyes. Not being provided with the modern industrial facilities and mental equipment, we have been reduced to a state of helplessness and we suffer ourselves to be impoverished and our country to be exploited by foreigners.

I cannot omit to mention in this connection the work the Government and some of our enlightened people have done in this direction. Our rulers have in their own way and in accordance with their light and interest fostered education, general and technical, have carried on economic and industrial investigations,

have organised departments deemed necessary for the industrial expansion of modern times—undertaken experiments and convened conferences for the development of the resources of India. But the people of this country have themselves availed but little of these surveys of the reports and monographs published by the Government or of the results of its experiments and investigations, because they were never taught the modern methods of handling industrial questions.

In the same way, the large sums subscribed by our people were utilised by the Government for educational purposes in accordance with the prevalent ideas about education. Had a portion of these sums been spent in educating our artisans, farmers and capitalists in the ways and means pursued by the people of Europe and America, we would not have been made dependent on others for the necessaries of our life. Our Princes introduced facilities for technical studies in their States, but their measures were not carried out in the right patriotic spirit which demands in educationists earnestness, completeness and foresight, especially in a country like India, rich in resources and abounding in people addicted to conservative and exploded methods of work and unaware of the progressive and scientific methods of advanced nations.

Lord Reay's famous resolution on technical education fell into deseutude because persons entrusted to carry it out did not possess the essential qualification just mentioned. The resolution aimed at making Sir J. J Art School a central institute for art industries, the V. J. T. Institute one for mechanical industries, and the Poona College of Science one for scientific and technological studies. But when Mr. Chatfield was interpellated in the Bombay Legislative Council as to the fate of the resolution, his

reply was to the effect that the problem of industrial training was being solved by the Baroda Technical School.

• The Kalabhavan of Baroda was instituted when H. H. the Gækwar initiated his enlightened policy for the advancement of his subjects. General education, the foundation of all technical education, was made free and compulsory in one division of the State, i.e., in Amreli, and by this time it is extended to all the divisions. Three trade schools were also opened. A State museum was established and a system of industrial loans was instituted on the lines of the culture system of Java suggested by the great Ranade. This liberal policy encouraged me to organise the Kalabhavan which had for its ideals the Zurich and Charlottenburg Technical Schools. It undertook to impart instruction in such subjects as would not only serve the present industrial needs of the people, but enable them to start new industries. After making some preliminary remarks, I shall refer to the work done by it in this direction.

The industry that occupies a prominent place in our commercial life is the mill industry. Its commercial and mechanical sides are attended to, but, until recently, no thought was devoted to the development of its chemical and artistic aspects. Our technical schools are partly responsible for the neglect of these important factors in mill industry. With the single exception of the Kalabhavan, they rested satisfied with the provision of instruction, which the existing needs of the industry required and took no steps to introduce studies necessary for its further development. The V. J. Technical Institute is now arranging for instruction in dyeing and textile chemistry twenty years after the Kalabhavan took up the subjects at Baroda.

The Kalabhavan had a great share in the introduction of the dyeing industry in India. When our vegetable colours were

driven out from the world's market, which they had held for centuries, by the marvellous colours modern chemistry had extracted from coal-tar; when our dyers and weavers were reduced to poverty, their occupations having been taken up by others, there was no recourse left but to make use of these new colours and not to pay unnecessarily for the process of dyeing carried on outside India. Germany, the home of these chemical dyes, was anxious to secure a market for them in India. Our mill industry also needed a healthy growth and development. These considerations led me to suggest to the great oclour manufacturers of Germany to train students and instruct native dyers in the use of their dves if they desired India to become one of their great consumers. They appreciated the suggestion and acted upon it, and started their first laboratory in this very city and commenced to instruct students and native dyers in the processes connected with dyeing. When Mr. J. N. Tata heard about ' this, he at once communicated with me and made up his mind to append a dye-house to his mill, with the help of dyers trained in my private laboratory at Baroda. Even a costly laboratory set of dyeing apparatus was presented to his mill through me by the German manufacturers. Dyeing schools were soon after opened at Ahmedabad, Delhi, Cawnpore, Amritsar and other places under my supervision and several trained dyers were sent round as travelling agents. There are now several laboratories in Bombay connected with German offices where the educational methods the are trained. These are Germans adopted for their purely commercial purposes, and the result is the present remarkable revival in cur dyeing industry. My friend Mr. Tulsiram, who introduced dveing into Madura, informed me, at the time of the last Bombay Congress, that 47,000 Sorathi settlers have been blessing the trained-

