$The \ GEOGRAPHICAL \ \mathcal{J}OURNAL$

Vol LXXV No 3



March 1930

COLONEL SIR THOMAS HUNGERFORD HOLDICH, K.C.M.G., K.C.I.E., C.B.

THE death of Sir Thomas Holdich at the age of eighty-six has removed one who, at the beginning of the century, had a greater experience and a more profound knowledge of the geography and inhabitants of the North-West Frontier of India than any other living man. That knowledge and experience were founded on personal contact with almost every tribe and race that inhabit Afghanistan, Baluchistan, Turkistan, and Persia, during twenty years of service, crowded with incident military and political, on the borderland of India. When he left India he was the supreme authority on all matters connected with frontier delimitation and demarcation.

Sir Thomas was born at Dingley, Northamptonshire, on 13 February 1843, the son of the Rev. Thomas Peach Holdich, and was educated at Godolphin Grammar School. Passing high out of the Royal Military Academy at Woolwich, he was commissioned in the Corps of Royal Engineers on 17 December 1862, and after completing his instructional courses at the School of Military Engineering at Chatham, he came out to India early in 1865. His choice of career in India had probably been made before sailing for the East, for in less than a year he received a temporary appointment in the Survey of India, and accompanied the Bhutan Field Force as assistant surveyor in the cold weather of 1865–66. At the close of that expedition he was made permanent in the Department, and remained in it until his retirement in 1898 at the age of fifty-five.

Holdich was soon on active service again. After little more than a year in Rajputana he was selected as one of the survey officers for the Abyssinian campaign in December 1867. Eighteen months later he returned to India and joined a survey party in Central India. It was here, I believe, that he had the narrow escape in company with Edward Leach out tiger shooting, the story of which he used to tell right up to his death as one of the most exciting moments of his long career. But this was an incident that did not compensate one whose yearning was already for a life of active service on the frontier, and soon after he was given charge of the Vizagapatam Survey in 1877, he took furlough to England, after having been continuously abroad, it appears, for twelve years.

From this furlough he was recalled to join the Southern Afghanistan Field Force in December 1878, thus beginning his long unbroken connection with the frontiers of India, which lasted for twenty years.

When Holdich first set foot in Quetta, in the early days of Robert Sandeman, very little was known of Baluchistan, beyond parts of Kalat and the Pishin plain; even the present line of the railway was unexplored, and, to quote his own words, "only a thin line of information was marked on the maps linking up Jacobabad with Quetta and Kandahar." The Afghan War changed all this, and in many ways changed also the policy of the Army towards geographical and topographical exploration. This change in policy was due mainly to two men, Sir Donald Stewart and Michael Biddulph, the two generals who commanded the South Afghanistan Field Force. For the first time, apparently, trained staffs of sapper surveyors, both triangulators and topographers, with Indian assistants, accompanied the advanced forces in the field to carry out scientific survey, as distinct from rapid military sketches. An accurate system of triangulation was carried up to Kandahar by Maxwell-Campbell, Heaviside, and Rogers, and when that place was taken in January 1879, Holdich, who had been in charge of the topography, following close on the heels of the triangulators, employed his men in detailed surveys towards the Helmand, Girishk, and Kalat-i-Ghilzai.

On the conclusion of peace in the spring Holdich accompanied the Thal-Chotiali Field Force, which returned to India by the previously unexplored Khojak route. The peace was, however, of very short duration. The fate of Cavagnari's mission at Kabul restarted the war in the autumn, and Holdich was ordered to join the force operating on the Khyber line. The survey officers who had been in the Kurram during the first phase of the war were almost all out of action. Samuells and Charles Strahan were down with typhoid; Edward Leach (who had won the V.C.), Tanner, and Woodthorpe had all been wounded; only Scott, who first surveyed the middle course of the Kabul river, was whole. Woodthorpe, however, was able to join the Kurram column under General Roberts, while Holdich, with Bright's force, carried his triangulation along the Khyber. The junction of the two surveys was made on the hill overlooking Bala Hissar. Surveys and rapid reconnaissances were now carried out in all directions from Kabul, until they were interrupted by the siege of Sherpur, in the defence of which Holdich and his surveyors took an active part. Subsequently he accompanied Roberts on his memorable march to Kandahar, but, as might be expected, the pace was too hot for much survey work. For his services during the two Afghan campaigns, Holdich was mentioned in despatches and promoted brevet-major.

