Don't Forget The Cheese And Fries
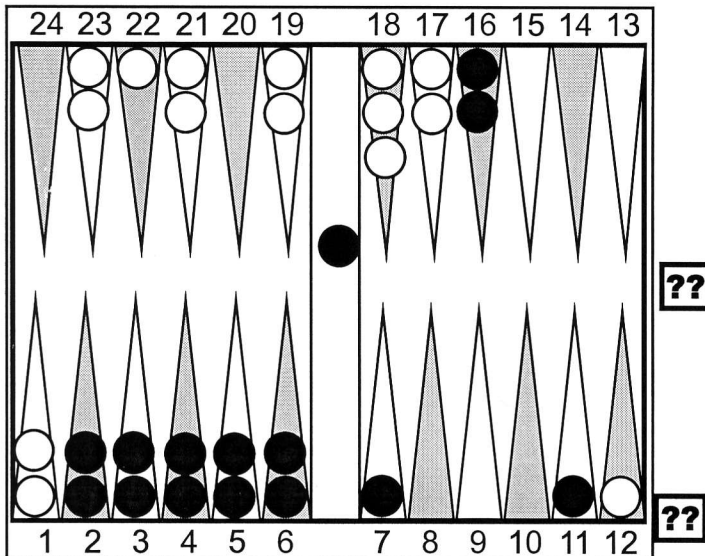by Mary Hickey

7-point match, cube action, both sides.
Situations:
1) Money Game.
2) Black-1, White-1 (6-away, 6-away), cube centered.
3) Black-2, White-1 (5-away, 6-away), cube centered.
4) Black-1, White-1 (6-away, 6-away), cube at 2.
5) Black-2, White-1 (5-away, 6-away), cube at 2.

The original problem proposed in the April newsletter showed the above diagram, and asked for the proper cube actions at various scores. For the money game, and most of the other scores proposed (6-away, 6-away cube centered or at 2, 5-away, 6-away cube centered), Black clearly has a double or redouble. His gammon chances are good, but not enough to give him a play on here. After all, even his best sequence (hit/fan) doesn't lead to a sure gammon-- a rollout of a perfect 34 (hit twice)/fan shows a gammon percent of only 53.8%, with White still winning 16.4% of the games! White cannot take in any of these cases, due mainly to the gammons (33.2% for Black) but also because of his anemic win rate in the face of that only 25.8 percent. The net equity of +0.767 would be enough to scare off any sane opponent.

The question from the April letter that gets interesting is the last one, where you hold a 2 cube at 5-away, 6-away. There's an inclination then to hold the cube once you own it, thinking something like this: *"If I give it back, he'll reship to 8 and we'll be putting the match on the line! How can I do that, when it's more or less won now if I hold? ... And anyway, if I have a good enough game to think about doubling, isn't winning a gammon enough of a possibility that I might be too-good/not-enough? ... OK, maybe not if it's a straight race, but I hate to let him 6-6 his way to a win he didn't deserve. And anyway, doesn't Hickey's Postulate say there's no such thing as a won race?"*

That's all true enough, but there's enough doubt, too, to indicate that doubling windows do exist at this score. And that is windows, plural-it matters whether it's a sudden-death ending, one where White will have opportunities to recube, or one where gammons are a significant factor.

Let's look at the sudden-death endings first. If White passes, he goes to 6-away, 3-away, with match winning chances of 29% according to Kit Woolsey Hal Heinrick (KWHH) Table (see link at end of article). If he takes and loses, he's at 6-away, 1-away Crawford, 10% MWC (match winning chance). If he takes and wins, he reaches just 2-away, 5-away, 75%, because he has no chance to recube. His take point comes out to 29.23%, meaning he can accept most normally takeable bearoff ending cubes. The only exception is 2, 2 vs. no-miss.

So where does Black's doubling window open? Again using KWHH numbers, we get 47.22% minimum equity for the sudden-death recube. There is only one two-checker ending at this equity, the 4, 3 vs. no-miss. Since that's right on the border, it's the kind of position where you would decide about redoubling based on other factors. These would include time trouble, or a truly awesome opponent (e.g., the kind who frets if he's only listed in the lower half of the Giant 32).

