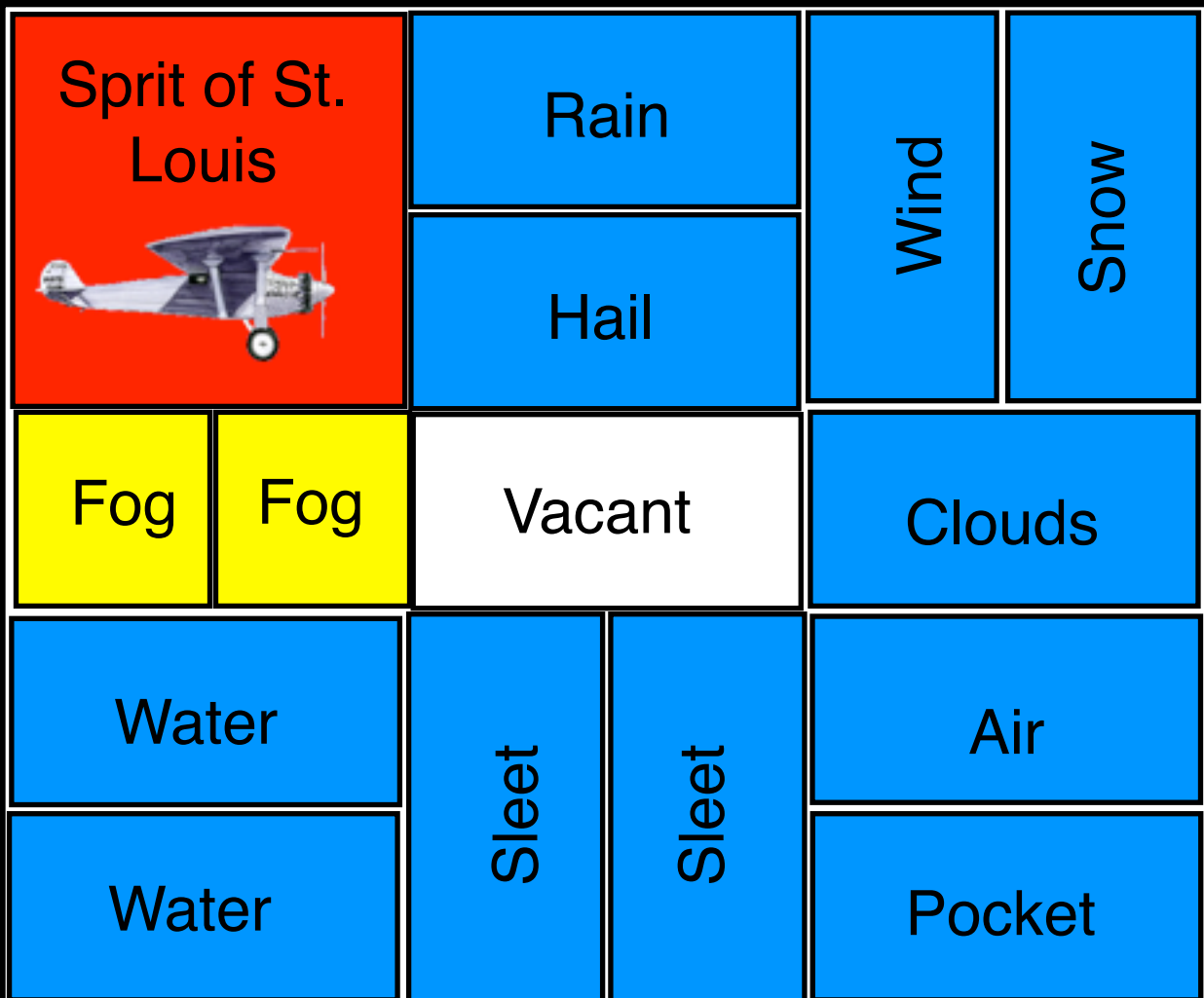


# The Flying Puzzle

## The Flight of Charles Lindberg from the USA to France in 1927 in the Spirit of Saint Louis

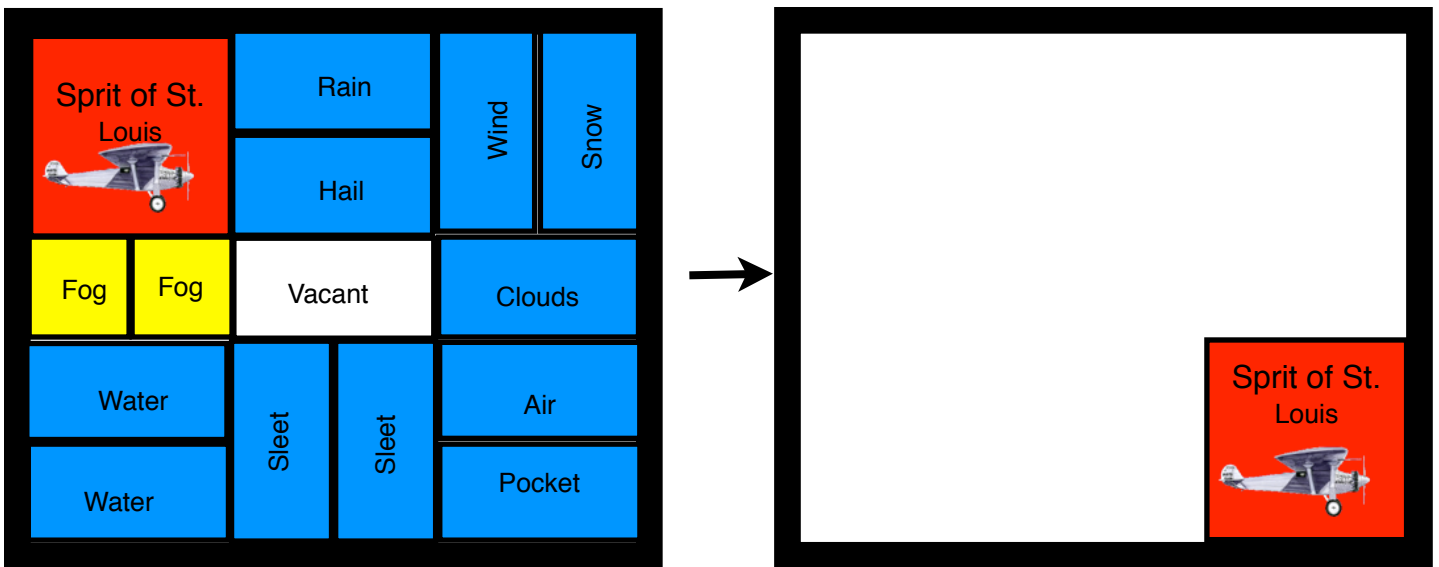
Lindberg flew the distance of nearly 3,600 statute miles in a single-seat, single-engine, purpose-built Ryan **monoplane**.

