April 2017

## The Seven Percent Solution (Divided by $\mathbf{1 0 , 0 0 0}$.)

I've written a lot about mirrored stacks lately, and I'm about to write some more. (After all, the column is called Inside Ed's Head and my head still has mirrored stacks rattling around in it.)

As some of you may know, I've sent some of my material to Mike Powers, with the hope he might find it useful for his column, "The Card Corner," in The Linking Ring. I sent him some of the material about the $2 \mathrm{~N}-1$ principle I discovered about mirrored stacks.

He agreed that the principle was intriguing but was not happy with a twodeck trick. He said that I should look for a one-deck trick, which would give me the added benefit of the "Stay Stack" principle. I followed Mike's suggestion and came up with this. I sent it to him and I think he's pleased with it.

A major property of a mirrored stack is that it's also a "Stay Stack." What this means is that if you break this stack exactly in half, and then faro shuffle it, it will remain a mirrored stack. The stack will, of course, be different but the top card will match the bottom one, the second card will match the second from the bottom, etc. More importantly, it doesn't matter if the faro is off center. As long as the weave is perfect and the deck or packet has been split in half, you'll still have a mirrored stack after the shuffle.

Now if you can't do a perfect faro, not to worry-as long as the spectator believes the deck to be well shuffled, you're OK. So you'll need either a false shuffle or a deck switch. I like to make a point of how well the deck is being shuffled, so I think the faro is important. If you wish to learn it, try Expert Card Technique, by Jean Hugard and Frederic Braue. If you don't have this book, get it!

## The 0.0007\% Solution

## Effect

A deck is shuffled and a spectator is asked to name a number that will lie within half of a deck. The deck is divided into two equal portions and the magician and the spectator each deal a card from their pile, face up on the
table. The magician points out that the cards are not "mates." In other words, they are not the same value and the same color.

The cards are dealt in this manner, counting until you reach the number that the spectator originally named. These cards are dealt face down-it is also pointed out that no mates have shown yet.

The rest of the cards are now dealt face up (there is no need to count them). There are still no mates showing.

The magician now opens another deck he used to perform the same experiment before the show. He removes two face-down cards from that deck and tables them.

He now turns over the face-down cards that were just dealt-they are the two black tens. The face-down cards from the second deck are also turned over-they are also two black tens. Seven chances in a million-easier than winning the lottery!

## Materials

You will need one regular deck of cards with both jokers in the deck. This deck should be separated into pairs to create a mirrored stack (as mentioned above.) You will also need an Ultra-Mental (Invisible) deck and one more joker. The backs of all the cards are immaterial. If you intend to switch in the mirrored stack, you'll need to be using a fifty-four card deck with backs identical to the mirrored deck.

The Ultra-Mental is placed off to the side of your performing area at the beginning of your set. The mirrored deck is either used as an opener or switched in during your set. The joker is in your breast pocket.

If you're performing in a close-up show situation, ask one member of the audience to sit next to you to assist in the performance.

## Method

The shuffles: The next paragraphs only apply if you intend to take advantage of faro shuffling a Stay-Stack deck.

Divide the deck exactly in half (easy, because there is a pair of mates at the center) and begin an off-center faro shuffle. Say, "Some people believe that magicians don't always shuffle the deck fairly." Show the interwoven halves of the deck to your assistant/spectator and ask, "Does this deck look shuffled to you?" He should answer in the affirmative. If there are magicians in the audience, you might add, "It's not a perfect shuffle, but it is a pretty good shuffle, right?" A magician will answer in the affirmative, because of the off-centered nature of the shuffle. This will lead most magicians to assume your weave is imperfect, which will throw them completely off track.

Slowly push the halves of the deck together, making sure the spectator verifies your actions. Ask him if he'd like you to shuffle again, and repeat the previous actions if he says yes.

Selecting a number: Tell him that you will each use half of the deck and you'd like him to give you a number that will lie within that range. "How about giving me a number from, I don't know, how about from five to twenty. (You can actually let them pick a number from one to twenty-seven, but limiting the lower range makes the trick more interesting and limiting the upper range makes the math a little easier.)

