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WILLIAM STEWART DORMAN,
President, 1929-1930.

ADDRESS

OF

Mr. W. S. DORMAN,

PRESIDENT.

Gentlemen,

It is my privilege, as President of the Punjab Engineering Congress, to express on your behalf the pleasure it gives us all to welcome here, this morning, to open the Congress, the Hon'ble Khan Bahadur Mian Sir Fazl-i-Husain, Revenue Member of the Punjab Government.

Sir Fazl-i-Husain is an old friend and his services to the Province are too well-known to need recapitulation, but as I understand that before we meet for our next Congress he will have left us to undertake still higher office and greater responsibilities with the Central Government, I should like to offer him our good wishes and to say how greatly we shall miss his official guidance and more particularly his leadership in the Legislative Council.

I should also like to welcome the Hon'ble Sir Alexander Stow, who perhaps will permit me to take this opportunity, the first which we have had of meeting him in our corporate capacity, to congratulate him on having been made a Knight Commander of the Most Eminent Order of the Indian Empire ; and the Hon'ble Ministers, who year by year find time to show their interest and encourage us by their presence. We more particularly welcome our esteemed friend the Hon'ble Minister for Agriculture who is so intimately connected with my own Branch of the Public Works Department and to whom you will also wish me to tender our most hearty congratulations that his labours for the welfare of the Province should have been recognised by the honour of a Knighthood. To the other distinguished visitors who have been able to accept the invitation of your Council to honour us with their presence here this morning I would also extend a hearty welcome. It is a particularly great pleasure to see our old friend Mr. Foy.

The thought that this is our eighteenth Congress engenders feelings akin to those of the high minded youth, who, leaving school full of great and noble ideals and reliant on himself, is determined to make the world a better place than he finds it. Time may shatter some of his ideals and experience may show him that others are impracticable, but so long as he remains true to himself all will be well.

During the year, death robbed us of one active member—one who while he was in India never failed to combine attendance at the Congress

with his annual training in the Punjab Light Horse Camp and whose premature death must be very largely attributed to his devotion to duty. I refer to Alexander Edmund Knox.

Eight members have resigned—mostly on leaving India, and four, I am sorry to say, have had to be struck off the roll as defaulters, but despite all this, if I take into account all the most recent applications for membership, some of which are still under the consideration of the Council, we have had a nett increase of nearly 60 since 1st January 1929, bringing our membership up to close on 400.

Before I pass on to more general matters, on behalf of the Congress I should like to congratulate Mr. Walker, C.I.E., Rai Bahadur Ganpat Rai and Khan Sahib Abdur Rahman, on the honours which they have received during the year, and also to thank here publicly Mr. Robertson, most efficient of honorary secretaries, for a year's exceedingly strenuous work, and Rai Bahadur Dewan Amar Nath Nanda for several years' devoted and efficient service as honorary treasurer. I feel sure that our other office bearers, who too have done their work right nobly, will forgive me if I spare their blushes.

I do not know how it came about that we originally adopted the slogan of "Unity and Progress" for our Congress motto, but there it is in large type on the cover of every volume of Proceedings which we issue, and I do not think that it would be easy to find anything more suitable.

Progress denotes life, while life to be worth the name must be active, but I think that the growth in our membership, the presence of the large crowd here today and lively discussions on the papers to follow will show, I hope, that we are very much alive. Moreover, it is only by pooling our resources and working together, with each one doing his part, that we can make satisfactory progress and this yearly Congress provides the opportunity for men to contribute their quota towards the common stock of knowledge, either by presenting papers for discussion or contributing from their experience to the discussions on these papers and, thereby, enabling us all better to fulfil our destiny as engineers, in directing the great sources of power in nature for the use and convenience of man. Never before have we had so many papers presented to the Congress that the Council has been able to pick and chose to an extent not hitherto possible, and I am glad to say that an increased number of contributions have been by young Punjabi engineers, but, not having the figures by me, I am unable to say whether each community has contributed its proper quota. This year we have also been fortunate enough to secure a paper on a subject closely akin to engineering from two well-known Forest officers, Messrs. Holland and Glover, which will be discussed this afternoon, but it is not only Forest officers whose co-operation we need for our technical work. Our dependence on the physicist, the chemist and the geologist is obvious. To the researches of zoologists we owe the successful construction of the Panama Canal and the designers of our aeroplanes had to call on the botanists for advice in the selection of their wing materials.