Early in 1881 the Wazirs raided Tank, and a force was called into being at Dera Ismail Khan to punish the offenders. It was divided into two columns, with the northern of which, under General John Gordon, Holdich was attached as surveyor and triangulator. While Gerald Martin, with the column under General Kennedy, ascended Pre-Ghal, the highest mountain in Waziristan, and triangulated to the south, Holdich, with an escort from the northern column, was the first white man to ascend Shuidar, the second highest, whence a fine view was obtained as far as the Safed Koh to the north, dividing the Khyber from the Kurram. It is of interest in these days, when Shuidar and

Razmak are so easily accessible, to remember that Holdich accompanied the first British force to reach both places.

The results of this little and almost forgotten campaign—so forgotten that it was asserted in 1927 that neither Pre-Ghal nor Shuidar had been climbed—were most important from a survey point of view, and Holdich was quick to seize the opportunity. The policy of sending explorers into forbidden country was revived. Surveyors, both British and Indian, were trained by Holdich as explorers, and, often without the knowledge of our own political officers, were encouraged to cross the border. Their rapid and surreptitious reconnaissances—in these days we rather look on them as "tip-and-run" surveys—based on the points fixed by Martin and Holdich, afterwards proved most valuable. Unfortunately, no history has ever been written of the exploits of these men, and but for scattered references to such as McNair, Abdul Subhan, the Bozdar, and a few others, it is almost impossible to ascertain details.

We find Holdich next in charge of the Kohat survey, but not for long. In 1883 he was placed in charge of the Baluchistan Survey Party, and he was officially, according to the Survey of India records, in command of this party until his retirement.

In the very year he took over charge, an opportunity came for another useful extension of frontier survey and geographical knowledge. The Shiranis had been blockaded for some two years without any effect, and it was decided to send a small "survey promenade" into their country, more with the object of showing them that they were not beyond the reach of punishment than for any other reason. It is, I think, admissible to assume, though there is no official record of the fact, that it was Holdich himself, with his burning desire to turn every faint opportunity of gathering knowledge to full advantage, who proposed and argued this little expedition into being. Only the Khiddarzai clan were recalcitrant: and they lived in the neighbourhood of the Takht-i-Sulaiman. The Takht is a high hill, commanding a fine view to the west and south; the way to it leads through the Dabarrah defile. The combination of circumstances led the Khiddarzai to shout defiance, and Holdich to accept the challenge. The actual capture of the enemy's position on the Takht-i-Sulaiman was due to Holdich, who, while out with a plane-table, discovered an unguarded but difficult route by which an ascent could be made to the summit. Guided by Holdich in the night, the position was turned and captured without a single

The highest point of the range was climbed and rapid triangulation executed from it and a neighbouring peak. Forty thousand square miles of new country were within view, and points scattered over this area were fixed by which the "tip-and-run" process could be continued.

