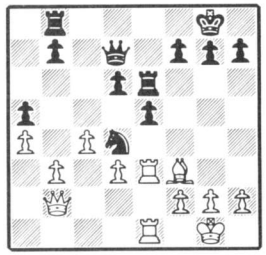
P.Burkett with 5/6, ahead of H. Dobson and E.Fitzjames 4½. The *Minor* was a victory for K.Gunnell 5½/6 followed by 2-4 R.W.Morris, M.I.Watkins and K.D.Richardson. A *Lightning tournament* was won by youthful veteran Dr J.M.Aitken. The Congress was impeccably controlled by R.O.Powis. We end with the following, played in the event:



C.H.Breach

A.Vyle

From the diagram, play went on:

19 ♗g4, f5; 20 ♗h3, ♖h6; 21 ♕d2, ♕d8; 22 ♖g3, f4; 23 ♖g4, ♖×h3; 24 ♖e4, ♖h4; 25 ♖×h4, ♕×h4; 26 ♕×a5, ♕g5; 27 ♖×d4, f3; 28 White resigned.

TURKISH DELIGHT

by **Ken Whyld**

For most chess-players the chess automaton was Kempelen's machine which came to be known as the 'Turk'. Students of these fakes are aware of Ajeeb and Mephisto, recently discussed in these pages, but few know that there has been something like a couple of dozen such devices. This article is an attempt to cast light upon some of them.

The Turk was a great intellectual challenge at the end of the 18th century. E.T.A.Hoffmann wrote a story, 'Die Automate', in which an automaton Turk appears. This in turn provided the inspiration of the ballet *Coppélia* and the first part of the opera *Tales of Hoffmann*. One writer who responded differently to the challenge was Baron Racknitz. His book, published in 1784, offered a theory of how Kempelen's machine worked. In order to form his analysis Racknitz made two models of the automaton, on roughly a one-sixth scale. He was substantially right about the method whereby the operator moved the pieces, and how he knew what had been moved, but quite wrong in his idea of how the operator was concealed.

Henri Decremps, a French expert on conjuring, said that he had seen a chess-playing automaton at the house of M. van Estin, around 1784, but the first full-size competitors to the Turk for which there are adequate accounts are the two made by Morosi, an Italian knight. His first was presented to the Grand Duke of Tuscany, Ferdinand III, in 1797, and his next, also made in Florence, was shown in Paris in 1798.

Except that the second was less polished than the first, Morosi's two machines were alike. A human-size figure, dressed like a Turk, sat before a chessboard placed on a table. Morosi opened all the doors exposing the inside of the body and the table, and moved his machine around the room to prove that it was not operated by levers or magnetism ... The spectators sat behind a barrier. After an illegal