Gentlemen, It is always difficult for your President to know what to say when he addresses you on these occasions. Few have such a wealth of material at their disposal as Col. Craster (who did so much for the Congress) had in 1917, when he gave that masterly review of 31 years' progress on the North Western Railway since various lines were amalgamated to form that great system in 1886. Several Presidents have been content to anticipate the administration reports by giving a brief record of the previous years' activities, and I must say it is a temptation to tell you of the 235 miles of new line opened to passenger traffic by the North Western Railway administration during the year; of the progress which they are making on bridging the Indus at Kalabagh, the Jhelum at Khushab, and the Chenab at Chiniot, after having completed new bridges over the Ravi at Narowal, and over the Sutlej at Ferozepur, and reconstructed the bridges across the Indus at Attock and over the Sutlej at Adamwahan. I might also enlarge on the 7 million odd acres of rabi crop irrigated in 1928-29 or of the 6 million odd acres irrigated in the last kharif, and it is of interest to state that the irrigation of the British portion of the Sutlej Valley canals alone amounted to over 11 lakhs of acres during 1929-30, which, considered in crop values, comes to approximately Rs. 500 lakhs increase in the annual income of the Punjab. The total value of crops raised on all canals during 1929-30 was Rs. 5,506 lakhs. This is based on a yield of Rs. 46 an acre.

The Sutlej Valley Project is now approaching completion, and the final diversion of the combined Chenab and Sutlej waters over the last weir would probably have been in progress had it not been for the alarming floods in August. Mr. Gunn describes the flood resulting from the bursting of the Shyok Dam, on 15th August, in a paper which is coming up for discussion just now, and Sind and the Punjab should be grateful that this flood did not synchronize with the still heavier flood resulting from more local rain which followed it and which was estimated to have caused damage amounting to close on Rs. 90 lakhs to public works in charge of the Irrigation and General Branches of the Public Works Department and on the North Western Railway alone, in addition to a loss, estimated at Rs. 25 lakhs, in traffic earnings on the railway.

For my own part, however, I prefer to hark back for inspiration to Mr. Montgomery's attempt in 1920 to forecast what the future had in store for the Province. Mr. Montgomery thought the Lyallpur grain elevator, with its storage capacity of 100,000 maunds of wheat, would be the forerunner of similar elevators in all the large grain producing centres of the Province, once the railway and port authorities realised the enormous advantage of bulk transport, but these have not yet materialised; also the system of lines of surface tramways, linking up outlying villages with the railway, and of shallow draft barges plying on the rivers and canals, which he thought likely, now appear to be unlikely lines of development. The great expansion in the road system, however, which he foresaw, with roads rivalling in importance the old imperial trunk road from Delhi

to Attock—roads radiating from Lahore to Multan, to Bhakkar, to Khushab and so forth, has made substantial progress, though, as Sir Edward Maclagan then reminded us (and it is something which is now being brought home to us once again) progress in such matters depends on the auspicious conjunction of three planets—the provincial balance, the staff and the ways and means—and it was seldom we got the time and the place and the loved one all together.

Mr. Montgomery was over sanguine of the revolution the Attock oil fields were about to create by flooding the market with cheap oil and petrol, so much so that he not only anticipated oiling all our roads, but even using oil for brick burning. He was on firmer ground, however, when he spoke of electrical developments and of the fillip which the establishment of the cement factory in the north of the Province would give to the use of Portland cement.

