The young man's book of amusement

Halifax, 1848

A certain Number of Cards being shewn to a Person, to guess that which he thought of

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three persons may be at liberty to choose any of them they please. This choice, which is susceptible of six different varieties, having been made, give to the first person twelve counters, to the second twenty-four, and to the third thirty-six; then desire the first person to add together the half of the counters of the person who has chosen the card A, the third of those of the person who has chosen B, and the fourth part of those of the person who has chosen C, and ask the sum, which must be either 23 or 24; 25 or 27; 28 or 29, as in the following table:—

First	Second	Third	Sums
12	24	36	
A	B	C	23
A	C	B	24
B	A	C	25
C	A	B	27
B	C	A	28
C	B	A	29

This table shews, that if the sum be 25, for example, the first person must have chosen the card B, the second the card A, and the third the card C: and that if it be 28, the first person must have chosen the card B, the second the card C, and the third the card A; and so of the rest.

A certain Number of Cards being shewn to a Person, to guess that which he thought of.

To perform this trick, the number of the cards must be divisible by 3 ; and it is more convenient that the number should be odd. Desire the person to think of a card, then place the cards on the table with their faces downward; and taking them up in order, arrange them in three heaps, with their faces upward, and in such a manner, that the first card of the packet shall be first of the first heap; the second the first of the second, and the third the first of the third ; the fourth, the second of the first, and so on. When the heaps are completed, ask the person in which heap is the card thought of, and when told, place that containing the card thought of in the middle, then turning up the packet, form three heaps, as before, and again ask in which is the card thought of. Place the heap containing the card thought of still in the middle, and, having formed three new heaps, ask which of them contains the card thought of. When this is known, place it as before between the other two, and again form three heaps, asking the same question. Then take up the heaps for the last time; put that containing the card thought of in the middle, and placing the packet on the table, with the faces downward, turn up the cards till you count half the number of those contained in the packet; 12, for example, if there be 24, in which case the 12th card will be the one the person thought of. If the number of the cards be, at the same time, odd, and divisible by 3, as 15, 21, 27, &c. the trick will become much easier, for the card thought of will always be that in the middle of the heap in which it is found the third time; so that it may be easily distinguished without counting the cards ; nothing will be necessary but to remember, while you are forming the heaps the third time, the card which is the middle one of each. Suppose, for example, that the middle card of the first heap is the ace of spades; that the second is the king of hearts, and that the third is the knave of hearts; if you are told that the heap containing the required card is the third, that card must be the knave of hearts. You may therefore have the cards shuffled, without touching them any more, and then, looking them over for form's sake, may name the knave of hearts when it occurs.

At the Game of Whist, what probability is there, that the four Honours will be in the hands of any two Partners.

De Moire, in his Doctrine of Chances, shews that the chance is nearly 27 to 2 that the partners, one of whom deals, will not have the four honours. That it is about 23 to 1 that the other two partners will not have them. That it is nearly 8 to 1 that they will not be found on any one side. That one may bet about 13 to 7, without disadvantage, that the partners who are first in hand will not count honours. That about 20 to 7 may be betted, that the other two will not count them. And in the last place, that it is 25 to 16, that one of the two sides will count honours, or that they will not be equally divided.