dyer sent by me to Madura some years back, and the Glasgow turkey-red yarn manufacturers had to send their agents to Madura to enquire why all the imports were stopped and what were the methods of dyeing adoptd there. Since that time an extensive use of coal-tar colours is made in India, and thus is saved to her the margin of profit swallowed by Lancashire and Glasgow. The dyers and the experts of these German firms were assisted by the students of the Kalabhavan in developing the dye-houses of our mills. They are saving the mill industry from stagnation, are giving remunerative work to thousands of workmen and showing productive investments of capital. They are successfully working the dye-houses which costly foreign experts failed to do. Had it not been for these pioneers to whom the flourishing conditions of mills is indebted to a great extent, our manufacturers would not have been · enabled to meet the demands the Swadeshi movement is making on them.

We live in a time when new ideas are spreading. For instance, many believe—and their number is on the increase—that since Government cannot be expected to promote our industries by a policy of protection, we should promote them ourselves by means of a consumers' league to boycott foreign articles. Now I do not wish to assert either that boycott is altogether impracticable or it is altogether useless. What I do wish to point out is that boycott can never by itself solve an industrial problem. For instance, the wood agriculturists of England boycotted indigo, branding it "Devil's Drug" and the Legislature also came to their aid by passing the harshest laws to punish those who imported it. But the use and import of indigo went on in England until modern chemistry produced the colouring matter artificially and at less cost. Scientific knowledge, technical

skill, and industrial enterprise and organisation—these are the true remedies, the only positive forces we can rely on to develop our industries.

It has been pointed out above that the expansion of mill industry has not been attended with the parallel development of the chemical industries. Many raw products await chemists to transform them into articles of use and commerce. Take for instance, the varieties of seeds our land produces from year to year. They are sent to foreign countries to provide us with their oils and derived products. If we started oil mills, a group of chemical industries will come into existence and utilise the by-products. You are not unaware of the new and unexpected avenues of industries, which the chemistry of by-products opens up in the West. For the last twenty years I have been preaching the great future that lies in store for oil industry in our country. The dazzling prospects that the textile industry holds forth, however, leaves little room for it to attract capitalists and manufacturers.

Another disadvantage we suffer from—the lack of chemical knowledge—is seen in mining and metallurgical operations. We have been quarrying mineral deposits and exporting them to Europe because we do not know how to make them into articles of use. The minerals that demand chemical treatment are not touched but only those which can be readily and easily transhipped to Europe. The gigantic scheme of the late Mr. J. N. Tata to work iron ores, which have been allowed to remain undisturbed until now, will, no doubt in course of time, bring about a steady progress in our metallurgical undertakings and stimulate the growth of an extensive mining industry.

"The feature which stands out most prominently in a survey of the mineral industries of India is the fact that practically nothing has been done to develop those minerals, which are essential to modern metallurgical and chemical industries, while most striking progress has been made during recent years in opening out deposits from which products are obtained suitable for export, or for consumption in the country, by what may conveniently be called direct processes."

"In this respect India of to-day stands in contrast to India of a century ago. The European chemist, armed with cheap supplies of sulphuric acid and alkali and aided by low sea freights and increased facilities for internal distribution by a spreading network of railways, has been enabled to stamp out, in all but remote localities, the once flourishing native manufactures of alum, the various alkali compounds, blue vitriol, copperas, copper, lead, steel and iron, and seriously to curtail the export trade in nitre and borax. The high quality of the native-made iron, the early anticipations of the processes now employed in Europe for the manufacture of high-class steels and the artistic products in copper and brass gave the country a prominent position, in the ancient metallurgical world."