Slide the puzzle pieces without picking up any of the pieces until you have moved the plane in the **upper left corner** to the **lower right corner**. The upper left corner represents the take off of Charles Lindberg from the USA and the lower left corner represents his arrival in France. The other pieces represent the obstacles he had to over come during the flight.

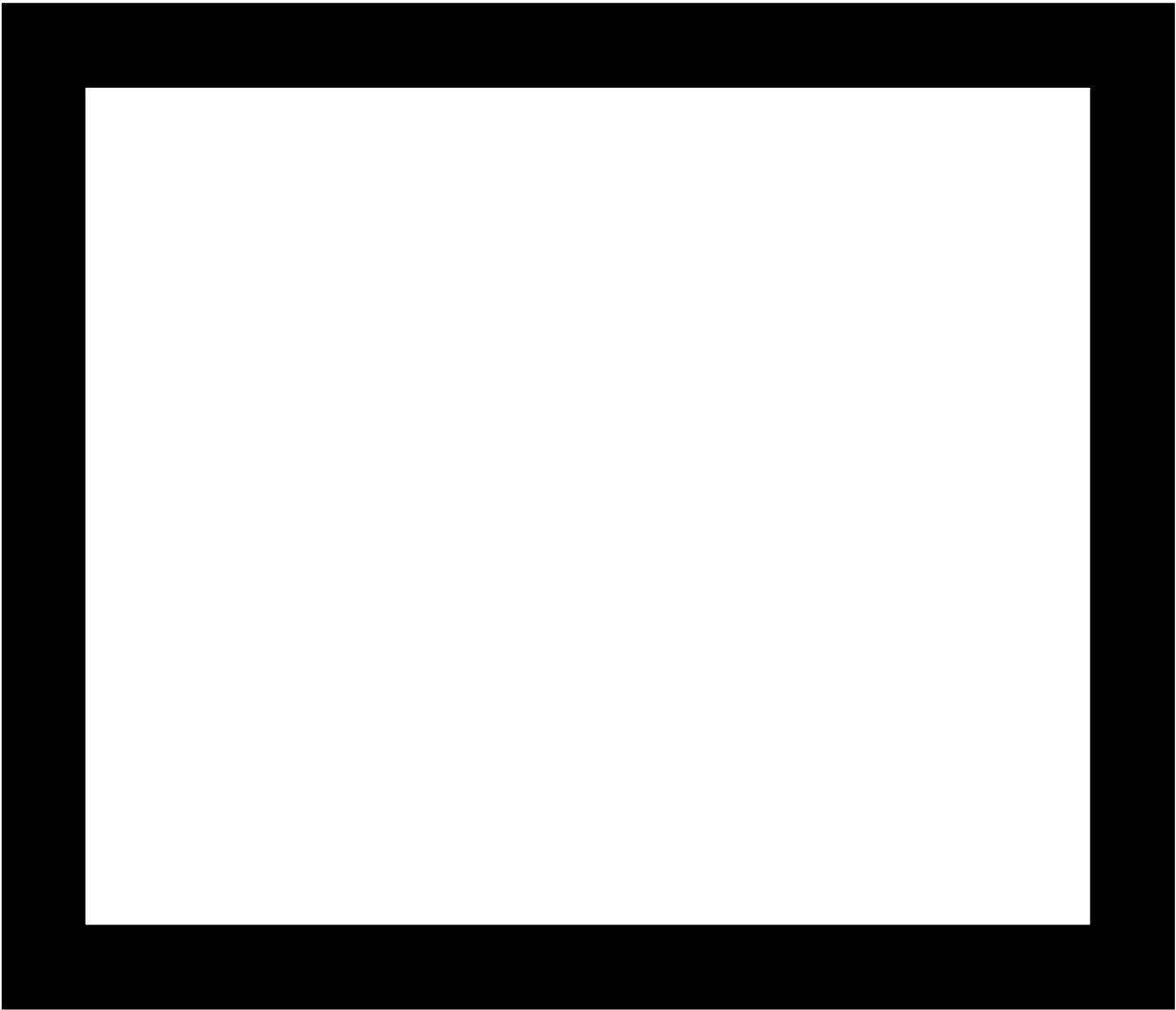


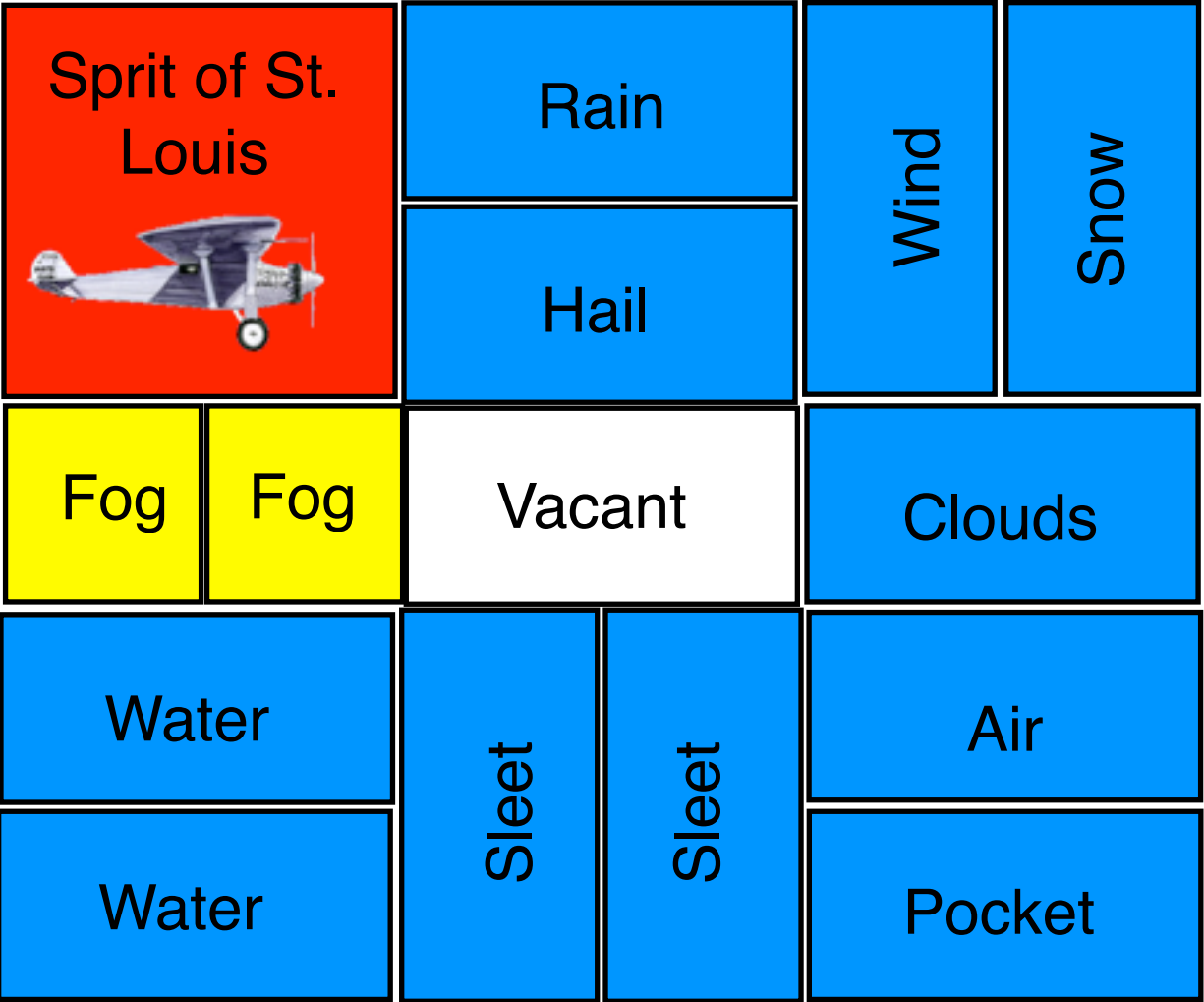


Slide the puzzle pieces without picking up any of the pieces until you have moved the 2x2 piece in the upper left corner in the to the **lower right corner**. The upper left corner represents the take off of Charles Lindberg from the USA and the lower left corner represents his arrival in France. The other pieces represent the obstacles he had to over come during the flight.

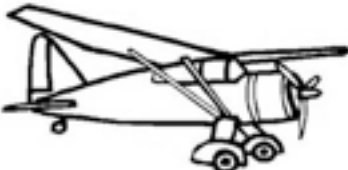


Cut around the outside of the rectangle to make the frame for the puzzle. Cut out the 14 puzzle pieces on page 4. Arrange the pieces on the frame as shown on page 1. Try to solve the puzzle.





A Black and White Version of the puzzle pieces

 Sprit of St. Louis		Rain		Wind	Snow
		Hail			
Fog	Fog	Vacant		Clouds	
Water		Sleet	Sleet	Air	
Water				Pocket	

## Notes to the Teacher

This is an historical puzzle. In the 1920's many people would have been given a puzzle like this as part of an advertising campaign. It was common in the early 1900's to use puzzles for this purpose.

