"bond" in so far as there is an anastomotic cross-communication at K, fine though this be. The vessel ABCDEFG, Fig. 19, looks "venous" in character, especially at G in the fornix. This "bond" receives the conjunctival tributaries, X, Y, Z, as well as the efferent component of the loop QQ'. Now up to a point the portion ACDQQ', being accompanied by a thin concomitant M, and its branch P, may be considered as an afferent-efferent loop based on the limbus region, and such it would functionally be if the direction of the blood flow in A were always northward, as it often was. But it so happened that on other occasions the flow was noted to be southward in A. Now the direction was never noted to be other than southward in H, no matter which way—north or south—the blood flowed in the sector AB. If the blood flowed south in AB, it also flowed south in C, D and E, and presumably also in F and G—though down here the vessel was too thick for the direction of its compact flow to be visible. When, however, the flow was northward in BA, it was south in CDE (to F), the point of disjunction of the two directions being that where the tributary X ran in. (It is a very common functional feature of conjunctival vascular architecture that the flow in a vessel takes place in two opposite directions from the point of union of a small tributary with it: see Fig. 5B). At other times the flow would be north not only in B and A, but—the southward direction in the tributary X still being unchanged—also north in C; in this case the point at which the coincident main southward flow began was that of union of the tributary Y. Hence, this channel, ABCDEFG, from limbus to fornix, though in some respects functioning as part of a potential loop system, can also be regarded as merely a "bond" joining the circulation of the limbus region with that of the fornix region and receiving, on its way across, venous conjunctival tributaries, such as X and Y. If the lower, i.e., more peripheral part of the limbus-plexus which it joins is to be regarded as purely "venous," then the whole vessel ABCDEFG is a venous "bond" between the limbus and the fornix; but if this part of the limbus-plexus conveys, as will be suggested later, blood which is not purely venous, then the upper portion of this long "bond" vessel can, when it is conveying blood northward, perhaps be regarded as being specialized for the oxygenating function which will be suggested presently.

It will thus be seen, from both Figs. 6 and 19, that both features—afferent-efferent loops based on the fornix or limbus, and "bonds" joining corresponding systems at the limbus and fornix with one another—are functionally related and often may, in fact, be practically synonymous one with the other.

(To be continued)

ALL-INDIA OPHTHALMOLOGICAL SOCIETY,
ANNUAL CONGRESS, 1933

The third conference of the All-India Ophthalmological Society was held in Calcutta, from the 19th to the 21st December, 1933. The attendance was the largest on record and was well supported by delegates from all parts of India. Dr. A. Fuchs from Vienna and other visitors attended the Conference.

The Conference was formally opened by Sir Hassan Suhrawardy, M.D., F.R.C.S.I., Vice-Chancellor of Calcutta University. He spoke of the absence of facilities for ophthalmological work in India and regretted that this vast country was still very backward...
in the number of well-equipped, modern ophthalmic hospitals. The enormous ophthalmic centres in the capitals of the various provinces of India were maintained at Government expense, and in every one of these magnificent work has been, and is being done, but he hoped that wealthy Indian gentlemen would come forward with sufficient money for the establishment of further ophthalmic hospitals and schools where efficient post-graduate training and research could be carried out.

In welcoming the delegates, Dr. D. N. MAITRA, Chairman of the Reception Committee, said that the problems of health which included that of the eye were at the bottom of social education and economic problems.

Lt.-Col. J. N. DUGGAN (Bombay), was formally proposed as President of the third Conference by Lt.-Col. E. O’G. Kirwan (Calcutta) and seconded by Dr. G. Zachariah (Madras).

Lt.-Col. Duggan, after acknowledging this honour, gave in his address a comprehensive survey of the progress which ophthalmological science has made in recent years, and stressed the need for a well organized and systematic campaign for the prevention of blindness in India. He pointed out that India has earned a place in ophthalmology in the past. The intracapsular method of cataract extraction and sclero-corneal trephining for the relief of glaucoma have been two notable contributions to operative surgery, and the work done in clinical, pathological and operative fields by distinguished members of the I.M.S. has gone far to raise the status of Indian ophthalmology.

In the afternoon the scientific session was opened by a paper on “Epidemic Superficial Punctate Keratitis in Bengal” by Lt.-Col. KIRWAN. After describing in detail the clinical findings, pathology and treatment, he pointed out that the name superficial punctate keratitis was a misnomer as in a large number of these cases the affection produced a mild iridocyclitis. He, therefore, favoured the suggestion of Lt.-Col. R. E. Wright that it should be called keratitis diversiformis et uveitis anterior. The paper was illustrated by slit-lamp paintings. Discussion followed in which Drs. Fuchs, Bhaduri, Mukerjee, Srinivasan and Col. Duggan took part.

A paper on “The Treatment of Spring Catarrh by Injections of foreign proteose emulsion from the Urine,” by Dr. BANAJI (Bombay), produced a lively discussion in which a large number of members took part.

Dr. FUCHS (Vienna) read a paper on “The Surgical Treatment of Iritis.”

This was followed by a paper on “Parinaud’s Conjunctivitis, Illustrated by Lantern Slides,” by Dr. SANYAL (Calcutta).