"With the spread of railways, the development of manufactures connected with jute, cotton, and paper, and the gradually extending use of electricity, the demand for metallurgical and chemical products in India has steadily grown. Before long the stage must be reached at which the variety and quantity of products required, but now imported, will satisfy the conditions necessary for local production of those which can be economically manufactured only for the supply of groups of industries."

What line of action does this extract from the new "Imperial Gazetteer" suggest to us? What steps are necessary to develop our mining industry on a scientific basis? Instruction in mining and metallurgy either in the existing colleges or in an Institute

of Mining, will alone lead to the fulfilment of prospects our rich mineral deposits hold forth. By its means another great staple industry will come into existence and supply the people of India with commercial activity and remunerative work and repay the cost of education thousand-fold.

We have to blame our Government for not rousing itself to the necessity of creating a great Institute of Mining. The great work it is carrying on for the improvement of agriculture should be supplemented by some efforts in this direction, because all chemical industries depend upon agriculture and mining. Its agricultural improvements will take time before they are universally adopted throughout India, but provision of instruction in mining and of facilities for the working of mines will give a stimulus to the prosperity of India and *check impoverishment and destitution to which villages after villages have fallen victim through the changing conditions of the times.

We are fortunate in having big Native States to look after our interests. If our Government does not shake off its tardiness, let us appeal to the great ruling princes of India to set apart a portion of their revenues to supply this great want. The money spent on it will be repaid by the enhancement of their revenues caused by the industries which will spring up in connection with the working of the mineral wealth which lies imbedded in their territories or in British India.

In this connexion I have great pleasure to announce to you that H. H. the Thakore Saheb of Morvi intends to establish a Technical Institute in his State. It will provide instruction in technological chemistry and in mining and metallurgy for which there is a great field and demand in India. The institute will provide higher standard of studies than that provided for at the Kalabhayan.

Kathiawad and Cutch contain great possibilities of development for some chemical industries. The valuable deposits of salt and iron pyrites there hold forth bright prospects for the manufacture of soda and sulphuric acid—the two great pillars of chemical industries. The people of Kathiawad and Cutch do not lack enterprise. Let some of them divert their energies from the cotton trade and go in for these industries. If they do so, the favourable geographical position, rich geological formations and the patriotic interests of the chiefs will, within a decade, transform the two peninsulas into a great manufacturing centre and drive out for ever the recurring famines which depopulate and paralyse some of the Native States.

For want of time, I have to leave off reference to important industries such as tanning, brewing, glass and porcelain and many others which have a great future before them.

Indigenous Indian industries are characterised by the simplicity of tools and implements employed by the workers. The labour unit of Indian industry is small and the capital required for working that unit successfully is also small. Time has brought us, whose industries possess these characteristics, face to face with modern achievements of Western science, and its multifarious inventions in the mechanical, chemical and electrical branches. So on the one hand we have to produce on a large scale and to adopt the factory system, but on the other hand we have also to rescue our small industries, and make them, with the help of modern science, a source of prosperity to our country. The question of cottage or village industries is one of the vital questions of our national life. There is some possibility of solving it, according to Professor Hobson,* if a cheap produc-

^{* &}quot;Science in Public Affairs."

tion of electric energy owned or controlled by the public can be cheaply distributed throughout India.

Let our industrial and political leaders concentrate their energies on the proper handling of a problem like this and solve it once for all. Many of the disadvantages we suffer from would thus find a remedy. Let our activities profit by the lesson the industrial history of the West has to teach to the world, that huge combinations for the maintenance of artificial prices, huge and lying advertisements and gross adulteration of manufactured products get rid, according to Prof. Duncan, * of the efficiency in manufacturing operations by which every business should naturally stand or fall. Let us not proceed on lines which have brought in their train misfortune and disaster. Instead of blindly following in the footsteps of Western manufacturers,let us adopt their latest methods of work, and introduce the systems devised to nullify the evil and disastrous consequences of those . prevalent now. Let us bear in mind that the dominant factor of industrial success is just simple efficiency, by which I mean a combination of economy and progress in manufacturing operations. If we do this we shall not be handicapped in the competitive race of commerce but we shall be ahead of Western countries in proportion as we develope the nascent skill of our people and to the extent we make use of our resources.