By 1884 Holdich was already a very experienced and efficient frontier surveyor, desperately anxious to leave no blank space unfilled upon the map. And like all frontiersmen of the day, he viewed with intense suspicion the steady advance of the Russian across Central Asia. The "Russian Menace" was on every one's lips. In February of that year, while England was occupied in the Sudan, the way was apparently being prepared for an advance from Merv across Afghanistan. The Amir, jealous of his eastern and southern frontiers, appeared negligent of his Herat border, and it became imperative for the

British to call a halt to Russian designs. The outcome of diplomacy at St. Petersburg and London was the formation of the unwieldy Russo-Afghan Boundary Commission, to assemble on 13 October 1884 at Sarrakhs, the point where Russia, Persia, and Afghanistan met. Holdich was placed in charge of the survey party and marched up from Quetta via Kandahar and the Helmand. The old boundary between Turkistan and Afghanistan was extremely vague, and though the Russians had pushed reconnaissances forward and had a good idea of the geography, our own maps were a complete blank. The survey work accomplished by the inadequate staff under Holdich was amazing. By various "technical expedients," as he himself called them, triangulation was taken from the neighbourhood of Kandahar to the Helmand, and thence through Western Afghanistan as far as the Hindu Kush near Herat. It was carried along the frontier, and on it was based not only the British but also the Russian topographical surveys: and from the eastern end it was connected across the Hindu Kush again with the previous work near Kabul. The work of this Commission, undertaken by Holdich, Gore, and Talbot, with only three native assistants, is still reproduced in text-books, as an example of how such survey should be carried out. At the end of it Holdich had some hard words to say about the political organization of the Commission; but it speaks much for his own tact and capability that, in spite of the scientific rivalry between the two survey camps, the Russian and British surveyors worked throughout in the utmost harmony, even when people at home had begun to rattle their sabres.

The frontier laid down by this Commission has been respected to this day. For his services on the Commission Holdich was promoted brevet-lieutenant-colonel in 1887, and was awarded the Gold Medal of the Royal Geographical Society "in consideration of the services he has rendered to Geographical Science by his surveys in Afghanistan."

On the conclusion of the Russo-Afghan Boundary Commission, Holdich found himself back in Baluchistan at the time when Sir Robert Sandeman was carrying out his policy of peaceful penetration and settlement. At the end of 1889 he accompanied Sir Robert on the political promenade known as the Zhob-Gomal expedition, which closed the back door to the Sulaiman tribes. The whole of the Zhob valley and much of the Kundar were surveyed and the site of Fort Sandeman was selected. For the next year or two Holdich, now promoted brevet-colonel, was engaged in organizing the surveys of Southern Baluchistan and Makran, the triangulation of which was undertaken by his assistants, Talbot and Wahab. Holdich himself gained an extensive knowledge of Makran and the Persian coast, and surveys were extended as far as Jask and Bandar Abbas.

In 1892 he was appointed Superintendent of Frontier Surveys, and it was in this capacity that he was called upon to organize the various survey parties for delimiting and where necessary demarcating, the line laid down in the Durand Agreement of November 1893. The actual work in the field in connection with this agreement was not completed till 1896.

Holdich was an opponent of the Durand Line policy from the start. He always maintained that the presence of a surveyor or topographer, who knew the ground from personal observation, among the advisers of Government, would have prevented some of the errors that were made owing to lack of geo-

graphical knowledge, and the consequent political troubles on the border, both during and after demarcation. He never agreed with the policy of defining an easily penetrable frontier-line behind the independent tribesmen. As long as there was no boundary west of the tribes, we could, if necessary, follow up raiders and punish them: the boundary line did not prevent intercourse between the Amir and the tribes, but merely formed the frontier of a sanctuary, which we bound ourselves not to violate. Holdich, an ardent admirer of Sandeman's methods, maintained that to do any real good, military posts connected by good communications should be maintained at the "back door" of the tribal tracts, and so prevent the escape of marauders into the Afghan asylum. That was long before the advent of motor cars and aeroplanes, but it is interesting now to see those early ideas of Holdich in force to-day, though modified by modern conditions.

South of the Khyber the work of demarcating the line was divided into three sections. Holdich placed the Kurram party under Captain Macaulay, the Waziristan party under Major Wahab, and the long Baluchistan section, stretching westwards to the last pillar on Kuh-i-Malik Siah, the tri-junction of Persia, Afghanistan and Baluchistan, under Captain Ranald Mackenzie, with Tate as his assistant.