### Dad's Puzzler and Ma's Puzzle started the wave



and many puzzles followed.



These puzzles needed to be small, cheap to produce and have a cover or area where the advertising could be placed. The simple shape of the wooded blocks were cheap to make. The paper box was also cheap to make. The puzzle was pocket size and could be carried around and shared with friend thus adding to the advertising value.

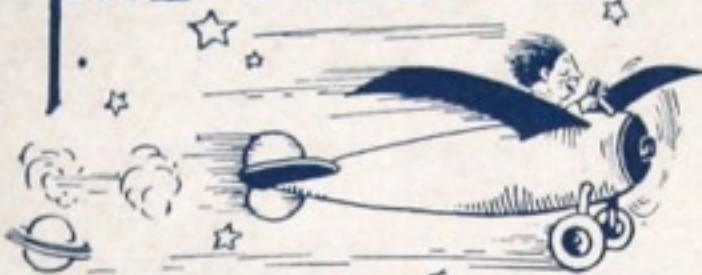
Advertisers liked the inexpensive puzzles. There were over 20 versions of dad's puzzler used for advertising moving companies, refrigerators and oil companies and political candidates. Each version used the same puzzle pieces and the basic cover but added their names and changed the wording on the moving pieces to support the product being advertised. The shapes of the pieces were given names that reflected the new product.

The company could print what they wanted on the face of the blocks. There was room on the front of the lid to print the company name and the theme for the puzzle. Many of the advertising puzzles were easy to solve. You did not want to frustrate potential customers. Some were a bit harder but they were made that way for a particular reason. If the person could not solve the puzzle they could get the solution by visiting the merchant or they could send away to the merchant to get a solution. That way when they showed their friends the puzzle they would know the solution as if they had solved it.

