

## A NOTE ON AN OLD MANDIBLE

C. J. BOFFA

B.CH.D., B.PHARM., F.I.C.D.

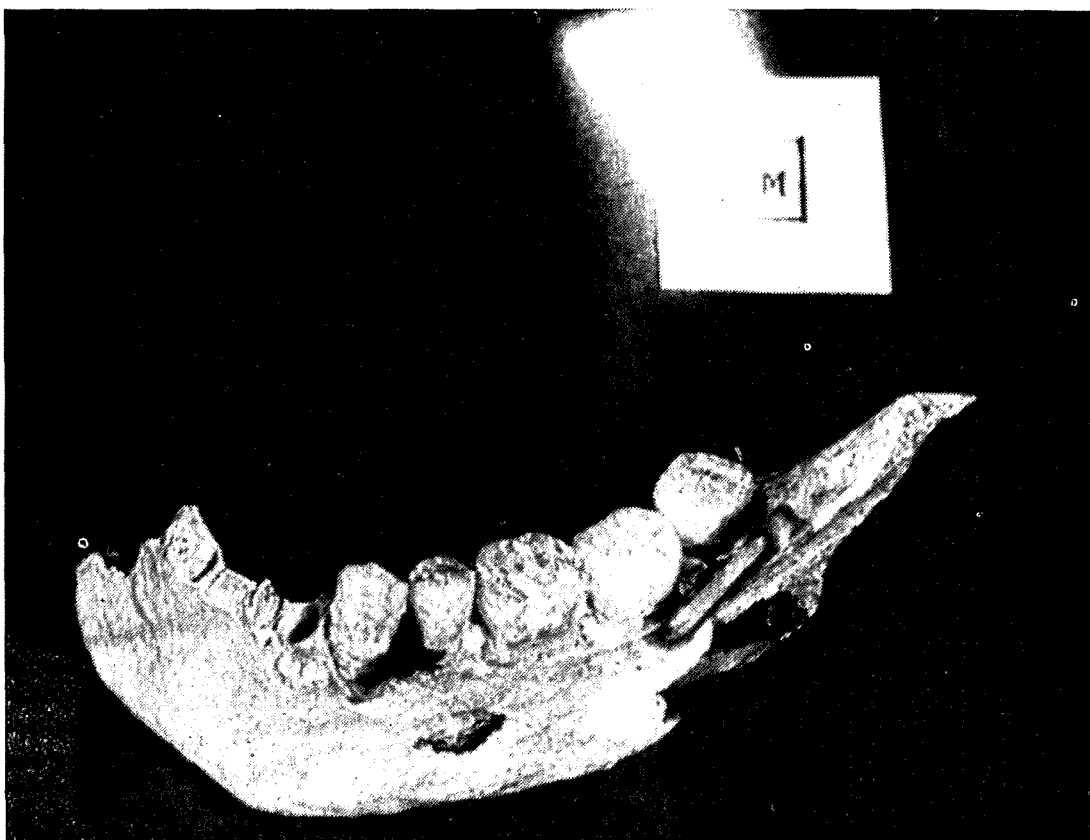
*Demonstrator, Dept. of Dental Surgery,  
Royal University of Malta.*

Part of a very old human mandible was brought to my attention. I was informed that it had been found with other bones "in a sort of small chamber" (probably an ancient rock tomb) while a shelter was being dug during the second world war. It shows certain interesting characteristics and I here describe its salient features.

It is in a fair state of preservation. When brought to me, it was still covered with a thin layer of sediment and this probably prevented further disintegration through the centuries.

When a human being dies, the soft

parts undergo rapid dissolution, but the bones, since they are composed largely of an inorganic matrix of lime salts, may remain intact for a time. However, if they happen to be fairly quickly covered up by layers of sediment (such as particles of limestone or sand) and in some way sealed off and protected from the destructive effects of weathering or from the depre-dations of carrion eaters, they may remain preserved for thousands of years. A dry environment also further helps preservation. Even more resistant to destruction after death are the teeth, composed as they are of the most durable tissues of



the body.

Clinical and radiological estimation was made, where possible, of the age, partly according to the eruption and state of teeth and radiographic criteria of McCall and Wald. I believe it was that of an adult person, probably past middle age. The teeth present are fully developed and the fully erupted wisdom tooth shows considerable attrition — a clear proof that it had been used for many years.

The following features were also noted: (a) A well developed fairly broad ascending ramus — ideal for the attachment of a strong masseter muscle. (b) One of the premolars is missing. (c) The five teeth present, canine, premolar and three molars, had been affected by attrition, but are free from any caries. (d) The condition of the teeth is very good indeed, but that

of the tooth-bearing bone is weak and crumbling. (e) There are signs of bone destruction in the region of the apex of the premolar (?). (f) Radiographs revealed some deposition of secondary dentine in the pulp chambers. (g) The coarse nature of the diet of our ancestors is demonstrated, in a way, by the attrition of the teeth.

It was estimated by means of modern tests, that the mandible is approximately 1500 years old. It is relevant to mention that according to Sir T. Zammit, "the large number of rock-cut tombs found in different localities in the Maltese Islands prove that for centuries the Maltese buried their dead in graves dug out in the rocks. This custom which probably originated in prehistoric times, continued through the Phoenician, Carthaginian and Roman periods."