Holdich himself, who had been awarded both the C.I.E. and C.B. in the early part of the year, accompanied Mr. Udny on the Kunar Valley Delimitation Commission in December 1894. Once more he took the Khyber route towards Kabul, and crossing the Kabul river at Jalalabad ascended the Kunar river to Arnawai, the disputed point. It was here that they were to await the arrival of Captain Gurdon, the political officer in Chitral, who was to represent the interests of that state during the demarcation of the frontier between it and Kafiristan. The trouble which broke out in Chitral and the siege of that place hardly concern us here, for in spite of the attitude of the Afghans, Udny and Holdich carried on the work of demarcation and survey and completed it up to the Dorah pass by the following April.

The actual survey work was disappointingly meagre, in spite of the efforts of Holdich himself and his assistant, Lieut. Coldstream, simply for the reason that the Afghans obstinately refused to allow any work to take place that was not absolutely necessary for the delimitation. It is not till 1929 that any error has been found in this frontier, and that error lies in the section of it beyond the Dorah pass which was accepted as correct by both the Afghan and British Commissions.

Hardly was Holdich back from these duties when he found himself appointed as chief survey officer on the Pamir Boundary Commission, with Major Wahab, whose work in Waziristan was finished, once more his assistant. Unlike the other boundary settlements included in the Durand Agreement, the demarcation of a boundary on the Pamirs was necessitated by the principle that at no point on the Earth's surface should the land frontiers of England and Russia meet. The Amir was therefore given the small strip of Wakhan, a "long attenuated arm of Afghanistan reaching out to touch China with the tips of its fingers." This narrow springless buffer, a bare 8 miles wide at one spot, is all that separates Russia and Britain in the East; and it was the northern edge of this buffer that was demarcated. The work proceeded without a hitch; the

Great and the Little Pamirs were surveyed in detail; and the surveys and reconnaissances of Holdich were connected by triangulation carried out by Wahab, based on resection to the distant peaks already fixed from the south. When the geodetic link was forged between India and Russia eighteen years afterwards the difference between the common points of the two triangulations averaged only 5 seconds of arc in latitude and 3 seconds in longitude.

The Russians and British parted on the Pamirs on 12 September 1895. On his return Holdich was immediately appointed Chief Commissioner of the Perso-Baluch Boundary Commission, to demarcate the frontier west of Baluchistan and Makran, with Colonel Wahab as his chief survey officer. Holdich was now able to put into practice the lessons he had learnt during the many boundary commissions he had been on. He already knew much of the ground, surveys had already been carried up to and along much of the frontier, and he had himself studied the characters of the men with whom he had to negotiate. These factors were of enormous advantage to him and enabled him to complete the demarcation most expeditiously before the hot weather set in. For his services to India on this commission Holdich was made a K.C.I.E.

The year 1897 saw the frontier ablaze from Waziristan in the south to Swat on the north. Once more Holdich had to find officers and surveyors to accompany each column that penetrated the tribal areas. With his intimate knowledge, he was able to direct the efforts of his best assistants to the regions where the maps were "blankest"; and in 1898, while he was personally engaged on the Tirah campaign and reached the fatal age of fifty-five, decreed by the Government of India to be the age of inutility for Survey officers, he handed over his command in the field to his old friend Colonel Wahab.

When Holdich left the frontier there was hardly a corner of accessible ground on it that he had not seen. His strict scientific training, his capacity to endure the extremes of heat of baking deserts and the cold of Himalayan heights, his adventurous enjoyment of tight corners, all combined to make him an example to his successors on the frontier. His many frontier experiences rendered him most valuable at headquarters, where his push and tact and influence ensured that no opportunity of acquiring topographical information was missed. His view was that, when not actually required in the field, it was his job to see that his subordinates had every chance to do their job efficiently. The fact that surveys still continue on the frontier is due to the ever-increasing needs of peaceful development. Maps of larger scale, of greater exactness and detail, contoured for the alignment of roads and railways, and not merely for the punishment of marauding tribes, are required to-day, and our frontier surveyors are still hard at work. We find little blunders, necessitated by the "tip-and-run" circumstances of Holdich's time. To-day the frontier is at peace, and the back doors are connected by roads. The motor, the aeroplane, and the survey camera are there to assist us. The tribesman, at any rate in bulk, rarely scampers to his bast behind the Durand Line.