Silver Label Beer used the Flying Puzzle parts and almost the same picture for the front of the box. They still had the plane on the front of the box but they used the Silver Label Puzzle for the title and the moving parts had the Silver Label Block instead of the plane and the other parts supported the beer with words like try it today, quality, refreshing and even a claim of being wholesome.



# The **FLYING PUZZLE**



KEEPS YOU  
UP IN THE  
AIR

NEW YORK

HOPOFF		RAIN	WIND	SNOW
FOO	POO	HAIL	VACANT SPACE	CLOUDS
WATER	SLEET	SLEET	AIR	POCKET
WATER	SLEET	SLEET	POCKET	

IT CAN  
BE DONE  
-BUT-  
TRY AND  
DO IT

THE HAZARDS AND PERILS CANNOT BE REMOVED FROM THE BOX. IN SPITE OF THEM THE AIR-PLANE BLOCK MUST BE MOVED TO THE CORNER MARKED **PARIS**

PARIS

PAT. APPLIED FOR  
DISTRIBUTORS

**BONA FIDE BROOM CO.**

San Fernando Blvd., & Pierce Ave. PACOMIA, CALIF.



a.k.a. *Starry Puzzler, Tit-Bits Teaser No. 2, Ching Foo, South Pole Expedition, Straight Arrow Puzzle*

## BONA FIDE BROOM CO.

MANUFACTURERS

"VELVET PARLOR SPECIAL BROOM"

WAREHOUSE, OFFICE and HOUSE BROOMS

COAST DISTRIBUTORS

### DAD'S-MA'S and FLYING PUZZLES

FACTORY  
COR. SAN FERNANDO BLVD.,  
AND PIERCE AVE

PACOMIA, CAL.  
NEAR  
SAN FERNANDO.



The Flying Puzzle is the best example of this use. It was an advertisement for the Bona Fide Broom Company that used a theme of the Lindbergh nonstop flight from the USA to Paris. The plane was the attraction on the front but the company name Bona Fide Broom Company was prominent at the bottom of the front label. Inside the block that represented the plane started in the upper left corner in New York and ended up in the lower right corner in Paris. The other blocks represented the obstacles that Lindbergh had to overcome. They were labeled Rain, hail, wind, snow, fog, sleet, clouds and even air pockets. You could send 10 cents to the company to get the solution to the puzzle.



**HERE'S HOW—IF YOU FAIL  
SOLUTION TO FLYING PUZZLE**

<p>Place the blocks in the box as shown on the diagram on the top of the box.</p> <p>First move: Both sleet's up.</p> <p>Water to the right.</p> <p>Water down.</p> <p>Fog down and to the left.</p> <p>Two sleet's, clouds and air to the left.</p> <p>Snow down.</p> <p>Wind, Rain, Hail and Plane to the right.</p> <p>Both Fogs up.</p> <p>Sleet, Sleet, Clouds, Air and Snow to the left.</p> <p>Wind down.</p> <p>Rain, Hail and Plane to the right.</p> <p>Fog to the right and up.</p> <p>Sleet, Sleet and water up.</p> <p>Water to the left.</p>	<p>Air, Clouds and Plane down.</p> <p>Both Fogs to the right.</p> <p>Sleet, Sleet, Water and Water up.</p> <p>Air to the left.</p> <p>Clouds and Plane down.</p> <p>Fog down and to the left.</p> <p>Rain and Hail to the left.</p> <p>Wind up.</p> <p>Snow and Plane to the right.</p> <p>Both Fogs down.</p> <p>Rain, Hail and Wind to the left.</p> <p>Snow up.</p> <p>Plane to the right.</p> <p>Fog to the right and up.</p> <p>Clouds up.</p> <p>Pocket to the left.</p> <p>Plane down which lands the flyer in Paris safe and sound.</p>
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This puzzle is harder to solve than most so it was very common to include the solution with the puzzle. The intent was to have the person try to solve the puzzle without help. After they became frustrated the person could then look at the instructions. They would then use the solution provided and try to follow the numerous steps required to solve the puzzle.

THE INTENT OF THE PUZZLE IS NOT TO HAVE A STUDENT SOLVE IT. THE INTENT IS TO HAVE THE STUDENT EXPERIENCE FOLLOWING A LONGER LIST OF INSTRUCTIONS STEP BY STEP.

The skill of being able to follow a complex solution to complete a task is a skill that is very much in demand by employers in almost every area of today's work place. The jobs that pay well often require the person to follow more complex steps to complete a task than in the past. This puzzle from the past is a great starting point to help students experience following complex instructions.

Many students want to be given easy problems that can be completed in one or two step steps. The mathematics or science they experience in the basic mathematics and science classes often do not require a long process. In the more advanced math and computer courses they experience later do require many steps and many students balk at the amount of work required or ask for a tool to do the work for them. That is understandable but they need to be pushed beyond that skill level.

When I use this puzzle with students I give them the instructions and go over the symbolic format with them. I then ask them to try and solve the puzzle by following the instructions and see if they can get the block into the final location in the right lower corner. It may take a bit of help to have them follow the instructions but with help they can do it. I want to remind you that almost every student can complete that challenge if they focus and persist. These are the real skills that they are learning and the real value in problem solving in general.

After challenge 1 is complete I raise the level of complexity by asking them to get the block in the lower left corner. This requires more steps to get a solution. I also require that they write down the solution they have found. The puzzle is a great way to introduce the skill of writing instructions that are easy for the person using them to read and follow. It is common to write solutions that only technical people can follow. Today's markets demand that we find a way to make the instructions accurate but involve a less symbolic format. This puzzle is a great example of this.