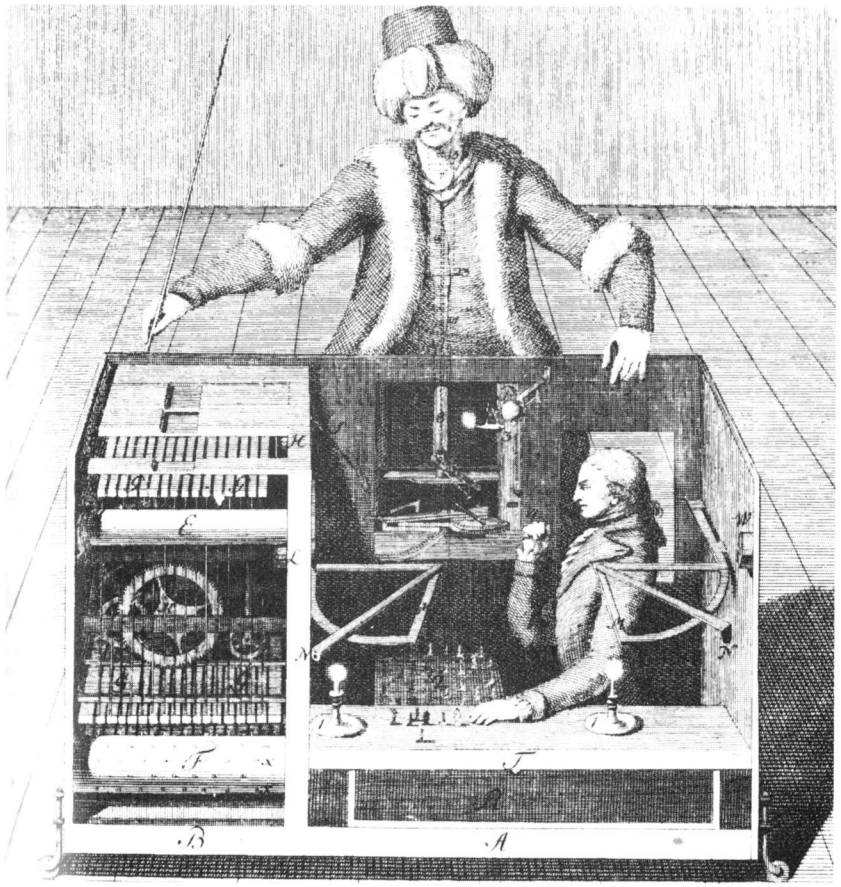


Illustration from 'The Great Chess Automaton' by C.M.Carroll.

move the android replaced the offending piece. After a second, whether in error or in jest, the machine swept the pieces off the board and turned its head away. In addition to playing chess and draughts, it offered tobacco to its opponent and the spectators, and would write from dictation.

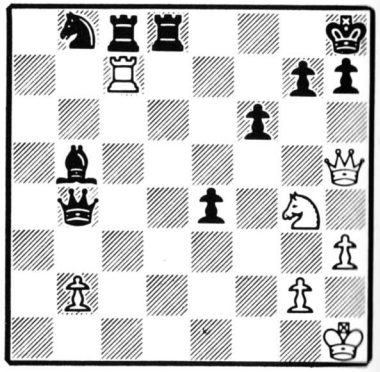
Morosi used one of the classical decoys of conjuring. He told his audience that he would reveal to them the secret of his machine. There was no mystery he said, he himself operated the device remotely, using a box which he held in his hand as he stood beside the machine, carefully following each game. He said that the automaton simply executed a pre-determined combination, which was why it always had the first move. If the opponent made it necessary to employ a new combination, then Morosi had to help the machine by starting an additional piece of clockwork. From time to time he would wind the machine, not always in the same place.

What ended Morosi's exhibition, apart from the general turmoil of the times, was the bad publicity arising from its extremely slow play. Challengers often made mistakes out of sheer boredom and felt that they had been given poor value.

The next creation may have been a clumsy attempt. Aloys Bayer, a clockmaker from Neuberg, on the Danube, took his 'Bavarian Boy' to the Café Tambosi in Munich at the beginning of 1820. It was about 1.5 metre tall, the size of a 12 to 15 year old boy, and sat before a velvet covered table on which the chessboard stood. As soon as an opponent sat at the table the 'boy' came to life and responded, without hesitation, to the play. The movements were described as quite life-like, and the right arm in particular as very correct. It played equally with white or black pieces, and also played draughts. The apparatus may have been worked from behind a curtain which crossed the room immediately behind it. The device seems to have disappeared when it was offered for sale in March 1820.

In 1827 a New York music publisher, Daniel Walker, and his brother asked the owner of the Turk for $500 to deter them from making a copy. When this was refused they went ahead, and in May started their own exhibition which was successful enough to produce an offer of $1,000 from the Turk's owner. This time they refused. It was said to be more skilfully made than the Turk, but its operator was no match for Schlumberger and the machine known as 'The American Chess Player' dropped out of the headlines. It may have continued for many years, and might have been the automaton that Morphy played when he was a boy.

At many exhibitions the early chess automatons did not play full games but, alledgedly to save time and interest the audience more, offered challengers several positions from which to choose, as well as the choice of colour. Here is a typical example from the original Turk's repertoire.



The snag was that the automaton always had first move. Using this kind of position, a direct descendant of the medieval gambling chess problem, the operator need not be a strong player, since it was always a forced win for the player moving first, and the analysis was written.

The next part of our account is in some ways the most bizarre, In his autobiography, first published in 1858, the great illusionist J.E.Robert-Houdin said that he had seen 'the' automaton chess-player in the house of a friend living in Belleville, an eastern suburb of Paris, in 1844. Robert-Houdin then gave a highly romantic version of the Turk's origin, which has no factual basis. This version was the basis of a play and several stories. One of these, *Le Joueur d'échecs* (1927), was made into a silent film released at the same time, and remade in 1938 as a talking movie. It was doubtless from this novel that Osorgin took the story which was recounted, by Donald M. Fiene, in *BCM* August and September 1977.