It must not be supposed that Holdich at the age of fifty-five closed his interest in frontier matters. Though his talents were employed in various fields for many years to come, those of us in the Survey of India who had the honour of meeting him long after he had left us always found him well up in all that concerned the Indian frontiers. It was not till then that he had time to put

his experiences in print for the benefit of his successors. 'The Indian Borderland' appeared in 1901; 'India' and 'Tibet' in 1904 and 1906; 'The Gates of India' in 1909; and 'Political Frontiers and Boundary Making,' a summary of all his accumulated wisdom on the subject, in 1918. Many of these are delightfully illustrated by his own sketches. That his interest never waned till the very end may be instanced by the fact that on 5 October last, less than a month before he died, he wrote me a letter asking me to find out what had become of a certain explorer, and of the report that he had taken down from the explorer's lips in 1884. A nephew of the man was traced and the manuscript found a few days after November 2. Sir Thomas Holdich was a Founder Member of the recently formed Himalayan Club and a generous donor to its foundation fund and library. The last words in his letter expressed a wish for the prosperity of the Club.

Perhaps the most important of all Holdich's work was his connection, after retirement, with the Chile-Argentine Boundary. The protracted dispute between these two countries over their common frontier in Patagonia, which on more than one occasion nearly led to war, arose from the ambiguity of their Boundary Treaty of 1881, which defined the frontier as following the highest crests of the Andes along the line that divides the waters which flow into the Atlantic from the waters which flow into the Pacific.

For a distance of some 900 miles in the northern portion of the boundary, a lofty unbroken mountain chain also traces the continental water-divide, but this unbroken ridge ends at Mount Lanin (about lat. 40° S.), and from that point southward, for another 900 miles, the mountain system is a jumble of detached massifs, often separated by great lakes lying transversely to the main axis, and sometimes cut through by deep gorges through which flow westward to the Pacific considerable rivers which have their sources far out in the Patagonia pampas to the east. It will be seen, therefore, that the actual geographical conditions did not by any means conform with the terms of the Treaty so far as the southern half of the frontier was concerned.

The Chileans claimed as a frontier the continental water-parting in its entirety, in accordance with their interpretation of the Treaty of 1881. The Argentine case, on the other hand, was a closely reasoned argument in favour of a boundary following a series of high detached peaks as constituting the main range and equivalent to the line of the highest crests mentioned in the Treaty.

After many years of discussion, which at times nearly led to open rupture between the two countries, the governments concerned, with great good sense, decided to submit the whole matter to arbitration, and invited the British Government to undertake the task. This led to the appointment of an Arbitration Tribunal, in 1900, composed of Lord Macnaghten, a Lord of Appeal, as President, Major-General Sir John Ardagh, the distinguished head of the Military Intelligence Department, and Col. Sir Thomas Holdich, as members, with Major E. H. Hills, R.E., as secretary. In view of the divergence of the claims, and the conflicting and often contradictory evidence adduced, the Tribunal felt that an examination *in situ* of the region in dispute was the only means of arriving at a decision on the numerous points submitted to it. This

mission fell to Holdich. He embarked for Buenos Aires with four officers as assistants on 31 January 1902.