We have undertaken a grave responsibility in meeting in such conferences from year to year. The destinies of India hang on the practical results of our deliberations. Consequently, I may be permitted to suggest some lines capable of leading us to the desired goal. We must not only apply ourselves to the study of the industrial conditions prevalent in

^{* &}quot;Chemistry of Commerce."

India and elsewhere, but should come to a definite conclusion as to the means and methods to be adopted to improve our condition in consonance with the highest developments of modern science. We should bring about the creation of all the facilities in India which the artisans, manufacturers and capitalists possess in the West, Economic and industrial museums* planned on the models of Europe and America, should be established in every important commercial and industrial centre. Our annual exhibitions may form a nucleus from which the future museums may grow in conformity with local conditions and requirements. A collection of samples of foreign manufactures should be placed side by side with that of home-made articles, so that local artisans may have the benefit of cultivating their taste in the proper direction by comparative study. Their heads should be patriotic Indians who possess sufficient experience of the needs and resources of India; they will furnish the requisite information and help to our people to go in for new productive industries. It is unnecessary to add that commercial bureaus must follow as a corollary to museums. The reports prepared at these institutions should not only be published in scientific and technical · English which takes for granted a good deal of training, information and knowledge on the part of the readers. but also in the vernaculars and in a form devised to attract the attention of our people and to interest them in their contents, thereby inducing them to embark on the introduction or creation of new and profitable industries.

Our ancient guilds known as the Mahajanas in Gujarat have suffered disintegration with the permeation of British influence in India. The services they performed as social and commercial forces were great, but now they have fallen into

^{*} Refer to Professor Gajjar's Museum Notes.

disuse. It is time that new guilds should be organised to meet the requirements of the times. They shall have to attend to the organisation of their industries, the creation of facilities in the shape of museums, bureaus, technical institutes, industrial banks, etc., to guard the interests of industrial centres and communities and to undertake industrial surveys in special directions. Our Conference will render a very important service to the industries of India, if it takes up the question of the formation of guilds seriously.

Only the Government has the means to carry out general industrial surveys. If they are properly carried out and their results placed within the reach of the teeming millions of India, the British Government will confer a great benefit on them. Our native princes may also be approached to come forward to help our industrial advancement by instituting economic surveys in their States. Our industrial development will be stimulated if surveys of particultar industries are carried out instead of planning a general survey of the whole country. H. H. the Gaekwar entrusted me, some years ago, with the work of making a survey of the dyeing and calico printing industries. This survey was of considerable help to me in my subsequent work for the memorial of dyeing industries.

Before putting suggestions on the last but important problem of our industrial regeneration, I have a pleasant duty to perform. Our Conference has been fortunate enough in securing as its President my friend Dewan Bahadur Ambalal Sakarlal Desai, who is a distinguished alumnus of the Bombay University, a staunch political leader of Gujarat and one of the captains of her flourishing mill industry.

His high intellectual attainments, varied experience of life, keen and penetrative grasp of our national problems will, I am sure, give a practical shape to our deliberations. The Industrial Conference is a practical offshot of the Indian National Congress. We, who have assembled here to-day, are all practical men and naturally anxious to work; we are idealists too; the industrial efficiency and expansion of India will be of the realisation of our ideals, if we put our shoulders to the wheel and work day and night for the amelioration and progress of our country.