## Other Versions of the Flying Puzzle

This puzzle was used to advertise the Worlds Fair in Chicago in 1933



**PLACE BLOCKS THIS WAY TO START**

<b>EAST</b>	<b>Airplanes</b>	<b>WORLD</b>	<b>WONDERS</b>
	<b>Automobiles</b>		
<b>CHICAGO</b>	<b>YOU</b>   <b>SEE</b>	<b>VACANT</b>	
<b>Century</b>   <b>Progress</b>	<b>Machinery</b>	<b>WEST</b>	
	<b>Inventions</b>		

**CHICAGO**

**DIRECTIONS**

Place Blocks in box as per diagram. The Puzzle is to move either of the Big Blocks from original corner to corner marked Chicago.

Blocks cannot be jumped, raised from bottom of box, or turned.

The East Block can be moved to the Chicago Corner and so can the West Block. Can you do it?

If you fail to solve this puzzle send 15c and we will send you a solution and another baffling puzzle by return mail.

**THE STANDARD TRAILER CO.**  
Cambridge Springs, Pa.

The race to the South Pole was the subject of this version

PLACE BLOCKS THIS WAY TO START FOR BOTH SOLUTIONS

TO THE SOUTH POLE BY AEROPLANE	WATER		SLEET	WIND
	ICEBERGS			
BRAVERY	ICE	FOG	VACANT	
PROGRESS	ADVENTURE	DARKNESS		TO THE SOUTH POLE BY DOG SLED
		SNOW		

**SOUTH POLE**  
CONTEST ENTRY BLANK IS UNDER THE BLOCKS

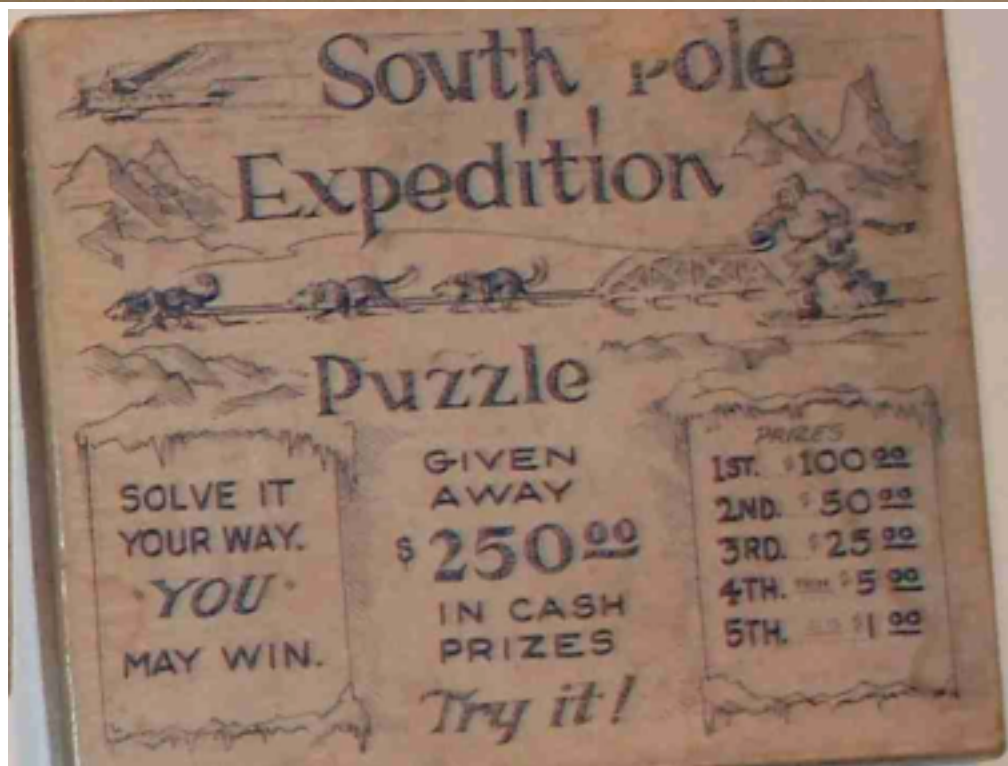
**DIRECTIONS**  
PLACE BLOCKS IN BOX AS PER DIAGRAM. FIRST TRY TO MOVE THE AEROPLANE BLOCK TO CORNER MARKED SOUTH POLE. THEN REPLACE BLOCKS AS PER DIAGRAM AND TRY TO MOVE BLOCK MARKED DOG SLED TO CORNER MARKED SOUTH POLE.  
BLOCKS CANNOT BE JUMPED, RAISED FROM BOTTOM OF THE BOX OR TURNED.

**PUZZLE CAN BE SOLVED**

CONTEST CLOSES JULY 1, 1934  
CASH PRIZE MONEY WILL BE PAID JULY 15, 1934

SHORTEST SOLUTION, BEST WORDING AND NEATNESS WILL BE CONSIDERED BY JUDGES IN PICKING THE WINNERS.

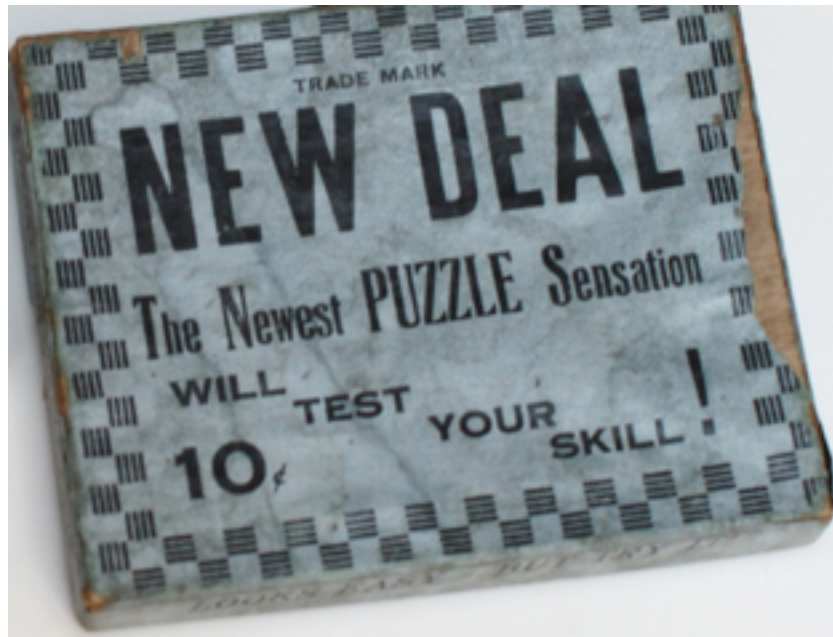
MFRS. STANDARD TRAILER CO. CAMBRIDGE SPRINGS, PA.