In the last five years the consumption of cement in the Province has more than doubled, and last year (1929), in the Second Circle alone, we used nearly 30,000 reinforced concrete battens for our flat mud roofs, while reinforced concrete slab or girder and slab construction is rapidly superseding the time honoured brick arch in all new bridge and culvert work. The fact that 1929 has seen steel sleepers used for the first time in any quantity on English railways, where their longer life has proved their ultimate economy, suggests that the day may not be far distant when reinforced concrete will displace wood for the sleepers of our Indian railways, and, that the consequent decreased demand for timber will help reafforestation and thereby, do something to remedy the deplorable state of affairs, which has resulted in so much damage to some of the fairest Districts in the Province, as has been so interestingly set forth in the paper which Messrs. Holland and Glover are presenting for discussion this afternoon.

Col. Battye's paper, which will be coming up for discussion just now, tells us how the waters of the River Uhl in Mandi are being harnessed for the service of the Punjab, and a few years should see the electrical developments, forecast by Mr. Montgomery, a *fait accompli*, partly with power from the Uhl and partly by the development of oil or steam driven plants, which have grown so enormously in efficiency during the past 10 or 15 years.

I think, however, the speeding up of communication is perhaps the most marked feature of the day, and is one which, by bringing the peoples of the world into closer contact, is going to be the main unifying factor of the future.

Think of that wild rush through the air, on the 12th September, by Squadron Leader Orlebar, in his Supermarine Rolls Royce S. 6 at 357·7 miles per hour, or of Sir Henry Segrave's 231 miles an hour in his "Golden Arrow" over the sands of Daytona, to try to beat which Mr. Kaye Don is already on his way to America with his 4,000 horse-power Sunbeam car "The Silver Bullet."

The air-ship R-100 with her six Rolls Royce Condor engines, developing 4,200 horse-power, and with living and sleeping space for 100 passengers, has a cruising speed of 80 miles an hour which would enable her to make the voyage from London to Lahore comfortably in three days, while the Duchess of Bedford, at an age when we engineers are already considered past our work, actually flew from England to Karachi and back in an aeroplane in 7½ days.

The Blue Riband of the Atlantic, after being held by the Mauretania for 22 years, has just been wrested from us by the German-built Bremen, but the Cunard Shipping Company is already planning a 30-knot liner with which it hopes to re-establish its supremacy. Sir Henry Segrave, however, has pointed out that, whereas during the last 20 years motors have more than doubled their speed and airplanes have learned to travel five times as fast, shipping has remained practically stationary for many years, and only a complete change of design will enable ships to improve appreciably on their present performances. Instead of ploughing her way forward, half submerged, through the water, the ship of the future must come out of the water and travel on the surface. He may have had in mind something similar to the German Dornier's flying boat, with a maximum speed of 150 miles per hour, a cruising speed of 100 miles and sleeping accommodation for 40 passengers.

Germany has also produced a giant land plane, able to transport, three tons of freight, 2,500 miles, at a speed of over 125 miles an hour.

Aviation, however, had its birth in the United States of America, on 17th December 1903, when Orville and Wilbur Wright flew a biplane a distance of some 825 feet, at Kitty Hawk in North Carolina, but the failure, in 1920, of the services between New York and a number of almost equally well known places to pay their way showed that the Americans had not then became air-minded. Between 1920 and 1927, Germany's air traffic increased 30-fold while America had made little progress, then suddenly, with Colonel Lindbergh's flight across the Atlantic, America became air minded. A New York newspaper which had declined Colonel Lindbergh's story of his flight, the day before his departure, on the ground that it would be of no public interest, cabled him an offer of £10,000 after his arrival in Paris, which however he refused. America had discovered its interest in aviation, and all the great newspapers entered into the keenest rivalry in promoting it, with the result that aircraft construction companies have sprung up like mushrooms, so that it is difficult to keep pace with the progress in statistics. There are now well lighted air mail routes between the Atlantic sea-board and the Pacific coast, and the wealthy traveller, in a hurry, can get from Los Angelos to New York and back in four days by a regular mail aeroplane, thereby saving a full week's time, though the cost is double the train and Pullman fare. Our own Empire's air routes in 1928 measured 11,000 miles, 8,000 miles were added in 1929, and Lord Thompson, the Air Minister, addressing the British Empire League the other day, anticipated that the close of 1930 would see 35,000 miles in operation.