Ladies and gentlemen, I have laid great stress on technical education and again I revert to it because it is the liver of industrial progress to which our activities must be seriously and vigorously applied. We must organise a national system of technical education with the help of industrial guilds which will formulate technical courses to meet local needs, start institutions where instruction in them can be provided and to raise funds to equip and finance such institutions. Let us all-all the workers in the onward march of India-rally round the banner of Education and leave no stone unturned to increase the brain-power of our nation. Let us not wait for the Government initiation in this matter. We must take our destinies into our own hands and the Government is sure to help us, when we help ourselves. Let us study the national forces of England, Germany and America in order to be enlightened as to the means and measures we should take for the regeneration and development of our industries. Without universal education, there is no salvation for us. We must undergo an intellectual revolution; our outlook of life and our present conception of mundane duties must be modified, if we want to remain as a nation and a nation full of youth and prosperity as in the days of yore. "Educate, educate, educate." must be the cry heard on all sides. Listen to the words of wisdom the present Secretary for War in England utters.

"Science," says the Rt. Hon'ble Mr. Haldane, "is essential to victory whether the struggle be in the arts of war or in those of peace. Organisation is the key to success; organisation depends on steady thinking, and thinking depends on ideas, ideas which give birth to ideals. For inspiration as well as guidance, those engaged in enterprise of every kind look more and more to the trained mind. They are forced to do so....... We are learning that nothing can be accomplished on a large scale without the indispensable preliminary of first taking thought. And we are learning that the taking of thought requires at every turn, not only the expert,* but the highest type of expert knowledge." Then he goes on to show the great importance talent has attained in the modern world.

While speaking at Wakefield on October 17 at a public meeting held in connection with the Wakefield Education Guild, he said that "Higher education is of great value to those engaged in industrial pursuits; in fact, it is of value to the whole nation. Learning for learning's sake is a great text, and it does not shut out the utilitarian side. The profits of industrial enterprise go to the man of brains, to the man with the power of direction. This shows that it is vital to those engaged in industrial enterprises that they should have command of science and as much knowledge as they can get. Unless knowledge is spread among the people, there cannot be equality of opportunity. There is only one leveller, only one man who does anything substantial to make people equal, and that is the schoolmaster. Education in this country will never be right until the elementary school, the secondary school, and the university are linked together. The British people, perhaps, need education more than any other nation. We are very prosperous; we are very self-reliant; we have magnificent energy; if we had not, we should have been distanced in the race. But we are competing against science and the increasing science which science gives. We are being more and more handicapped in the race and it is our own individual powers that have enabled us

^{*} Science in Public Affairs.

still to get to the goal in front of our competitors. Let us learn, before science makes still further advances and before they are appropriated by foreign nations, to bring ourselves at least up to this level."

Shall we rouse ourselves to the consciousness of the urgent need India stands in for trained skill and scientific thought? Shall we fritter away our energies, miss our opportunities, waste our resources in worthless and idle quarrelings for personal glorification, in listlessness and inaction, in the practice of ideals detrimental to our progress and take no steps to diffuse universal scientific education leading to a stupendous moral and intellectual revolution? Shall we remain satisfied with our industrial degradation and dependence and the increasing poverty of the masses, to be crashed in the struggle for existence and to be cursed and condemned by our posterity for the disgraceful legacy we'll bequeath to them? Shall we rely upon our rulers, when, as Mr. Haldane observes, they are themselves outstripped by Germany, America and other countries which have taken the fullest advantages of the progress of modern knowledge? It ought not to be so. We must make up our mind to found institutions for technical education and thereby raise our material condition. No progress is possible in the absence of material prosperity. No moral development, no intellectual achievements have taken place in countries where the material condition of the people is at a low level and where, consequently, life is a bundle of pessimism, inertia and apathy. We must not rest until temples dedicated to Sarasvati and Visvakarma, i.e., colleges and polytechnics outnumber all the temples, mosques and churches which minister to the spiritual needs of the people. Our religious charities must be directed towards supplying us with brain-power. On brain-power depends the regeneration of India, her prosperity and integrity,

and also her salvation. I have great faith in it and have devoted the best years of my life to the imparting of education. I have always looked upon it as the great panacea for all the misfortunes we groan under.