Once he's given you the number, double it and remember it! (If this number is greater than twenty-seven, subtract twenty-seven. If you're a subtractionally deficient person, you can subtract thirty, and then add three.) This will be your key number.

You might want to offer another shuffle here-that's up to you.

Dividing the deck: You'll now divide the deck exactly in half, as follows. Take the top card into your right hand, and count to yourself "Twentyseven." Take the next card under the previous one as you count, "Twenty-six." Continue counting the cards into the right hand until you reach the number you are remembering. You should be counting these cards into a rather uneven spread to facilitate the next action. (See Photo 1.)


Once you've counted the card at the key number into your right hand, pause and square the right-hand cards against the left-hand cards. (See Photo 2.)


Drop the squared cards onto the table and continue counting the cards into the right hand until you count the number "one." Drop your right hand cards onto those on the table and give this twenty-seven card packet to the spectator.
(It is possible that your key number will be twenty-four or twenty-six. If this
is the case, the ploy of squaring the cards won't make much sense. You're probably better off just double-cutting two or four cards to the bottom of the spectator's packet and then doing a false double-cut of your packet to mimic the action with the spectator's.)

Finding the match: The rest is relatively simple. Deal the top card of your packet face up to the table and count, "One." Ask the spectator to do the same. Mention the names of the cards seen and discuss the concept of "mates." Point out that the cards seen are not mates. Deal the next card, count "Two" and then ask the spectator to do the same. Point out that it's very important for the spectator to wait until your card is on the table before he deals his card. (This will be important later.) Continue dealing and counting cards until you reach the number that the spectator originally called. As you do this, continue to point out that none of these pairs are mates.

Begin the action of turning the card at spectator's number face up but stop before the spectators can see the card-turn it only as far as necessary for you to glimpse and memorize the card. Say, "Oh, let's leave this card face down." Place it face down next to the packet of face-up cards you've previously dealt. You and the spectator can now deal the rest of the cards face up at a more rapid pace, without needing to count. Be sure to point out that no mates are showing up.

The next coincidence: Now it's time to pick up your Ultra-Mental deck. (Unless the card you glimpsed is a joker. More on that later.)

Remark that you've had another deck off to the side since your set began. Explain that you had run through the very same exercise that was just witnessed earlier in the day-with this deck. Tell them that the two reversed cards are still in place. Remove the deck from its case oriented so it will reveal the proper cards. Here's how I handle the deck: Let's assume the card I glimpsed earlier was the ten of Clubs. That means I have to look for both red threes to reveal the reversed black tens. I spread five or six cards and place them underneath the deck, even if they contain a red three and continue spreading again. I never spread more than five or six cards at a time before ducking them under the deck. This obscures exactly where the cards are in the deck and takes care of those awkward situations where one of the cards you're looking for is right near the top or bottom.

Look for the first red three and reveal a reversed card next to it. Drop this face down on the table. Do the same for the next red three and case the deck.

What if the glimpsed card is a joker? Well, you could add a pair of roughed jokers to you Ultra-Mental deck. You'd have to risk the small possibility that a spectator would note that the reversed joker that was exposed at the end of the trick originally was right next to another joker. Even if this does happen, it's unlikely it would mean anything to the
spectator. If you do this, when you run through the Ultra-Mental deck, just table the single joker. It shouldn't make a difference.

Instead, just have a spare joker in your pocket or under the mat. If you see a matching pair of jokers, ignore the Ultra-Mental deck and just mention that you had a premonition before the show and placed a special card in your pocket.

The sockdolager: Turn over the face-down card from your half deck. Point out that the odds of having the one and only mate from a shuffled deck appear at a number previously called are only a little better than one percent. Turn over the spectator's face-down card and show that this very unlikely event has occurred.

Point out that having it happen with two decks with the same card is so low as to be practically impossible. Turn over the two matching cards previously tabled from your Ultra-Mental deck, and you've shown an event as close to impossible as you're likely to run into. (For a joker, turn over your premonition cards. The result is just as impossible. Since the UltraMental deck has been out of play, no one will associate it with this trick and wonder why it's not been used.)

Final note: I'm not sure about the better way to end the trick. Do I first expose the cards that have been dealt out and then turn over the other cards or do I turn over the Ultra-Mental cards first?
'Tis a puzzlement.
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