Dr. Pascoe’s address has told us that this school, whose inauguration we are celebrating today, is the result of many year's consideration of the best method of solving not one but several problems. It is an attempt to provide in the first place a school of Geology which will rank with similar institutions in Great Britain: it is to furnish a supply of trained men for the coal mining industry and for other mineral industries throughout India: it is to help to solve the problem of recruitment of young men of this country for the Geological Survey of India and Indian Mines Department. The conception is framed on generous times and cannot fail to appeal to the imagination. The inauguration of the school has, through circumstances beyond our control, been delayed for six years since the final adoption of the proposals by Government. This postponement, regrettable as it is, has at least given me the opportunity of being present at this opening ceremony—an opportunity of which I have availed myself with great pleasure.

There are few branches of knowledge which can compete with geology in providing a scientific training of the mind, the habit of close observation and correct inference, and in opening up at the same time the way to practical careers of utility, bringing within man’s grasp and making subject to his control the immense resources of nature. To the geologist again, as to few others, is unveiled the immense panorama of history from far distance times. He thinks in ages, as we think in days and years. He finds sermons in stones, romance in granite blocks. In a fault in the hill-side he traces those unimaginable stresses and convulsions which have left the earth the shape we know it to-day. From all these points of view, scientific study, practical training, and imaginative interest, geology has few rivals. In India we have already no mean record. The Geological Survey of India has for many years been renowned for its high standard of achievement. Even before the days of Sir Thomas Holland and the late Sir Henry Hayden, it had secured world-wide recognition. Under their guidance it established itself even more firmly, and its reputation under Dr. Pascoe stands as high to-day. Not the least of the benefits which we hope for from this school is the continuance of that tradition and the increasing association of the picked youth of this country in the work of this fine service.
On the other side of the school’s activities, as a school of Mining Engineering and practical training in coal and metalliferous mining, we hope to see the results reflected in the development of Indian industries. This school will, we trust, be the training ground of many of those who are destined to take an active part in the development of the immense resources of this country. We hope that the students whom the school will turn out into the world of affairs will leave it not only with a grasp of scientific method but with a practical knowledge of the work which they will be called upon to do such as no other institution in India has hitherto been able to provide. It is with great pleasure that I have noticed the large number of applicants for admission to the school. I understand that in the past there has been some reluctance on the part of Indian boys to embark on technical studies, and it is a hopeful sign that the opening of School has elicited such a favorable response.

In glancing through the prospectus and curriculum of the new school I have been struck by the great variety of subjects with which the students will have to make acquaintances. I have noted with special interest that training in the field, and frequent visits to colleges are included. To this I have no doubt you are right to attach importance, not merely because of the direct experience which will be gained there from, but because the students will have an opportunity to see for themselves the conditions of labor in mines, and to study some of the social problems which are of such vital importance to industry. If they can acquire a real intimacy with and a sympathetic understanding of such problems, the value of their future work for India will be doubled. I look with much hope to the School to develop in its students vigorous ideals of social service.

Coming as I do fresh to this country, a country old in history and tradition, but in some respects, especially in industrial development, a new country on the threshold of a great future, there is one thought which is very present in my mind. It is that for us in India industrial development brings a great opportunity. India is learning much from Western experiences. She is developing industrially—here inevitably the most develop—very much on Western lines. But with industrial benefits which industrialism brings home also disadvantages and grave dangers. In Western countries the growth of industrialism has a history with many unpleasant and unkindly features. Those countries look back upon a century of struggle, upon a period when material progress had outstripped social ideals. The long history leading up to
modern factory and mining legislation and to trade union development. It one long struggle of re-adjustment of an Endeavour on the part of social ideals to keep pace with mechanical efficiency. In that struggle for over a century social amelioration was ever behind hand in the race. In recent years however, and especially since the war, a great advance has been made. Those who have studied, for instance the record of the international Labor organization at Geneva, will realize the efforts that have been made in the last few years to promote schemes for raising the moral and material condition of the manual workers in industry, and to place the social standards of development in their due position side by side with mechanical efficiency.

In India we come to this question with the experience of Western countries behind us; there is no need for us to work through the painful stages of the industrial revolution and the years that followed that followed it in England. This is what I mean by our opportunity. It is the opportunity to use the experience of others, and to start where they are now. But with this opportunity comes also responsibility. It is for us, for the young men whom this school will turn out for the great employers of the labor, who are represented on your Governing Body, and their fellows, to see that this opportunity it seized and this responsibility realized. Every country has, of course, its special circumstances to consider. In India progress will not automatically or immediately follow precedent elsewhere. But India cannot remain permanently behind in the matter of social legislation and improvement of industrial conditions. What the experience of the world approves elsewhere must sooner or later, making due allowance for difference of conditions, find a place in our industrial code. In such matters, for instance, as the terms of employment of women and children, the hours and conditions of labor in mines and factories: the improvement of sanitation and housing of industrial workers: in all these matters and others, our opportunity is that we have the experience of the older industrial world to help us, and our responsibility that are, the later starters in the industrial race, should not neglect or ignore what that experience can teach us.