The earnestness, sacrifices and martyrdom of some of our people have ushered in a new era in the history of our nation. We are all pulsating with a new life, new ideals and new vigour. Let us sanctify the birth of this new life by providing for universal education in India. Let us not wait for large funds but begin with whatever sum we get from our people. Let earnest and influential workers come forward to persuade our native chiefs, merchant princes and our middle classes to set apart a portion of their revenues and incomes for educational purposes in the same way as they do to satisfy the religious cravings. Education is a religious duty and let us gird up our loins to perform it to the best of our abilities.

I again accord you all a most cordial welcome to Surat on behalf of the Reception Committee. Surat has caught the, spirit of the times and embarked on industrial activity. Let the same spirit inspire us to fulfil the mission which has brought us together. Let us thoroughly and systematically carry out the conclusions we arrive at. We have the necessary means present in abundance in our land; we have capable men in our ranks; we have guidance offered by the history and experience of England and other nations; why should we then hesitate to work out our industrial salvation? If we neglect the present opportunities, we shall have to pay a very heavy toll in future for mere existence. Let this dismal and depressing prospect spur us on to action, to stimulate and accelerate our industrial progress. If we will, we shall bring about our regeneration. With knowledge, with self-confidence, with determined action and with united endeavour in the sacred cause of our motherland, let us, ladies and gentlemen, resolve to work out our own regeneration.

THE THEISTIC CONFERENCE.

PRESIDENTIAL ADDRESS

BY

SATYENDRA NATH TAGORE.

I feel myself highly flattered by your asking me to preside over this Conference. When the proposal was first brought before me, I felt some hesitation in accepting it, not because my spirit was unwilling, but because of my conscious incompetence to adequately discharge the arduous duties of the office. A moment's consideration, however, was sufficient to overcome my scruples. I felt that Guzerat had strong claim to command my services, however humble in my own estimation they might be. I also felt that I was called upon to appear not before captious critics, ever ready to find fault, but before kind and indulgent friends, ever ready to forgive and overlook my shortcomings. It was in Guzerat where I spent the earliest and best part of my life and the Prarthana Samaj of Ahmedabad was the first to welcome me to its palpit, which was often graced by our revered brother Bholanath Sarabhai and other worthy men. So you see, I am now here before you, with a message from the Brahmo Samaj of Bengal, and what is that message to be? I do not think that I can do better than crave your indulgence for a few minutes while I endeavour to lay before you some of the distinctive tenets of our Samaj and its claim to the allegiance of educated India.

And first of all I would wish to point out to you that the religion of the Brahmo Samaj is essentially national in its basis and development.

There is a national as there is a universal aspect of religion. As each nation has to elaborate its own art, its own literature, its own system of law, so each nation has to perfect its own religion. Even after a universal faith has appeared, religion does not cease to be a national thing. Each people moulds the universal religion which it has adopted into a special form, continues by means of it the rites and traditions of the past and expresses through it its own national character and aspirations. Each nation as well as each individual must necessarily have a faith specially its own, arising out of its own character and experiences and in great part incommunicable to others. No two nations could possibly exchange religions. What I contend is that the religion of the Brahmo Samaj is not an exotic plant, but is closely interwoven with our religious history of the past.

We have to trace the existing form of our religion to its source—the Vedic form of Nature-Worship.

The Vedic religion takes its name from the Rig Veda, the oldest portion of Indian literature, and the earliest literary document of Aryan religion. Of the four Vedas or collections of hymns, the Rig Veda is the oldest and most interesting. The religion of the hymns is a strongly national one. The Aryans appeal to their gods to help them against the races, afterwards driven to the south and to the sea-coasts, who differ from themselves in colour, physiognomy, in language, in manners, and in religion.

The Veda, in the larger sense, is made up of three bodies of composition—Mantras, Brahmanas, and Upanishads. These three belong to revelation or Sruti, i.e., hearing; what is con-

tained in these is to be regarded as having been heard by inspired men from a higher source. The counterpart of Sruti is "Smriti," i.e., recollection, tradition. This embraces the Sutras or works dealing with ceremonial, with the exposition of the Vedas, with domestic rites and conventional usages. The law books, the epics, and the Puranas, or ancient legendary histories, also belong to this class.