There have been some appalling disasters, such for example as the one last June when seven passengers lost their lives in a forced descent while crossing the English Channel; the outward air mail, the "City of Jerusalem," which was burnt at Jask in September; and the homeward air mail, the "City of Rome," which, six weeks later, perished with all on board, in a storm in the Gulf of Genoa, and although these may breed a feeling of distrust for a time, the air-lines persist and every year will make air travel safer.

With the world being girdled by air routes in this way I do not think we can hope to escape, and the enthusiasm being displayed for civil aviation at Delhi and Karachi suggests that we shall not be left for long outside the ambit of air development. In his administration report on the Sudan, Lord Lloyd, while commenting on the increase in comfort and saving in time resulting from the development of roads, railways and motor traffic, all over the country, pointed out how air travel, both official and private, has become accepted as part of the transport system of the country and that landing grounds now exist at all the important, and at many of the smaller places in the Sudan.

Business men have already proved the value of aeroplanes out here, and the day does not seem far distant when every government official will have his own aeroplane; and it is not difficult to visualise a Deputy Commissioner or the Superintendent of Police, visiting an outlying village in his District before breakfast, the Civil Surgeon a remote dispensary or even a Chief Engineer flying low along a canal to see that every poor zamindar is getting all the water he wants. Landing grounds may be a difficulty for a time, but there is every hope that this will soon be overcome and that the aeroplane owner will be able to descend on, or rise from, a very small area, possibly even the flat roof of his bungalow.

The aeroplane will also be of further practical use to the engineer. Aerial photography made enormous strides during the war, but ground points are still necessary for checking and correcting aerial pictures taken for scientific work. Aerial photography should be particularly useful for locating under-water formations, and I believe it has been used in the United States for locating high tension transmission lines and for solving traffic problems. When tried out here on a large scale, however I understand it worked out more expensively than ordinary ground surveying, but every engineer would appreciate being able to take aerial photographs of his ground locations.

Turning for a moment to the railways. These after having more or less marked time for some years are now waking up under the stimulus of the competition from motor traffic.—On the North Western Railway this is being met by introducing additional train services, by reducing rates and by publicity propaganda. There has also been a general speeding up of passenger and goods train services and the strengthening of the main line track and bridges, now in hand, will admit using still heavier types of engines capable of hauling greater loads at higher speeds. Next September, the new 4-6-2 Pacific type engines, weighing 176 tons,

having a traffic effort of 32,000 lb and an axle load of 20 tons, will be in operation between Peshawar, Lahore and Karachi, and I understand this type of engine will be a great advance upon anything hitherto used on Indian railways.

. Efforts are also being made to cater better for the creature comforts and for the health of the travelling public, amongst other ways, by providing pure drinking water supplies, by means which Mr. Vardon will explain to-morrow. It may be we shall soon have artificial cooling for hot weather travel somewhat on the lines of the 'frigicar' of the North American Car Company, in which the temperature is apparently automatically controlled, at any fixed desired level, by means of an ammonia compressor, worked by a mechanical drive off one of the axles, which also stores a sufficient reserve in brine tanks to tide over periods when the car may be at a stand still. Such a system would soon oust fans which stir up dust and induce chills.

There has been a notable quickening up in English passenger train schedules, but the delays in goods traffic have caused much to be diverted to the road and a determined effort is now being made to recover the ground lost and in fact to pool all goods traffic.