Suffice to say that this story can be dismissed quickly on three grounds. Firstly there is not a single scrap of factual evidence to support it; secondly, despite it being such an attractive tale, it cannot be found earlier than over eighty years after the events to which it alledgedly relates; and thirdly, if Kempelen were making his Turk just to conceal a limbless player he would not have gone to the enormous effort of making it also suitable for a six-footer. Research into this subject is hindered by accounts which mix together facts about different machines, often because the writers do not know that more than one has existed, but this does not seem to be the case with the 'legless Pole' story.

The play mentioned above, *La Czarine*, had a fake pseudo-automaton built for it by Robert-Houdin himself. It bore little resemblance to the original, but those in the films were more like it. The first stage imitation was made for Beck's *Die Schachmaschine* (1797), and no doubt there have been substantial models in other plays.

Machines proliferated at the end of the 19th century. In the earlier article on Ajeeb (*BCM* January 1978) Ajeeb II was mentioned. With information seen since writing that, I am now convinced that there was a second Ajeeb in U.S.A. There are reports of one in New York Aquarium, and Chicago, in 1878, and later in Kansas City, Minneapolis, St.Louis, Boston and Galveston, Texas. A letter from A.B.Hodges, which I have just seen, says that the machine which he saw operated by Moehle (not Mohle as I said) was not as well-made as the one which Hodges subsequently worked, but was a good imitation.

Also belonging to that period is Az-Rah, whose performance was closed by the Bordeaux police in about 1890, because it was thought to be endangering the health of its 18-year old operator. Another device had the intriguing name King Fu, and there were draughts players named Ali and Akimo, as well as Mazam, the Egyptian Marvel, which was controlled by an English player, Harry Jacob, until the illness which led to his death in 1905.

Around 1914 a Berlin homeopath, Dr Lutze, who had a book on four-handed chess published, was said to have made an automaton which was operated by electricity from the next room. This seems remarkably like Mephisto, the work of another homeopath. (See *BCM* July 1977). When the first World War came along, all trace was lost of Lutze's work, and he himself soon died.

By then the age of the fake automaton was already over, as we shall see, but a late echo came in 1945 when an Allied soldier found such a device in Vienna, and sold it in Paris. When restored this did not look like any of the machines described elsewhere. There was a box of 'clockwork' on the chest of the Turk which was covered by a mirror during play. No doubt the fake machinery was pushed aside to enable the operator to look through the special mirror.

As a coda to this review we will examine briefly the first and so far last true chess automaton. It was first shown around 1890 by its inventor Dr Leonardo Torres y Quevedo, and was modified in several ways over the next forty or so years. 'El Ajedristica' (The Chessplayer) as it is called, is in working order still, housed in the Polytechnic museum of Madrid.

The machine plays only the end-game K+R v K, always taking the winning side. It is fully automatic. It is switched on when Black moves his

king, and selects its best move by following a program which seems crude to modern computer programmers. Having chosen its move it then actually moves its piece and switches itself off. There are many other interesting features which could only be described adequately in a much longer article. For example, at the end, the machine announces 'mate', resets the pieces to their original position and verbally offers to play again, before switching off.

As not only IM David Levy knows, computers play chess, but they neither move nor respond to the chessmen and so cannot properly be called chess automatons. I have produced, in a small edition, a bibliography of over 300 entries relating to chess-playing automatons but the last word has not been said on this subject.

I am grateful to Dr Adriano Chicco, David Hooper and Egbert Meissenburg for some of the information in this article.

Footnote — My article in the January 1978 *BCM* on the subject of Ajeeb did less than justice to two of the draughts-players who operated it. Thanks to Paul Michelson of Brookline, Massachusetts, and Frank Skoff, of Chicago, I can add that Dr August (not Adolf) Schaefer played for the U.S.A. in the first international team match, in 1905. Gonotsky lived longer than I said, dying in 1929. He won the USA checker (draughts) championship in 1926 and was regarded as a potential World Champion in some quarters.

Editorial note — We hope to publish, soon, a contribution by J.Edmund Peckover on 'Ajeeb'. Shortage of space has prevented us from giving it earlier in the year.