

THE NOCOLECHE METEORITE,
WITH CATALOGUE AND BIBLIOGRAPHY OF AUSTRALIAN METEORITES.

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(Plates xii., xiii., xiv.)

THE iron, which has been named the "Nocoleche" Meteorite, was presented to the Trustees of this Museum by Mr. George Raffel, in October, 1896, from whom the information was gleaned that it was found lying upon the surface of stony ground at a spot five miles south-west of Nocoleche Station, near Wanaaring, N.S. Wales. The specimen received was the whole of the mass found. Its existence was known twelve or eighteen months previously, but there is no record of any meteorite or meteoric showers having occurred in the district. The total mass weighed 20,040 grams (equal to 44·18lbs. avoirdupois). Its external form is of a pronouncedly rugged character, and the iron is raised into points and ridges, the latter trending mostly in a uniform direction. This character is shown in Pl. xii. At B (Fig. 1) is a projecting rugged nob, connected to the main mass by a neck which is almost penetrated at one point by a deep hole, very probably at one time containing a nodule of troilite. A similar hole, but considerably smaller, is situated in the large cavity at the opposite side. (Pl. xii., Fig. 2). The remains of a black magnetic coating are found in many places, where it is mostly thin, but in protected positions, patches remain which in places have a thickness of 2·5 mm. The external appearance, on arrival, however, was rusty and up to a certain level the colour was fresher than that above, suggesting that the iron was partially buried at the time of its removal. The form of the mass is no doubt partly due to weathering. The length from A to B (Plate xii., Fig 1) is twelve and three-quarter inches, from C to D eleven and a half inches, and greatest thickness, leaving out of account the projecting nob, five and a half inches. The specific gravity was found to vary slightly from place to place. One piece of the iron weighing 5·5824 grams, and visibly free from troilite, had a specific gravity of 7·721 (uncorr.); while another piece weighing 2·2798 grams, had a specific gravity of 7·796 (uncorr.) The specific gravity of a large piece weighing just over seventeen ounces, and containing small nodules of troilite (apparently a fair sample of the whole mass) was taken at the Royal Mint, Sydney, and found to be 7·69.

The meteorite was cut by Prof. H. A. Ward, of Rochester, U.S.A., and the surface shown in Plates xiii. and xiv., etched to