# Family Bundle Puzzle



A version of the puzzle for the New Deal Campaign to support Depression era policies



Produced during the mid 1930's



**PLACE BLOCKS THIS WAY TO START**

PRESIDENCY		WAR		TRENTON	
HONEST		WAR	PEACE	INTEGRITY	
NOBLE		George Washington		VIRTUE	
J	F	WAR PEACE		L	INDE-
U	A			I	PEN-
S	R	WAR	PEACE	B	DENCE
T		VACANT		Y	
LOYAL		VACANT		BRAVE	
BURGOYNE'S SURRENDER			VALLEY FORGE		

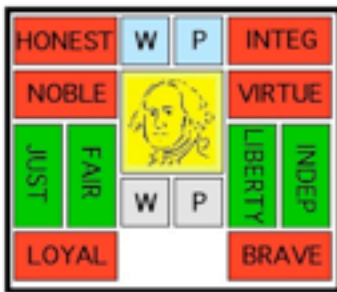
**IF YOU CAN RETRACE WASHINGTON'S CAREER YOU MAY BE PRESIDENT.**

**DIRECTIONS**

Place Blocks In The Box As Per Diagram. The Puzzle Is To Move The Big Block First To Upper Right Hand Corner Next To Bottom Right Corner, Next To Bottom Left Hand Corner, Then To Top Left Hand Corner Or Presidency Corner.

Blocks Cannot Be Jumped, Turned Or Lifted From Bottom Of Box.

