

= Stuart Milner @-@ Barry =

Sir Philip Stuart Milner @-@ Barry KCVO CB OBE (20 September 1906 ? 25 March 1995) was a British chess player , chess writer , World War II codebreaker and civil servant . He represented England in chess both before and after World War II . He worked at Bletchley Park during World War II , and was head of " Hut 6 " , a section responsible for deciphering messages which had been encrypted using the German Enigma machine . He was one of four leading codebreakers at Bletchley to petition the then @-@ Prime Minister Winston Churchill directly for more resources for their work . After the war he worked in the Treasury , and later administered the British honours system . In chess , he represented England in international tournaments , and lent his name to three opening variations .

= = Early life and education = =

Born in Hendon , London , Philip Stuart was the second of six children to a schoolteacher , Edward Leopold Milner @-@ Barry , who died in 1917 , and his wife , Edith Mary . A talented chess player , he won the first British Boys ' Championship in 1923 . He was a pupil at Cheltenham College , and won a scholarship to Trinity College , Cambridge , where he obtained firsts in classics and moral sciences . He represented Cambridge in chess . At Cambridge , he befriended another chess player , C.H.O 'D . (Hugh) Alexander , and composed a number of chess puzzles . Between 1929 and 1938 he was a city stockbroker , although he was unhappy with the work . From 1938 , he was the chess correspondent for The Times , succeeded in 1945 by Harry Golombek .

= = = Early chess contributions = = =

He made his debut in international @-@ class chess at the strong London 1932 tournament , which World Champion Alexander Alekhine won . Milner @-@ Barry 's best results in international competition were achieved in three straight years at the Margate tournaments from 1937 ? 39 , and at Hastings 1938 . In all four events he finished just above the middle against strong fields , with performance ratings (as calculated by Chessmetrics) between 2538 and 2565 . This places him at a solid International Master standard , although he never received this title . He reached as high as No. 65 in the world between June and August 1941 , according to Chessmetrics , which ranks historical chess performances retrospectively , using modern algorithms .

He represented England in chess , and played in the international Chess Olympiads of 1937 and 1939 . The latter tournament , held in Buenos Aires , Argentina , coincided with Britain 's declaration of war on Germany in September 1939 . Milner @-@ Barry , with teammates who included Hugh Alexander (at that time the British chess champion) and Harry Golombek , abandoned the tournament unfinished , and returned to Britain . His full Olympiad results are listed later in the article .

= = Bletchley Park = =

Upon their return , all three soon joined the Government Code and Cypher School (GC & CS) at Bletchley Park . Milner @-@ Barry was recruited by mathematician Gordon Welchman , who had been his contemporary at Trinity College ; in turn Milner @-@ Barry recruited Hugh Alexander . Arriving in early 1940 , he joined Welchman 's " Hut 6 " section , whose task was to solve the Enigma cipher machine as used by the German Army and Air Force .

In 1993 , Milner @-@ Barry wrote that " to this day I could not claim that I fully understood how the machine worked , let alone what was involved in the problems of breaking and reading the Enigma cipher " . Nonetheless , with his knowledge of the German language , he made a study of the decrypts and found that they contained stereotyped patterns and forms of address that could be exploited as " cribs " ? reliable guesses for the plain language message that matched a given piece of encrypted text . Finding reliable cribs was a critical task for Hut 6 , as Enigma was broken

primarily with the aid of " bombes " , large electromechanical machines which automatically searched for parts of the correct settings . Bombes were reliant on a suitable crib in order to succeed . In autumn 1940 , Milner @-@ Barry was put in charge of the " Crib Room " .

He was billeted with Alexander , who was working in Hut 8 , the counterpart to Hut 6 working on German Naval Enigma . Their close friendship let them easily resolve the competing needs of their sections for the limited available bombe time . By October 1941 , he was deputy head of Hut 6 under Welchman . At this time , Bletchley Park was experiencing a shortage of clerical staff which was delaying the work on Enigma , and the management of GCCS appeared unable to obtain the resources needed . This affected both Hut 6 and Hut 8 , which was run by mathematician Alan Turing with Hugh Alexander as his deputy . Together , Welchman , Milner @-@ Barry , Turing and Alexander bypassed the chain of command and wrote a memorandum directly to the Prime Minister , Winston Churchill , outlining their difficulties . It fell to Milner @-@ Barry to deliver the message to 10 Downing Street in person , on 21 October 1941 . The next day , Churchill responded , " Action this day : Make sure they have all they want on extreme priority and report to me that this has been done . " Within a month their needs were being met .

