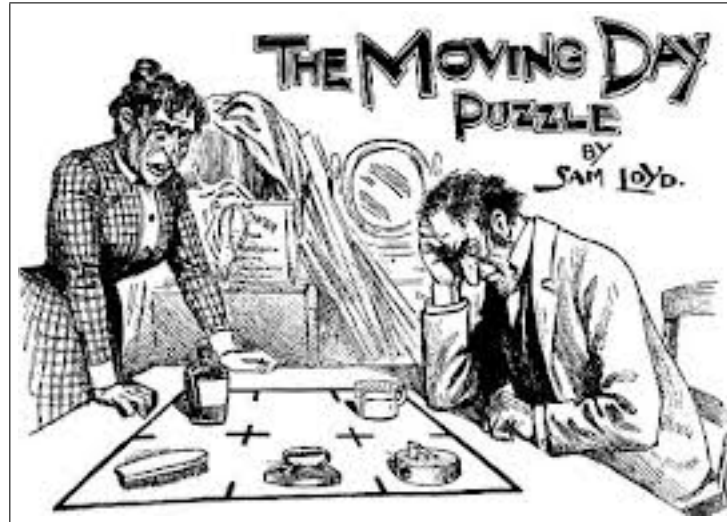

Problem of the Week

Solution Two



The sketch shows a migratory couple who have just moved into a cozy little six-room flat. They have five large pieces of furniture: bed, table, sofa, icebox and bureau. The pieces are so bulky that no two can be placed at one time in any one room. It happened, however, that the furniture movers placed the icebox and bed in the wrong rooms. The couple has been trying for several hours to figure out an efficient plan for transposing them.

Being a systematic sort of fellow, the man marked out a diagram of his flat on the table, then placed five small articles on the squares to represent the pieces of furniture that are to be shifted. The whisky flask represents the bed, and the scrubbing brush is the icebox. (The two corners farthest from the man, in the diagram.) **You are asked to transpose these two pieces by moving one piece at a time into a vacant room.**

SOLUTION: We can represent the diagram more schematically like this:

Brush	Flask
Iron	
Mousetrap	Pepperbox

(Flip page!)

The optimal sequence is now:

1. Flask, Brush, Iron, Flask

Iron	Brush
Flask	
Mousetrap	Pepperbox

2. Pepperbox, Mousetrap, Flask, Iron

	Brush
Iron	Pepperbox
Flask	Mousetrap

3. Brush, Pepperbox, Iron, Flask

Brush	Pepperbox
Flask	Iron
	Mousetrap

4. Mousetrap, Iron, Pepperbox, Brush, Flask

Flask	Brush
	Pepperbox
Mousetrap	Iron