A modern version of a solution to the Washington puzzle



Position 0



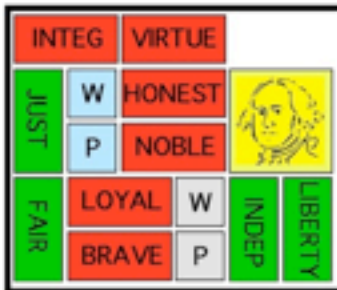
Position 9



Position 19



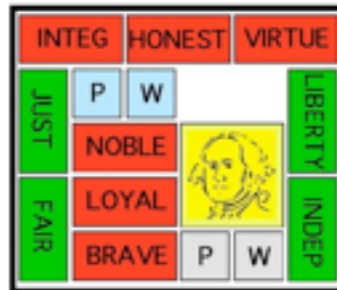
Position 30



Position 37



Position 43



Position 47



Position 55



Position 59



Position 67



Position 73



Position 81



Position 85



Position 93



Position 97



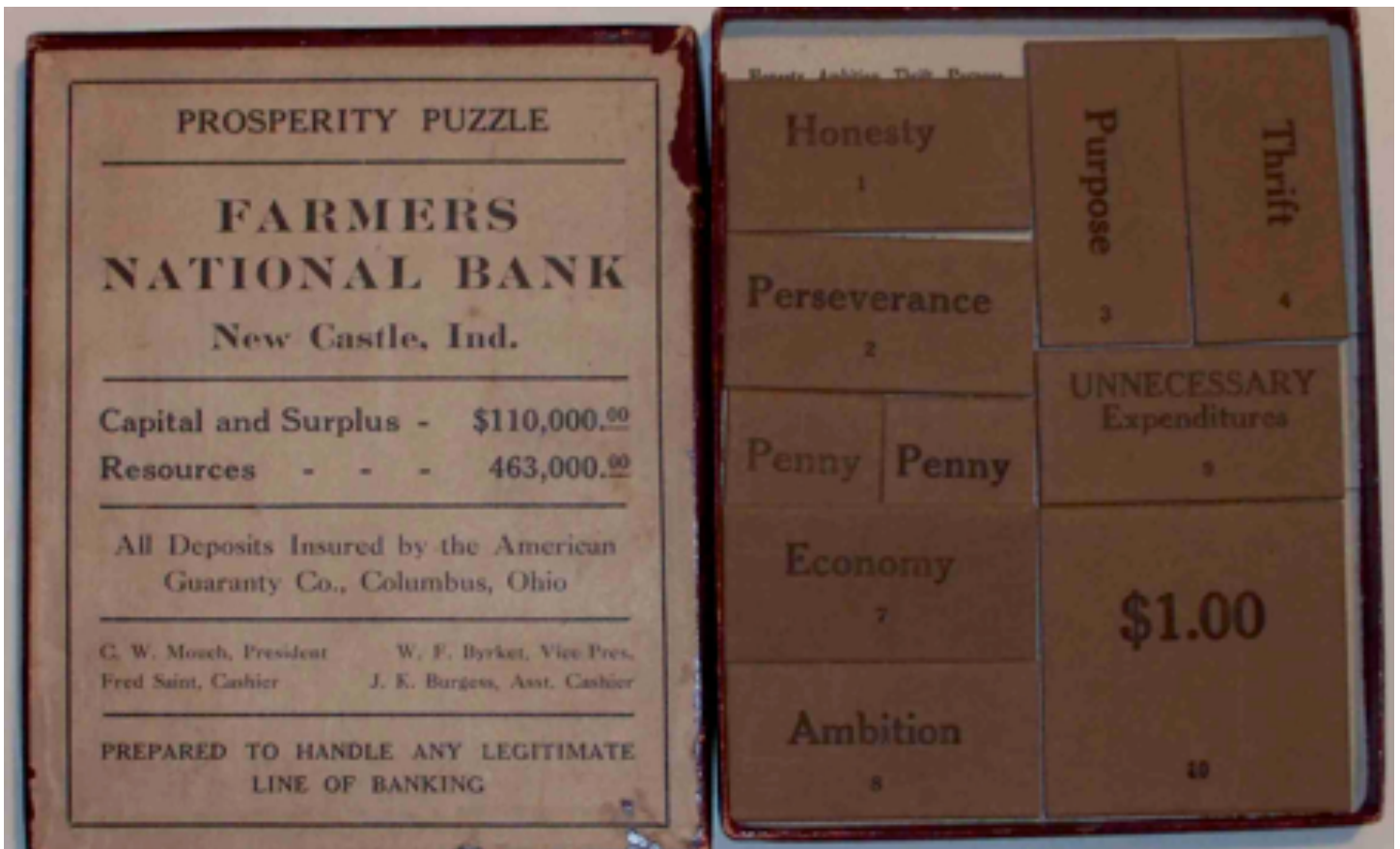
Position 101



A version called the Humdinger Puzzle



During the depression it was important to show your back was sound



A more modern version with magnetic pieces that could not fall out



The "Ching-Foo" Version moves the block from East to West



**CHING-FOO**

**EAST**



**A NEW PUZZLE**

*CHING-FOO is a Great Entertainer and Mind Relaxer. You May Think It Easy—But Not As Easy As You Think.*

**WEST**

**COPYRIGHT 1927**

**IT CAN BE DONE**

**DIRECTIONS**—Place the blocks in box as per diagram. The puzzle is to move the big square block from corner marked EAST to corner marked WEST, without jumping or raising any block or turning any piece.

Manufactured & Distributed by  
**SOUTHWESTERN DISTRIBUTING CO.**  
Hutchinson, Kansas

The Starry Puzzler Version moves the block from East to West  
note the nice use of the upside down printed instructions





I was astonished at the effect my successful landing in France had on the nations of the world. To me, it was like a match lighting a bonfire.

– Charles A. Lindbergh

At 7:52 A.M., May 20, 1927 Charles Lindbergh gunned the engine of the Sprit of Saint Louis aimed her down the dirt runway of Roosevelt Field , Long Island.



Heavily laden with fuel, the plane bounced down the muddy field, gradually became airborne and barely cleared the telephone wires at the field's edge. The crowd of 500 thought they had witnessed a miracle. Thirty-three and one half-hours and 3,500 miles later he landed in Paris, the first to fly the Atlantic alone.

Working as a mail pilot a year earlier he heard of the \$25,000 for the first flight between New York and Paris. Backed by a group of St. Louis businessmen, Lindbergh supervised the building of his special plane and set out after the prize. Other teams were attempting the feat - some had met disaster. Lindbergh equipped himself with four sandwiches, two canteens of water and 451 gallons of gas. Midway through the flight "sleet began to cling to the plane. That worried me a great deal and I debated whether I should keep on or go back. I decided I must not think any more about going back."

On the evening of May 21, he crossed the coast of France, followed the Seine River to Paris and touched down at Le Bourget Field at 10:22P.M. The waiting crowd of 100,000 rushed the plane. "I saw there was danger of killing people with my propeller and I quickly came to a stop." He became an instant hero, "the Lone Eagle." New York City gave him the largest ticker tape parade ever, the president awarded him the Distinguished Flying Cross. His feat electrified the nation and inspired enthusiastic interest in aviation.

## **Takeoff**

Bad weather and the prospect that his transatlantic flight would be delayed for a number of days greeted Lindbergh upon his arrival in New York. However, on May 19th, a favorable weather report predicted a break in the rain prompting Lindbergh to make his attempt the next day. He arrived at the airfield before dawn the next morning, prepared his plane for flight and began his historic journey: "About 7:40 A.M. the motor was started and at 7:52 I took off on the flight for Paris. The field was a little soft due to the rain during the night and the heavily loaded plane gathered speed very slowly. After passing the halfway mark, however, it was apparent that I would be able to clear the obstructions at the end. I passed over a tractor by about fifteen feet and a telephone line by about twenty, with a fair reserve of flying speed. I believe that the ship would have taken off from a hard field with at least five hundred pounds more weight. I turned slightly to the right to avoid some high trees on a hill directly ahead, but by the time I had gone a few hundred yards I had sufficient altitude to clear all obstructions and throttled the engine down to 1750 R.P.M. I took up a compass course at once and soon reached Long Island Sound where the Curtiss Oriole with its photographer, which had been escorting me, turned back."

## **Darkness**

Lindbergh continued his flight over Cape Cod and Nova Scotia and headed for the open Atlantic as darkness fell: "Darkness set in about 8:15 and a thin, low fog formed over the sea through which the white bergs showed up with surprising clearness. This fog became thicker and increased in height until within two hours I was just skimming the top of storm clouds at about ten thousand feet. Even at this altitude there was a thick haze through which only the stars directly overhead could be seen. There was no moon and it was very dark. The tops of some of the storm clouds were several thousand feet above me and at one time, when I attempted to fly through one of the larger clouds, sleet started to collect on the plane and I was forced to turn around and get back into clear air immediately and then fly around any clouds which I could not get over."

