

be observed among singers, although they are not uncommon in children.

The following are causes: Acute and chronic catarrh of the larynx, overstrain of the voice, and perhaps defective method of singing. Most writers consider these nodules a form of hyperplasia of the epithelium and of the superficial fibres of the vocal band. This opinion is confirmed by histologic observations, which are considered in the report. Finally, Chiari gives his personal observations resulting from his investigations, and comes to the conclusion that the mucous glands only very exceptionally take part in the formation of these nodules.—*St. Louis Medical Record.*

Progress in the Treatment of Fractures Since the Introduction of the Roentgen Rays.—PROF. V. BERGMANN, Berlin.

In the past ten years two very important steps have been taken in connection with the treatment of fractures, viz, the operative (bloody) treatment of fractured bones, the ends of which cannot be brought into juxtaposition by other methods, and the employment of radioscopy and radiography. There are at times relations which prevent the healing of fractured bones, as for instance, muscle or other tissue between the two ends. Though this cannot be determined with certainty through the radiograph, there is always a justification for this conclusion when a space is noted between the two ends of the bone. Other local causes of the hindrance to healing are readily revealed by the radiograph. This is especially well demonstrated in patellar fractures, where three points are noticed which have a tendency to prevent healing: (1) the difference in size between the two fragments; (2) splinters of bone are often seen between the two ends, which must be removed or pushed aside before healing can occur; (3) the lower fragment sometimes turns so completely on its axis that the coapting surfaces cannot be brought together. Through this means the plausibility of an operation is always revealed. In Bergmann's clinic twenty-five cases have been operated upon with silver sutures, after the radiograph had revealed the true state of affairs, and in every case bony union took place. Fractures of the tarsal and metatarsal bones, that were formerly so completely hidden through swelling, etc., are now very well understood. Before the use of the Roentgen rays these cases were almost invariably treated with massage, and the bones thus more widely separated; now the fragments can be precisely located and treated accordingly.—*St. Louis Medical Record.*