It is on this note, the note of opportunity and of responsibility that I desire to close what I have had to say. I regard the school as a great means for training on right lines the mental outlook towards social questions of the industrialists of the future, and its foundation in the first year of my office I look upon as of hopeful augury.
It was with mixed feelings that I received the news of the formal celebration of the silver jubilee of the Indian School of Mines. My feelings of pleasure at realizing that this important goal has been reached are tempered by my deep-felt regret at not being able to be present in India beside my former colleagues and students and to take part in, what I am sure will be, a successful event of national importance to India. Although the silver jubilee souvenir volume of ISMAG aims, I understand, at it being largely technical, I am to be forgiven if incline towards the popular or Reminiscent. As former Principal, responsible in a large degree for ensuring the extensive developments that have taken place since I left India I like look back on the earlier days still vivid in my memory.

I arrived about midnight on the Dhanbad Station platform on 1st November, 1926, standing on the platform was a figure not then very familiar to me—that of Dr. Penman, the first principal I had met him while I was on the staff of the Heriot-Watt College Edinburgh; I could not then guess that we should ultimately become closely associated in work in India. Our association was from that first a happy one and, I think, a successful one.

I left in 1948 what was then a somewhat pleasantly laid-out estate, marred, it is true, by the remains of military occupation, and, of course, in the throat of further building. It may be difficult to imagine the desert-like appearance of the fields that faced me when I arrived. Hardly a tree was visible. Two or three Mowhua trees were there, one or two Gul-Mohur and, of course, the scrubby mass of stunted Palas. The college front was straight and bare. My personal interest in gardening was partly responsible (in collaborates, of course, with the C.P.W.D) for the few hundred trees that now grace the estate. The two Jacarandas that show their delicate blue flowers once a year on either side of the college were brought by me as seeds from topchanchi, many years ago. The coal sampling laboratory now covers the site of one magnificent Amaltas that shaded the Chemistry Department for many hot sessions.
Of my technical and professional contributions to records of the college I think I would single out the work that we did in the Chemistry Department on Indian Coals and in particular their Washability characteristics. I do not think it would be an overstatement to say that much of foundatics of fuel research in India was laid at Indian School of Mines. In saying this I must record in particular the names of my friends, Mr. B.B Niyogi and Mr. J.N. Mazundar. With meager funds and little apparatus we could not cover as much as we should have liked, but I think the results served a useful purpose.

Twenty-one years comprise a large slice out of a man’s life and it brings many memories of persons and of events. Of the many earlier figures on the scene I single out a very humble colleague. Mir Niaz All, our dak peon who faithfully trudged up and down the D.B Road, Puggarea and Kulla perched at an odd angle, puttees seldom very presentable, but the legs as steady and faithful as their respected owner. His was the first Indian School of Mines face that I saw in India. He met me at the gangway of the “City of Nagpur” on my arrival at the Dock at Calcutta. A host of other names comes to my mind among them an equally humble servant Baneswar Mala who lost an eye in our service and finally died in harness. I still remember the contractor who made the earlier furniture that many of us have cursed in past years; he shall be nameless.

Among the more distinguished names are, of course, those of our visitors including the Victory, Lord Irwin, who opened the college formally on 9.12.26. The visit of Indian Statutory Commission in December, 1928 and of the Royal (Whisley) Commission on Labor in January, 1930 brought shoals of impeccable visitors. Every successive Governor of the province and many ministers as well as members of the Viceroy’s Council and finally Lord Wavett is on the list, but space does not permit of enumerating them.

I should have liked to refer to those members of our lecturing staff, who were with us in earlier years, but space again does not make that possible and I may perhaps be allowed to offer a further contribution for a later issue to ISMAG. This opportunity is very appropriate for a message for the future.

Seen against the background of the past visualize the Indian School of Mines marching forward under proper guidance to a position of greater and greater importance in the realm of the development of India’s mineral wealth. The importance of India’s coal mining industry and its relation to practically all other industry made it inevitable that the Indian School of Mines
could not remake a primary centre for fuel Research. An interest in fuel research problems should, however, continue to occupy an important place. The change of the name by the addition of the word “and Applied Geology” indicates to some extent the position that the Indian School of Mines already occupies and should continue to occupy. Perhaps in collaboration with the geological survey of India it should form an important centre for the collection and dissemination of up-to-date information on the technique of mineral development and the uses to which minerals both common and rare can be put in the industries of the country. It is a sphere of activity that I should have liked to see develop during my own time as Principal. I can only offer my best wishes for the future of my old college and for its firm establishment along the lines that I indicate the foundations have been well laid; the building is proceeding space.