fore the same Society of some of his later observations. Both of these demonstrations were beautifully clear and convincing, and ever since the first of them I have had frequent occasion to remember Dr. Codman with gratitude, as I have from time to time found myself easily able to recognize and treat rationally and successfully a class of cases which before 1906 I always found exceedingly puzzling.

A paper by Painter, of Boston, and another by Baer, of Baltimore, have appeared since Codman's first article was published.

In bringing this subject before the Canadian Medical Association at the present time I have no more pretentious purpose than to attempt to increase interest in this highly important surgical condition by presenting a partial digest of the contributions of Codman and others, and by reciting some typical clinical histories of some of my own cases.

## ANATOMY.

The bursa under consideration is sometimes referred to as the subacromial bursa, and sometimes as the subdeltoid. With the arm adducted it is partly subdeltoid, with the arm abducted it is wholly subacromial; the relative size of the two portions is, therefore, dependent upon the position of the arm. While usually single, occasionally there are two distinct bursae, or the subdeltoid may be separated from the subacromial portion by a thin serous septum. Painter and Baer state that the bursa is about the size of a silver half-dollar; Codman says that one of his smallest specimens measures 2½ inches in diameter and that he has seen many that are larger; in some dissections made by the writer it was not found less than 2 inches in diameter.

The bursa lies immediately beneath the acromion and the fibres of the deltoid, and its inferior surface is closely adherent to the capsule of the shoulder joint. Its floor is largely formed by the tuberosity of the humerus and the tendinous expansion of the supraspinatus, its roof by the acromion process and the coraco-acromial ligament and the fibres of origin of the deltoid. Normally the bursa does not communicate with the joint.

## ETIOLOGY AND PATHOLOGY.

The causes of subacromial bursitis may be grouped under two heads (*a*) trauma, (*b*) infectious processes. Being a serous sac, the bursa is, of course, vulnerable to the same disease-producing influences as other serous spaces, such as the pleura, peritoneum, joints, tendon sheaths, etc.; and the same pathological changes take place in the bursa as in the other serous sacs. By all means the most frequent cause is traumatism, usually a blow on the shoulder or a sudden twist or wrench; but over-use and unaccustomed use must also be ranked as traumatic causes. Among the infectious