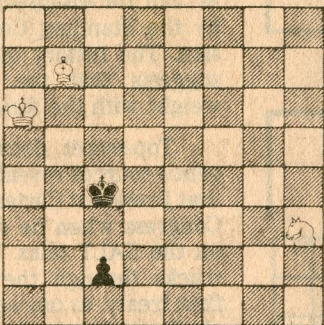# Chess

By George Koltanowski

STUDY

White to play and draw.

1. N-B4, P-B8 = Q; 2. B-Q5ch followed by a Knight check on either K2 or Q3 draws.

A Grandmaster was recently hustled out of $100 on a basic chess ending. He failed, with a king and queen, to mate a king and rook in 50 moves!

His opponent, avoiding the superficial analysis on which the Grandmaster relied — Fine, Averbakh, Keres, chose rather to examine every possible position of the four chess pieces, working each one down to forced mate or the winning of the rook. He discovered unknown defenses, upset the theory of a hundred years, and won a C-note from America's strongest active player. "He" is the computer, *Belle*; the Grandmaster, Walter Browne.

This is an historic event, the first time a computer has influenced chess play and the first time a computer has taught a Grandmaster anything, was how Dr. Maurice Stenberg put it in the current issue of *Minnesota Chess Journal*. The world's best computer-chess journalism emanates from Minnesota, where the union of computer and chess flourishes in the national headquarters of Honeywell, Univac, and Control Data.

On the Levy-Chess 4.7 match, for example, Dr. Cahlander provided readers of the *Minnesota Chess Journal* with the entire printout, showing *for each move;* (1) How many half-moves (known as iterations) deep were searched; (2) How many positions (called nodes) were examined (it's often millions!); (3) The elapsed time of each player at each move; (4) The computer's predicted course of the game (with best moves on each side) at least five or six moves deep; and (5) The computer's numerical evaluation of White's advantage down to two decimal places, using a pawn = 1 and positional nuances for decimals. Fantastic? Yes indeed.