Now let's look at race endings where White can recube. Since he should redouble if he sees daylight, with that defined at this score holding a 4-cube as about 11.8% GWC (game winning chance), we might as well start by assuming he will always redouble, so if he takes the match is on the line. This leads to a take point the same as his match equity if he passed to 6-away, 3-away, that is 29%. We can push this a bit, surely to 28% or maybe even a bit under, by noting what happens if Black lets loose with an immediate big double or other joker that pushes his winning chances beyond where White can recube. White then glumly sits out the bad race, retaining just the level of alertness necessary to throw in a cube if he counter jokers his way back into the game later, but usually ends up attempting to claw his way back from 6-away, 1-away Crawford, a 10% MWC proposition.

So when can Black recube this kind of ending? Again using KWHH, we see the doubling window opening at 59.15%, but of course we aren't redoubling at that point. We'd need to redouble if the alternative were "never redouble", but it's not. As we close in on the end of the game, we start looking harder at the edgier recubes, since then we're getting closer to that assumption being true, but earlier, we need more than the minimum. How much more? Hard to say, but the usual test of checking for sequences that lose the market by a lot will provide some guidance. If you're having trouble finding such sequences, chances are you're having a hard time finding a recube, too.

How does the above discussion help us solve the April newsletter problem? By showing us that first of all, Black will indeed be putting the match on the line if he redoubles here. We've shown that White still has 16.4% wins coming even if the sky falls on his head, so he's going to neutralize Black's gammons with an immediate recube if he takes at all. White's question is whether he can take in the first place, and the rollouts indicate that no, he cannot. His winning chances of 25.8% are inadequate when he can simply pass and continue with 29% MWC from 6-away, 3-away.

This means Black cannot be **TGNE** (Too Good/Not Enough), but it still leaves open the chance that he's just plain too good. This would be hard to figure out over the board, but using the rollout profile of Black getting 74.2% total wins, 33.2% G and BG, 4.1% BG, and White getting 25.8% wins, 8.7% G and BG, and 0.04% BG, we find that Black's match equity if he never redoubles is 68.66%. Considering that he will have match equity of 71% if he recubes now and White correctly passes, Black would have to be pretty sure he was going to get an even more effective redoubling opportunity not to do so, though it's certainly possible he could find 2.34% MWC worth of equity by waiting here.

But there's one more reason to recube now, even if you could demonstrate that you would indeed get a sufficient number of more equitable opportunities later, and that's the error draw factor. Why mess around parsing tiny differences when you can give your opponent a chance to make a Whopper right now? We've already shown that you have 71% match equity if your opponent passes, but 74.2% if he takes and recubes, and even more if he takes but doesn't recube right away. So serve up this tasty Whopper for him, don't forget the cheese and fries, and if he bites, well, then you can enjoy!

Kit Woolsey Hal Heinrick Table:
http://www.gammonline.com/demo/equity.htm

HBC Standings As of April 2005	
Sean Garber	**833**
Butch Meese	**577**
Scott Johnston	**464**
Rick Steele	**437**
Terry Bateman	**387**
Chuck Stimming	**335**
Larry Strommen	**297**
Scott Day	**162**
Merle Feldman	**123**
Mary Ann Meese	**109**
Jim Curtis	108
Paul Berg	96
Woody Woodworth	76
Josh Riddell	69
Dave Groner	36
Dan Moore	34
Mark Swanson	32
Mark Mikolon	20
Eric Luecking	18
Charlie Haley	12
Derrick Swanson	10

53rd Indiana Open - Labor Day Weekend 2005
Free Lecture by *Joe Sylvester*

Player of the Month of **May** was **Sean Garber** with 162 gammon points.

	May 4	May 11	May 18	May 25
1st	Terry Bateman	Rick Steele	Sean Garber	Sean Garber
2nd	Sean Garber	Chuck Stimming	Terry Bateman	Terry Bateman

Tournament BG Schedule

Jun 17-19	**Los Angeles Open,** Airtel Plaza Hotel, Van Nuys, California	818.901.0464
Jul 1-4	**Michigan Summer Championships,** Sheraton, Novi, MI	810.232.9731
Jul 29-31	**Wisconsin State Championships,** Radisson Hotel, Madison, Wisconsin	608.516.9109
Aug 18-21	**12th Annual Georgia,** Marriot, Atlanta, GA	770.333.1876
Sept 2-5	**53rd Indiana Open,** Sheraton, Indianapolis	317.255.8902
Wed 7 PM	**Neon Johnny's,** 86th & Township Line Rd	(Cells) 317.442.4065 or 317.430.7862