surprise to those who were concerned in that Commission work. Roughly, it may be said that the Commission values obtained in the course of a month or two by the method referred to are in excess of those now fixed by about two seconds of arc both in latitude and in longitude, a displacement which has no effect whatever on the validity of that international boundary which was then demarcated.

This is not unimportant, for it need be no longer a political secret that the adoption of the crest of the Nicolas range as the boundary in question depended on the fact that no part of it was north of the latitude of Lake Victoria. The Russians, by astronomical deduction, maintained that it did in fact bulge over that parallel, but the results of the Pamir triangulation, based on those mighty peaks which were visible from certain high altitudes overlooking the Hindu Kush, combined with astronomical determinations for latitude of the British surveyors, afforded too strong an argument to be refuted, and the range was adopted. It is therefore satisfactory to find (not that the matter was ever really in doubt) that the range is, so to speak, in its right place. These results do also suggest that more use might be made of the system of interpolation. The British officers who have been triangulating across the backbone of the Andine Cordillera in Peru have indeed made use of it, and that must have been just about the same time that Lieut. Mason's party was pushing its way through the Hunza defiles.

T. H. HOLDICH.

MR. BEDFORD MCNEILL.

IT is with regret that we announce the death on September 18, due to cerebral hæmorrhage, of Mr. Bedford McNeill, the well-known mining engineer, at fifty-five years of age. Apart from his high reputation as a mining engineer, Mr. McNeill's name was almost a household word in connection with the telegraphic code compiled by him, which was issued originally in 1893, and in an enlarged and revised form in 1908. This code is employed almost without exception by mining companies and engineers, to whose use it was specially dedicated, and other business men have found it extremely practical for cable communications.

As a mining engineer Mr. McNeill graduated at the Royal School of Mines in 1880, when the school was still in Jermyn Street; and his professional career as consulting engineer, which began in the office of the late Mr. John Darlington, took him into many parts of the world. He was a member of many learned societies, including the Institute of Chemistry, the Geological Society, of which he was also a Member of Council and Treasurer for some years, and the Iron and Steel Institute. In 1895 Mr. McNeill was elected a member of the Institution of Mining and Metallurgy, of which he soon afterwards became vice-president, and he occupied the presidential chair in 1913–14. His inaugural address in that capacity dealt with the present and future problems confronting the mining profession, particularly as regards the speculative nature of mining and its close association with capital. He pointed out that mining was likely to become more speculative in its character in the future, since, though there were still large areas not yet properly prospected, the engineer may ultimately be driven to working that class of mineral occurrence which presents no visible evidence whatever at surface, and the location and working of which will inevitably demand higher technical skill and involve greater risk of loss of capital than those deposits at present dealt with. During Mr. McNeill's term of office the Institution of Mining and Metallurgy acquired its freehold house at No. 1 Finsbury Circus, which was formally opened on January 13, 1914, by the Lord Mayor of London, and during his presidency also the first steps were taken for securing the Royal Charter which has since been granted to the institution. His connection with the Royal School of Mines was maintained throughout his career.

Mr. McNeill was buried at Hollington, West St. Leonards, on September 21. The following societies were officially represented at the funeral:—The Institution of Mining and Metallurgy, the Royal School of Mines Advisory Board, the Mining Committee of the Advisory Council for Scientific and Industrial Research, the Geological Society, the Royal School of Mines, the R.S.M. Old Students' Association, and the Mining and Metallurgical Club, of which he was vice-president, while floral tributes were sent by the Institute of Chemistry, the Iron and Steel Institute, etc. Mr. McNeill's death creates a gap in the mining and kindred professions that will be difficult to fill.

NOTES.

AN account of a new means of delineating internal organs *in vivo*, and the localisation of injuries to them, by an electrical method devised by James Shearer, M.D. (Washington, D.C.), at present a sergeant in the R.A.M.C., is given in the *British Medical Journal* for September 30. It is difficult to realise from the description the exact nature of the electrical installation used, but the principle is said to be to impose upon two alternating electric fields of equal strength at right angles the effect of a third field having its origin in the organ under examination. The patient lies on an insulated table, and near him are placed two screens of perforated zinc plate, one horizontal and the other vertical, connected to two separate batteries. A sheet of waxed paper is then put upon a cylinder which is set in rapid rotation, and a needle scribes upon this paper a tracing of the organ under examination, showing at the same time any lesions in it. Prints can afterwards be taken from the record by contact printing with photographic paper. Five illustrations are given in the *British Medical Journal* showing respectively pictures of the brain, kidney, cæcum and appendix, intestine, and liver of injured patients submitted to the process. The brain picture is as clear a delineation of the blood-vessels as is given in text-books of anatomy, but how it could possibly have been produced by a tapping needle upon a rapidly revolving cylinder cannot readily be conceived. Without further details to enable electro-physiologists to repeat Sergeant Shearer's work it is