The Vedic religion has no idols; it has no dark description of hell; the rigid caste system, on which later Brahmanism was based, is absent from it; it has no demons to be guarded against, and no bad deities. The Vedic religion is a bright and happy system, and the primitive beliefs of mankind, less changed by our people than they were elsewhere, are here to be seen. The hymns show the kind of faith to which a strong and happy race of men naturally came, as their minds began to open to the wonders of the world they lived in, the faith of primitive shepherds praising their "gods as they lead their, flock to pasture."

But there is another side to that religion which has to be considered. The Vedic leaders of religion were not merely champions of enlightenment in religion, they were also ritualists; the rite was to them an end in itself; the proper performance of sacrifice was their principal object. The ideas connected with sacrifice are not indeed very lofty. Sacrifice is, in the first place, a barter. Gifts were provided for the gods that they may give in their turn. In the Vedic period there were several orders of sacrifice—the hymns of the Rig Veda have to do with the Soma sacrifice alone—and several kinds of priests practising an elaborate ritual. The priest and those he acts for are so intent on the minutiæ of their celebration, that they forget all about the God they are intended for. This

process, which may be observed wherever ritualism exists, was carried in the period of Brahmanism to its utmost length. In this period the old gods lost the strong hold they had before over the people's mind; men ceased to look for their gods to the sky or to the tempest, and began to look instead to the long ceremonies of the priest or to the hymns he chanted at the altar or to the austerities he practised.

However that might be, the Rig Veda did a great work for India in inculcating gods who were moral and to whom man was drawn by higher than selfish motives. In all aberrations of the Indian religion, the high moral standard set by the Vedic gods is never lost sight of.

There is no Supreme God in the Veda, or, rather, each god is supreme in turn; the poet wants a god capable of being exalted in every way and does so exalt the god he has before him. In this way a monotheism is reached; the mind recognises a god to whom unlimited adoration can be paid. But it is a monotheism, the titular god of which is always changing; and Professor Max Muller gives to this partial monotheism the name of henotheism; that is, the worship of one god at a time, without any denial that other gods exist and are worthy of adoration. Indeed, the sense of unity in Indian religion is very strong; from the first the Indian mind is seeking a way to adjust the claims of various gods and view them all as one—

एकं सद्विप्रा बहुधा बदन्ति इन्द्रं यमं मातारिश्वानमाहुः

The one Sat is described by sages as many, such as Indra, Yama, Matarishwan.

An early idea which makes in the direction of unity is that of Rita, the order, not specially connected with any one god, which rules both in the physical and moral world and with which all beings have to reckon—

Mitra and Varuna, before all other gods, uphold the physical and moral order of the world; they are lords of Rita, watchers over it, its charioteers and guides. The most prominent is Varuna, who sees all, knows all, orders all, from whom nothing can be hid. He is the protector of the good. Whoever transgresses, sins against Varuna and may be punished by him. Yet he is a god of mercy and forgiveness. Bis hymns express the loftiest ethics of the Veda. In the following a sinner prays for forgiveness—

मृडा सुज्ञत्त्र मृड्य

Have mercy, Almighty, have mercy!

If I go trembling like a cloud driven by the wind:
Havd mercy, Almighty, have mercy,
Through want of strength,
Thou strong and bright god, have I gone astray,
Have mercy, Almighty, have mercy!

Wherever we man O God commit an offence before

Wherever we men, O God, commit an offence before the heavenly host;

Wherever we break the law through thoughtlessness,

Have mercy, Almighty, have mercy.

The one great perplexing question for all mankind, the question as to what becomes of man after death, still continues to peoplex the human mind, if haply it might find some solution. Yama was the first mortal to find the after world.

Those who had done good in this world, those who had performed sacrifices, been liberal, warriors or ascetic saints, gained the happy heaven where dwelt Yama with the fathers and the gods who have passed to the land.

Heaven, a happy hereafter, was all that was looked forward to by these Vedic Aryans. Throughout the hymns there is no weariness of life, no pessimism, the day's work had to be done, a new home won with sword in hand, there were friendly gods to cheer on the warriors.