I read somewhere the other day that the London and North Eastern Railway is at present experimenting with a rail-plane intended to carry passengers at 120 miles an hour. Dependent from and guided by rails, the coach accommodates 50 passengers and is driven by two aeroplane propellors, one behind and one in front. The cost is said to be only a third the cost of a surface line. If the experiment is successful it should revolutionize railway travel.

There is also a movement on foot in England to eliminate most, if not all, level crossings, but that brings me to the subject of roads.

During the past year (1929) we have added 125 miles of newly metalled road to the arterial road system of the Province, while spending a couple of lakhs in widening and tarring some of the more heavily trafficked ones and between 8 and 9 lakhs in rebuilding and strengthening road bridges. However, as there has been so much in the local newspapers during the past week about the shortcomings of our roads, I only propose to touch on one or two points.

The steady growth in the volume of motor traffic is a commonplace and is the inevitable result of the great increase in the motor car imports—these, having totalled under 3,000 in 1921-22, numbered nearly 20,000 for 1928-29. The average speed is also growing, and the increase in power of all cars in relation to weight is said to have been one of the most notable features of last year's exhibition at Olympia. Most of the motor coaches on the English roads can do 45—60 miles an hour and to pass one of these, with any degree of safety, a private car must have a speed of at least 10 miles in excess of the coach, with a great deal more acceleration, and though th ebrakes for controlling these high speed cars are quite up to their work

when the cars come out to this country new, it is common knowledge that, afterwards, these do not always receive the necessary attention and that the drivers of many cars met careering along the road would be quite unable to pull up sharply in case of emergency. It is therefore most necessary that all highway bridges should be of sufficient width to allow two cars to pass one another comfortably, and, where the metalling is not wide enough to take two lanes of traffic, that the berms be maintained in perfect order.

Another problem is the education of all bullock cart drivers to keep to their proper side of the road, or to turn to that side instinctively when they are sufficiently awake to realise the approach of another vehicle. I feel that this will only come about when a fourth R, the Rule of the Road, is added to the three R's already taught in all primary schools, and motorists themselves, as a body, insist on passing all cart traffic on their own proper side. The increase in motor traffic may in time drive the bullock cart and cattle off the road, when it will be necessary to provide parallel tracks for them at the side.

It is however in the towns and villages, of course, where there is most congestion and where only the fullest co-operation between the road authority, the police and the local authority (where one exists) will effect improvement—Unfortunately, the local authority is rarely alive to its opportunities and responsibilities, and the natural tendency for a town is to expand along the arterial road passing through it. Propaganda is necessary to persuade it that development at right angles to the road, where there will be less dust and danger from passing traffic, is preferable to ribbon development along the road. This has been recognised by the promoters of the Model Town at Kot Lakhpat and should be borne in mind by all whom the possession of motor cars is tempting to flee from the city and build houses for themselves in the purer air of the country. The absence of foot paths, free from hawkers, on which pedestrians will prefer to walk, and of proper parking places for lorries and carts make the traffic regulation in many towns and villages practically impossible for the police, and the provision of such conveniences is another matter for early attention.

I have dealt mainly with communications as it is on its means of communication that the world so largely depends, and this, I think, is equally true whether we consider it commercially, agriculturally or socially. It is an aphorism that just as the demands of trade are met by increased and improved communication, so improved communication provides greater facilities and enouragement for trade. As Sir Henry Thornton said the other day " it's keeping your eye open for to-morrow that builds a country or a business—that, and knowing what you're doing to-day." But, Gentlemen, I do not wish to end in a purely materialistic concept of progress, which appears to have found its supreme expression in that land of rush and hurry—the United States of America—and which is so far removed from that under-current of spiritual life which we like to associate with

the East, and which I should like to see reflected more in our work. Sir Benjamin Brodie, addressing the Royal Society in 1859, said that physical investigation more than anything besides, helped to teach us the actual value and right use of imagination, which, if properly controlled by experience and reflection, became the noblest attribute of man, the source of poetic genius and the instrument of discovery in science.

