

irritation and to lessen physiological activity in the part affected ; and, secondarily, to prevent unnecessary deformity.

(1) Tuberculosis of Bones and Joints ; Senn, pp. 4 and 354.

(2) Ibid, pp. 15-19.

(3) Lovett in *Boston Medical and Surgical Journal*, July 13, 1893.

(4) Whitman, Transactions of American Orthopedic Association, vol. v., p. 40.

(5) *Zeitschrift für Orthopädische Chirurgie*, 1 Band, 1 Heft, p. 1.

(6) *Annals of Surgery*, vol. x., p. 48, Bartow. *American Journal of the Medical Sciences*, March, 1893, p. 331.

THE NATURE OF INFLAMMATION.*

BY DR. A. F. MCKENZIE.

THE difficulty of getting a satisfactory definition of inflammation is shown by the fact that in some of our best and most recent works on pathology no attempt at a concise definition is made.

In order to learn what ideas were originally associated with the use of the word, we naturally turn to its derivation, and we find that the clinical symptoms of fiery heat and redness and burning pain gave origin to the word ; and at the present day these symptoms, together with swelling and perversion or loss of function, variously modified according to the nature and position of the affected part, and the extent and intensity of the diseased process, are the grounds on which we make a diagnosis of inflammation.

In order to teach the histological processes of inflammation, nearly all text-books first describe the normal circulation as seen in the web of a frog's foot when examined under the microscope.

The results of the application of irritants are then described somewhat as follows :

In some cases, according to the irritant used, a temporary contraction of the arteries occurs. In most cases, however, the first effect noticed is an immediate progressive dilatation of the arteries, followed by dilatation of the veins. The blood current is at first increased in rapidity, but soon becomes slower on account of the tendency of the blood corpuscles to adhere to one another and to the walls of the small vessels. Emigration of the white blood corpuscles into the surrounding tissues occurs, accompanied, perhaps, by the passage of a few red ones. At the same time the plasma of the blood transudes through the walls of the vessels and infiltrates the tissues as serum ; while by the union of substances contained

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