## **Ireland**

Lindbergh continued his course, at times skimming only 10 feet above the waves as he tried to find a way around the fog and maintain his course. The appearance of fishing boats below alerted him that he was nearing land: "The first indication of my approach to the European Coast was a small fishing boat which I first noticed a few miles ahead and slightly to the south of my course. There were several of these fishing boats grouped within a few miles of each other. I flew over the first boat without seeing any signs of life. As I circled over the second, however, a man's face appeared, looking out of the cabin window. I have carried on short conversations with people on the ground by flying low with throttled engine, and shouting a question, and receiving the answer by some signal. When I saw this fisherman I decided to try to get him to point towards land. I had no sooner made the decision than the futility of the effort became apparent. In all likelihood he could not speak English, and even if he could he would undoubtedly be far too astounded to answer. However, I circled again and closing the throttle as the plane passed within a few feet of the boat I shouted, "Which way is Ireland?" Of course the attempt was useless, and I continued on my course.

Less than an hour later a rugged and semi-mountainous coastline appeared to the northeast. I was flying less than two hundred feet from the water when I sighted it. The shore was fairly distinct and not over ten or fifteen miles away. A light haze coupled with numerous storm areas had prevented my seeing it from a long distance. The coastline came down from the north and curved towards the east. I had very little doubt that it was the southwestern end of Ireland, but in order to make sure I changed my course towards the nearest point of land. I located Cape Valencia and Dingle Bay, then resumed my compass course towards Paris."

## **Landing**

Lindbergh flew over Ireland and then England at an altitude of about 1500 feet as he headed towards France. The weather cleared and flying conditions became almost perfect. The coast of France and the City of Cherbourg passed beneath his wings as darkness fell a second time during his flight. "The sun went down shortly after passing Cherbourg and soon the beacons along the Paris-London airway became visible. I first saw the lights of Paris a little before 10 P.M., or 5 P.M., New York time, and a few minutes later I was circling the Eiffel Tower at an attitude of about four thousand feet. The lights of Le Bourget were plainly visible, but appeared to be very close to Paris. I had understood that the field was farther from the city, so continued out to the northeast into the country for four or five miles to make sure that there was not another field farther out which might be Le Bourget. Then I returned and spiraled down closer to the lights. Presently I could make out long lines of hangars, and the roads appeared to be jammed with cars. I flew low over the field once, then circled around into the wind and landed." But suddenly, a hysterical, ecstatic crowd broke through the restraining ropes and stampeded toward him, cheering and shouting. As he opened the door, he was lifted down and hoisted onto the shoulders of the police, who carried him through the surging crowd, cries of "Vive" ringing through the night. He had conquered the Atlantic alone, covering 3,610 miles in 33 1/2 hours. He had won the Orteig prize! From the balcony of the American Embassy the following morning, he responded briefly and modestly to the persistent calls of the great crowd which had gathered. For hours after he retreated back inside, they shouted, clapped, and waved their hats and handkerchiefs. In the days that followed, his fame as a hero grew to unbelievable proportions as he took Europe by storm. The President of France pinned the Legion of Honor upon the lapel of his borrowed suit and thousands of messages poured in upon him. It was as if everyone saw in him something that they sought in themselves - a spirit of adventure and achievement in life. Somehow he represented the symbol of hope in a weary world, for there was something unique about his integrity, courage, and indifference to honors. "He had started with no purpose but to arrive. He remained with no desire but to serve. He sought nothing, he was offered all."

## **Returning Home**

When he came home to America aboard the USS Memphis, a majestic convoy of warships and aircraft escorted him up the Chesapeake and Potomac to Washington. President Coolidge welcomed him home and bestowed the Distinguished Flying Cross upon him. His New York reception was the wildest in the city's history as 4 million people lined the parade route and Mayor Jimmy Walker pinned New York's Medal of Valor upon him. Finally, when it was all over, he turned and flew to St. Louis for a rest and to contemplate. His epic flight would become the one singular event which electrified the

world and changed the whole course of history. It was now that the Daniel Guggenheim Fund sponsored him on a three month nation-wide tour. Flying the "Spirit of St. Louis," he touched down in 49 states, visited 92 cities, gave 147 speeches, and rode 1,290 miles in parades. Tired, but satisfied with the job he had done in promoting aviation, he returned to New York. He made a good will tour at the request of Ambassador Dwight Morrow. It was here that he first met Anne Morrow, daughter of the Ambassador, a meeting that would blossom into romance. After Mexico, he visited twelve other Central American and West Indies countries, conveying goodwill all along the 9,000 mile flight tour. On March 21, 1929, President Coolidge presented him with the nation's highest honor, the Congressional Medal of Honor. Throughout the rest of his life he would continue to serve America as an advisor on aviation. He resigned his commission as a Colonel in the reserves on April 29, 1941, but he served in the Pacific theater during World War II as a technical advisor. He taught American fighter pilots how to get increased range from their planes - as much as fifty percent more. He flew several combat missions in P-38 fighters and on at least one sortie shot down a Japanese plane. After the war, he continued to serve his country in many ways and on April 7, 1954, he was appointed a Brigadier General in the Air Force Reserves.

Certification of Charles Lindbergh's flight required several documents to prove the performance. The Fédération Aéronautique Internationale (FAI) - the World Air Sports Federation - was the sole organization authorized to certify aeronautical and astronautical world records worldwide. The certification of Charles Lindbergh's flight required several documents to prove the performance. A sealed barograph, an instrument working with atmospheric pressure, was loaded on the aircraft; its six-hour cylinder recorded the altitudes flown and proved that the flight was uninterrupted. The start of the flight was attested by the US National Aeronautic Association and the Procès-verbal established by the Aéro-Club de France on Lindbergh's arrival attested that the barograph was found sealed and reported that 322 liters of gas (85 gallons) remained in the sealed tanks. This Procès-verbal was signed by no less than 13 French officials, the US Ambassador Myron Herrick, the Belgian Air Attaché Willy Coppens and, of course Charles Lindbergh himself. Finally, the FAI General Secretary Paul Tissandier informed the National Aeronautic Association on August 31st, 1927, that Lindbergh's flight was certified as the Class-C World Record for non-stop flight over a distance of 5809 kilometers". Pictures of the barograph, six-hour cylinder recorded, and certified world record documents