Some of us are nearing the end of our time in the service of the Punjab while others are only just starting their engineering careers, and I should like to leave this conception with my young friends, reminding them that the formation of character is one of the most important objects in life, meaning as it does that every action has its effect and every job carried out has an importance far greater than its intrinsic worth. Work therefore for your own credit, in the future judgment of men, not only good work on sure foundations, but work which is at once both beautiful and dignified that will be reflected in and reflecting your own character and which will give pleasure to generations yet unborn.

You may or may not receive recognition for your work. That is a secondary matter. Do the work for your own credit and for the glory of this great and progressive Province which we all love and seek to serve.

SPEECH.

BY

THE HON'BLE KHAN BAHADUR,

MIAN SIR FAZL-I-HUSAIN, K.C.I.E., Kt.,

MEMBER FOR REVENUE.

Members of the Engineering Congress and Gentlemen :—

I am very glad to see the engineering talent of the Punjab assembled in this great hall to-day; and I consider it a great privilege to welcome the members to this annual gathering. Ordinarily, I would have hesitated to accept the invitation of your Secretary knowing how ill-equipped I was to perform the task ; but as this was the last Congress meeting during my term of office as Revenue Member of the Punjab Government, I felt I could not deny myself the pleasure of availing myself of this opportunity of paying my tribute to a great profession, the wonderful work of which in one branch I came to know as Revenue Member.

The Engineering Congress has now become an annual institution in the intellectual activities of the province ; and there can be no two opinions about the very great utility of the institution. It is making most valuable contributions to engineering knowledge and research. The daily work of a large number of you is in remote parts of the province and a free and frank discussion on engineering subjects cannot but whet your wits, infuse enthusiasm and zeal, reclaim you from the monotony of the routine part of your work and invite you to efforts of investigation and invention. Discussion is verily the one method by which knowledge is enhanced and the capacity and talent called upon to make fresh efforts at self-realization.

The importance of your profession is ever-increasing ; your struggle with nature is getting more acute. You have made many conquests in the past, and we trust you have many more to make, but the resources of nature are unlimited and for years and years to come there will always be something for you to conquer. The scope of your activities is unlimited ; and there is hardly any sphere of human activity which can be developed without your co-operation. In communications of all sorts, whether surface, underground or aerial, the scope for development is unlimited. To contemplate a residence without your help is impossible. There is no profession which makes so direct a contribution to production of wealth as yours—whether that production of wealth is through land or through factories, your share in that production is greater than that of any other profession. Not only do you contribute towards production of wealth, but society is beholden to you also for facilities for marketing.

There is no other profession which makes a more direct contribution to national wealth than yours.

It is but natural that a profession with such wide possibilities should attract the best material, and yet there are certain popular fallacies which it is time should be exploded. It is generally believed that a boy who has a mechanical turn of mind will do for engineering, implying thereby that all that the profession needs is a mechanical turn of mind. This is entirely wrong. The engineering profession needs imagination quite as much as poets do, and no great success can be achieved without that great human virtue and necessity *viz*, sympathy. An engineer devoid of sympathy is very much reduced in his value and utility. A great engineer must possess not only broad and wide sympathy, but his capacity to visualize great schemes should be as great as of the best men in any other profession. A great engineer has to be not only a great scientist and mathematician, but also a great economist. His inventions are with reference to their utility to society, and as such the economic part of his mind is not one whit less important than the constructive or inventive part of his mind. There may be professions which take things from society, but you take nothing without giving something in return, more directly than any other profession. I have no doubt it is firmly established that no country can make any progress without the help of great engineers, and one may go even so far as to say that the position of a country in the list of civilized countries is determined by the position which its engineers occupy in the engineering profession of the world.