In autumn 1943 , Milner @-@ Barry took over as head of Hut 6 , which by that time had grown to over 450 staff , Welchman having been appointed the Assistant Director of Mechanisation at Bletchley Park . He remained in charge until the end of the war , presiding over a number of technical challenges presented by the introduction of extra security devices to the German Enigma , including the Enigma Uhr and a rewirable " reflector " rotor . His entry in the Oxford Dictionary of National Biography notes that , " although he increasingly felt that Hut 6 was on the verge of losing the ability to decode Enigma , it held on until the end of the war , and this was due in no small part to his gifted leadership . " The official history of Hut 6 , written immediately after the end of World War II , comments on his early " most vital technical achievement " in finding cribs , and on his " administrative and diplomatic talents " in his later role as head of the section .

= = After World War II = =

Milner @-@ Barry joined the Treasury in 1945 with the grade of Principal . In 1947 , he married Thelma Tennant Wells , with whom he had a son and two daughters . The same year , he was promoted to Assistant Secretary , and Under @-@ secretary in 1954 . Apart from a stint in the Ministry of Health from 1958 ? 60 , he remained with the Treasury until 1966 , when , aged 60 , he had reached the normal retirement age for the civil service . He was persuaded instead to carry on as a ceremonial officer administering the honours system . In this role , he supported the knighthoods of P. G. Wodehouse and Noël Coward . Milner @-@ Barry eventually retired in 1977 . He was appointed OBE in 1946 for his work in World War II , CB in 1962 , and KCVO in 1975 .

= = Later chess contributions = =

He had also continued to play chess , competing in the 1952 and 1956 Olympiads . This 1956 Olympiad trip to Moscow was risky , since Britain and the USSR , which had been allies during World War II , were by then locked into the Cold War , and Milner @-@ Barry 's wartime codebreaking knowledge would have been of great interest to the Soviets ; the very fact that Britain had broken German codes on a massive scale was kept secret until 1974 , when Frederick Winterbotham 's book *The Ultra Secret* was published . He placed second in the British Chess Championship at Hastings 1953 (finishing behind only Daniel Yanofsky) , with a score of 8 / 11 ; this would be his best result in British Championships .

He was president of the British Chess Federation between 1970 and 1973 , competed in the British Championship as late as 1978 , and was still competing in club and county @-@ level tournaments and matches into his 80s . His obituary in *The Independent* recalled his " savagely effective attacking style , honed to perfection through a series of ' serious friendly games ' against his old rival Hugh Alexander " . In 1972 , George Koltanowski wrote that , " his style was very pleasing to spectators because he was always looking for dangerous continuations and quite often he found

them ! " His name is associated with three chess opening variations :

Milner @-@ Barry Variation of the Nimzo @-@ Indian Defence (ECO E33) : 1.d4 Nf6 2.c4 e6 3.Nc3 Bb4 4.Qc2 Nc6

Milner @-@ Barry Gambit in the French Defence (ECO C02) : 1.e4 e6 2.d4 d5 3.e5 c5 4.c3 Nc6 5.Nf3 Qb6 6.Bd3 cxd4 7.cxd4 Bd7 8 @.@ 0 @-@ 0 ! ? Nxd4 9.Nxd4 Qxd4 10.Nc3

Milner @-@ Barry variation in the Petroff Defence (ECO C42) : 1.e4 e5 2.Nf3 Nf6 3.Nxe5 d6 4.Nf3 Nxe4 5.Qe2 Qe7 6.d3 Nf6 7.Bg5 Nbd7

= = = Olympiad results = = =

Milner @-@ Barry 's detailed results while competing for England in chess Olympiads are as follows :

Stockholm 1937 : board 3 , 3 / 9 (+ 2 ? 5 = 2)

Buenos Aires 1939 : board 3 , 4 / 5 (+ 3 ? 0 = 2)

Helsinki 1952 : board 3 , 5 ½ / 12 (+ 2 ? 3 = 7)

Moscow 1956 : board 4 , 6 / 12 (+ 5 ? 5 = 2)

Overall , he scored (+ 12 ? 13 = 13) , 18 ½ / 38 , for 48 @.@ 7 per cent .

= = Final years = =

In 1985 , Milner @-@ Barry fiercely defended the reputation of Gordon Welchman , who had come under posthumous criticism for publishing details about the wartime work of Hut 6 . In 1992 , echoing his wartime visit to 10 Downing Street , Milner @-@ Barry was a member of a party who delivered a petition to the Prime Minister calling on the government to help preserve Bletchley Park , which was then under threat from demolition .

He died on 25 March 1995 in Lewisham Hospital , London . A memorial service was held for him at Westminster Abbey on 15 June .