The examination of various portions of the frontier which the Tribunal had found difficult to decide upon was carried out by the different officers of the mission, while Sir Thomas himself crossed to Valparaiso, where he embarked on a Chilean cruiser. Eventually he arrived at Puerto Montt and, in company with the Chilean Boundary Commissioner, Dr. Hans Steffen, crossed the Andes by the low pass at Perez Rosales to Lake Mahuel Huapi, where he met the Argentine Commissioner, Dr. Francisco P. Moreno, the well-known Patagonian explorer. Thence he started southwards, making long marches by the easiest available routes, eager to get into touch with his southern parties before the winter set in. He soon established cordial relations with his mixed following, his impartiality, his friendly demeanour, his keen interest in the work of the surveyors, his determination to complete his task in spite of natural obstacles and vile weather, all combining to make an unqualified success of the journey. He concerned himself with the physical aspects of the line of the continental water-divide as an international boundary, which he found, as he expected, to be an absolute negation, in many parts, of the principle that such a frontier should be easy to see and difficult to cross. Thus it remained for him to select for the consideration of the Tribunal a line that should possess, as far as posible, the requisite physical characteristics and one that should not create any inaccessible enclave, mere occupation, in his opinion, offering no basis for arbitral consideration. The parties then assembled in the neighbourhood of Lake Buenos Aires and marched across the Pampas to Comodoro Rivadavia, where the mission embarked for Buenos Aires, just escaping the on-coming winter, which in these latitudes is very severe.

On Sir Thomas's return to England his recommendations were considered by the Tribunal and their definition of an agreed boundary line was embodied in an award signed by H.M. King Edward VII in November 1902.

The frontier as awarded followed a series of lofty mountain ranges, crossed rivers at gorges and avoided giving to either country any useless, because inaccessible, area. The award was received with the greatest satisfaction by both governments concerned, who have observed it scrupulously ever since. The immediate result was a Treaty of Peace and Disarmament between Chile and Argentine which still exerts a beneficent influence over their mutual relations.

The award met with but little criticism in the popular press, for both countries very soon realized that each had received all it could reasonably hope to make use of. Their appreciation has greatly increased with the passage of time.

On the successful conclusion of the arbitration Sir Thomas was awarded the K.C.M.G. For him, however, the conclusion of the matter had not yet been reached. There still remained the actual demarcation on the ground of the boundary so awarded. Here and there, especially in the south, in the otherwise unmistakable line there were a few points, certain mountain passes, and river and lake crossings, and the portion of the line at the southern extremity, where the governments of Chile and Argentine felt that friction might arise if the boundary marks were not set up by independent authority. They accordingly

invited Sir Thomas to return to South America for this purpose in the ensuing summer. This he did, again accompanied by a party of officers.

For purposes of demarcation the frontier, where it did not actually follow the crest of the Andes, was divided up into sections and allotted to the various officers of the Commission who actually superintended the erection of the boundary pillars in the presence of representatives of the two governments.

The writer, who was present with Sir Thomas in South America, can testify to the fact that the success of this undertaking was very largely due to the power he possessed of conciliating divergent elements where difficulties had to be smoothed over. He was endowed with a personal magnetism not often met with.

It is not too much to say that at the present date, twenty-seven years after the arbitration, the name of Holdich is held in high esteem in both Chile and Argentine, while certainly few things gave him more pleasure in his later years than the thought of the enduring peace that has prevailed ever since, due, in no small measure, to his labours.

H. L. CROSTHWAIT.

It remains to speak very briefly of Sir Thomas Holdich's work for the Society. On his return from India he was immediately elected on the Council, and in the following year was made a Vice-President. He reverted to the Council in 1906 and was elected a Vice-President again in 1910, succeeding Mr. Freshfield as President on 21 May 1917. He presided at the Anniversary Dinner on its revival in 1919 after four years intermission during the War, but did not serve the customary third year as President, owing to increasing deafness. After four more years as Vice-President he retired from the Council at the Annual Meeting of 28 May 1923, having then completed twenty-five years of continuous service on the Council. He died at Merrow near Guildford on 2 November 1929.