So far as the Punjab is concerned there are great problems which face you and directly affect the economic development of the province. Communications—thereby I mean surface communications—are the problem of the day. They are far too expensive to keep in decent order. The days of the camel and donkey transport are over; and unless aerial communications render surface communications unimportant, you must find the way to make communications in the Punjab less expensive than they are at present.

Again on the irrigation side, there is the trouble of waterlogging; how to render your canal and channel beds proof against absorption; how to make water yield electricity; and how to utilise sub-soil water where it is at a great distance from the surface. I have no doubt you will achieve more and more success as you obtain facilities for pursuing your investigations and experiments.

There is one point to which I wish to invite your attention. Recently I have been touring through the famine affected areas of the Gurgaon and Hissar districts; and this tour has oppressed my mind so much that I feel it would be a relief to me if I were to place this oppressing view of our economic life before you in the hope that you may be able to do something. In the countryside the population is large while the chances of work on the land are few—due to lack of irrigation facilities. The Bhakra Dam is a compliment to your great engineering skill, and it is a matter of very great

satisfaction to the people that it has been approved. This is not, however, what I had in mind. Even after the irrigation schemes are in working order, there is a tendency for a large proportion of the population of the country to be unemployed. In our social development, so far as lighting is concerned, the country oil of *sarson*, cotton for wicks, and earthern vessels for lamps gave place to kerosene oil, metal lamps and machine-manufactured wicks; and now we are at the stage where these are going to be replaced by electric current, wires, bulbs, fuses,etc. Similarly, the camel, ekkas and *gaddas* gave way largely to steam transport and horse-driven conveyances; but these in turn are giving way to "Fords" and "Chevrolets." These emblems of civilization are tending to upset the economics of the Punjab. No doubt there is great pleasure and *prima face* economic advantage in rapidity of motion; but it is felt in some quarters that these improved facilities of electric and other power may prejudicially affect the economics of the Province and impoverish middle class people. It is realised by some that the machinery and accessories used in our lighting, transport, improved water-supply and other adjuncts of civilization are very largely imported. With all the engineering skill assembled in this hall, should they continue to be imported? Should all our engineering skill be employed in government service? Is there no surplus to turn its attention to useful little ventures which will not only be profitable to them but also be of very great benefit to the country, offering investment to Indian capital and employment to a large number of the people.

Great indeed have been the achievements of the Engineering Congress in the past; but I have not the slightest doubt that greater achievements await it in the future. If the admiration and the appreciation of the people can be an incentive to more strenuous efforts, then, members of the Engineering Congress, permit me to assure you on behalf of thousands and thousands of Punjabees of their most sincere admiration and appreciation of your great and abiding work.

You were before the introduction of the reforms believed to be a sect apart from other sects, because people had such curious ideas about your department thinking that there was something very mysterious and very subtle about you, because you came in so little contact with them. When one is not known to others, one has very few opportunities of dissipating such suspicion. Under the reforms the search light of public criticisms was concentrated on many departments—yours was not by any means in the second row. Besides, under the reforms there were some persons who made strenuous efforts to bring your department and other departments of Government closer to the people than they had ever been, and amongst other services of His Excellency Sir Malcolm Hailey this will be remembered by the people of this Province and by this Congress. Now other departments and the Punjab public know you much better than they did ten years ago, I have not the slightest doubt that most of the suspicions have been dissipated and their appreciation and admiration for you has increased many fold. I consider that in this particular work such little service that I was able to

render has been of some advantage both to your profession and to the Punjab public. I can not reasonably accept the nice things about we that your President said to you. I have no doubt that any body else in my place would have done exactly the same, perhaps more effectively, than I have been able to do. All the same it is a matter of satisfaction for one to feel that the department or profession, with which he was connected, should be, at the time when he is about to leave the reins of office, better understood and better appreciated by the people, whom it serves than it was at the time when he took over the work of his department.

I must not stand between you and your work—time is pressing and I now declare the Congress open.