The afternoon session closed with a paper by Dr. BHADURI (Calcutta) on “Observations on Leprotic Affections of the Eye,”
in which he pointed out the causes of the wide variation of the ocular incidence in leprosy and advocated the benefit of iridectomy in the early stages of iritis.

In the evening a magic-lantern slide demonstration, followed by a cinema, were given by Lt.-Col. Kirwan, on “Prevention of Blindness and Care of the Eyes in India.”

Next day Dr. S. K. Mukerjee (Calcutta) read a paper on “Further Observations in Glaucoma as a Result of Epidemic Dropsy,” which comprised tonometric, ophthalmoscopic and visual field studies. A discussion followed in which Lt.-Col. Kirwan, Drs. Bhaduri, Narayan Rao, Gnanadikam, and N. Chatterjee took part.

The President read a paper on “The Treatment of External Eye Diseases with Ultra-violet Light.” A discussion followed in which many of the members took part.

Dr. J. Gnanadikam’s paper on “Iridencleisis” was instructive. He pointed out the advantages of this operation over other methods of decompression from his experience of a large number of cases. In the discussion which followed, the President and Drs. Banaji, Srinivasan and R. Ghosh took part. It was clearly evident that the operation of iridencleisis has many advocates in India.

Dr. C. N. Shroff contributed a paper on “The Intracapsular Cataract Operation Suitable to the Conditions in India.” He stated from his personal experience that the expression operation of Lt.-Col. Smith with certain modifications is the most suitable to the conditions in India where there is such a large amount of work to be done in a limited time. He pointed out that in all cases the lens should be tumbled, but, in cases in which there was a strong zonule, capsulotomy should be done. A spirited discussion followed in which the President, Lt.-Col. Kirwan, Drs. Fuchs, Narayan Rao, Srinivasan and others took part.

The Madras School of Ophthalmology produced an interesting paper by Lt.-Col. Wright and his Staff on “von Hippel-Lindau’s Disease.” Only three cases had been seen out of more than a quarter of a million fundus cases examined in Madras.

Dr. Bhaduri (Calcutta) read a paper on “Some Observations on Hypotension in Cholera” in which he showed tonometric records of 46 cases, and that the blood specific gravity varies inversely with the intra-ocular tension. Capt. K. Sen (Calcutta) contributed a paper on “The Asepsis of the Conjunctival Sac in Intra-ocular Operations,” in which he stated that 64 per cent. of the conjunctival sacs before intra-ocular operations showed no growth in 48 hours’ culture, and of the remaining 36 per cent., one-half showed harmless organisms and the remainder streptococci, staphylococci and other microorganisms. He advised the use
of mercurochrome drops 1 per cent., irrigation of the conjunctival sac with 1 in 10,000 oxycyanide of mercury and, immediately before operation, irrigation of the sac with normal saline.

Capt. S. C. Dutt's (Calcutta) paper, on "The Development of Modern Ophthalmology in Bengal," surveyed the period extending from the time of the Honourable East India Company in 1796 to the present day.

Lt.-Col. Kirwan on "Blue Sclerotics" pointed out the paucity of cases in India. He illustrated two cases with coloured sketches and discussed the different aetiological views.

Dr. Rafatullah's paper on "Webster's Operation for Entropion" produced a keen discussion and the author advocated this mucous membrane graft operation as a fool-proof method in the cure of this common and troublesome complaint.

Dr. H. K. Indra (Calcutta) read three short papers on "Lenticus Posterior," "Krukenburg's Spindle," and "A Case of Aphakia with Apparent Accommodation." All these papers were beautifully illustrated with slit-lamp paintings carried out at the Eye Infirmary, Medical College, Calcutta.

Dr. Biswas (Calcutta) read some notes on "A Few Cases of Epidermoid Carcinoma"; Capt. N. N. Roy (Calcutta) a paper on "Septic Thrombosis of the Cavernous Sinus and Orbital Cellulitis"; "The Treatment of After-Cataract" was described by Dr. N. Chatterjee (Calcutta). Dr. J. N. Banerjee (Calcutta) read a comprehensive paper on "School Myopia in Bengal."

The Annual General Meeting took place on December 21, at which a resolution advising more thorough legislation on the proper examination of the eyesight of motor vehicle drivers was moved by Dr. Narayan Rao and carried unanimously. It was also resolved to draw the attention of some of the universities in India to the absence of a special paper in ophthalmology in the final examination in medicine.

The following officers were elected: President—Lt.-Col. Duggan, C.I.E.; Vice-Presidents—Lt.-Col. Wright, C.I.E., I.M.S., Lt.-Col. Kirwan, I.M.S.; Secretaries—Dr. G. Zachariah, D.O.M.S., Dr. B. N. Bhaduri; Treasurers—Dr. S. N. Shroff, D.O.M.S., Dr. K. N. Karanjia, F.R.C.S.

It was decided that the next meeting of the Society should take place during the Easter week of 1935 in Madras, and the subject for discussion should be "Nutritional Disorders of the Eye."

The Congress was brought to a close on December 21 with a dinner at the Great Eastern Hotel, at which many delegates and members were present. The Congress was a great success, and has led to much mutual understanding and co-ordination, not only in the working out of scientific problems, but in bringing together workers from various parts of India.