Martin Gardner
PARADOX PAPERS

(New magical principles are a rare commodity. The concept described here by Martin Gardner is a new idea that can be used in many different ways. Get a piece of paper and follow the instructions given here; you will amaze yourself at the outcome. Ed)

Get a piece of paper about the size of typewriter paper and fold it twice each way. When the paper is opened, it will contain 16 cells or squares as in Fig. 1. It is a good idea to fold the paper both ways along each crease for easy re-folding later on.

Number the cells 1 to 16 as shown in Fig. 1. Fold it any way to make a packet. A sample is shown in Fig. 2 through 7, but keep in mind that this is only a sample. The spectator can fold the paper any way he chooses (along the crease lines of course) to make a packet.
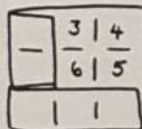
Trim all four sides of the packet, Fig. 8. Now deal the 16 pieces in a row on the table and you will observe a remarkable result; all the even-numbered pieces will be face-up, all the odd-numbered pieces will be face-down (or vice-versa, depending on which way the packet is turned).This result is consistent, no matter which way the paper is folded.
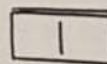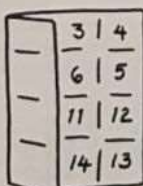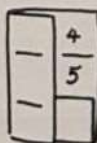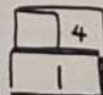
There are many ways to exploit the princi-

ple. For example, give spectator A the Ace thru 5 of Diamonds and have him choose one. Say he takes the 4D. Jot the names of the cards on one side of the paper, placing the names (Cont'd on pg. 433)

---

card, so all the cards are facing one way except
his selection face-up in the deck.

on the even-valued squares, as shown in the illustration below. The chosen card, in this case the 4D, is placed on an odd-valued square. Since the packet consisted of red cards only, you jot down the names of the cards using a red pencil.

In a similar manner have a card chosen from a packet of black cards, say the Ace thru Five of Clubs. Turn the paper over side-for-side and jot down the names of the Clubs on the opposite side of the paper. This time you use a black pencil, and you note the cards in the odd-valued squares. The chosen card, say the 3C, is jotted down in an even-valued square.

			AD
	4D		
			5D
2D		3D	

Have the spectator fold the paper any way he chooses. Trim around the four sides of the folded packet. Deal the pieces out and you will discover a curious result. As the pieces are dealt out, only red cards will show EXCEPT FOR THE CHO-

SEN BLACK CARD.

Turn the pieces over and deal them out again. Only black cards will show except for the chosen red card.

(Ed note: About six months ago, when Martin first described this idea, Steve Shimm suggested the following alternative. After the paper packet is completely folded, trim two opposite sides only. When the paper is opened, you will get long strips of paper rather than individual pieces. Another possibility is to use a paper that has been creased to produce triangular cells rather than squares.

There is also a playing-card analog that may be of interest. Deal out 16 cards in a 4 by 4 array so that colors alternate throughout, as on a checkerboard. Now start with any card and flip it over so it falls onto any adjacent card. Flip these two cards over as one, so they fall onto another card. Continue in this way until all sixteen cards have been gathered. On examination of the packet you will find 8 reds facing one way, the 8 blacks facing the other. There are many ways this can be exploited. One offbeat problem is to determine a way of gathering the cards so that any given card will fall at any given number after the packet has been gathered. There are a number of ways of accomplishing this, but the trick is to do it in the easiest way possible)

From The Pallbearers Review July 1971