

# Classroom Space



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## Chinese Inventions

There are too many Chinese inventions to address them all, but a selected few will be addressed in this article. Following are a few great Chinese inventions.

Where would the world be without iron and steel? The Chinese had developed blast furnaces to obtain cast iron at least 1200 years before any appeared in Europe. As to steel, the Chinese had conquered the process to refine iron into steel by the second century. The Chinese are well known for being the best in the world at making different types of metals.

Paper is a well-known invention of the Chinese, but did you know it was initially used for clothing? Actually the fibers for paper used in the second century B.C. were much tougher and thicker, enabling the Chinese to use paper for military body armor! It was not until about one century B.C. that paper was used for writing. The earliest examples of writing on paper date back to 110 A.D. The Chinese also developed printing, starting with wood block printing in approximately the 7th century, and moveable print in the 11th century.

Another immensely important invention was the “chain pump” which would lead to irrigation and advance farming throughout the world. However, the idea of row cultivation and intensive hoeing presented perhaps the greatest achievement in the area of agriculture. Prior to

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## First African American U.S. Senator

Who would have guessed that President-Elect Obama’s senate seat would become the center of so much attention? In addition to Illinois Governor Blagojevich being under investigation and impeachment proceeding for attempting to sell the Senate seat, and Senate appointee Roland Burris being barred from the swearing-in ceremony in Washington, there are the unfortunate rumors of racism spreading. As this issue goes to print Roland Burris has just received Senate approval of his appointment. Interestingly enough, in 1870, the first African American U.S. Senator, Hiram Revels, also encountered opposition to his serving in the U.S. Senate.

In 1861 U.S. Senators from Mississippi, Albert Brown and Jefferson Davis, the latter of course went on to become President of the Confederacy, vacated their positions. Naturally the positions remained open during the war as Mississippi seceded from the Union, but following the war, Hiram Revels was elected to finally fill one of the positions (1870). When he tried to present his credentials in Washington in January, he was refused because Mississippi still had not

been formally readmitted to the Union, which it was on February 23, 1870. However, acceptance of Revels’ credentials was not automatic, as some senators objected to his appointment on the grounds



Image courtesy of National Archives and Records Administration

that he did not meet the Constitutional requirement of having been a U.S. citizen for nine years. Technically this was true, as African Americans were not officially granted full citizenship until 1866, but the majority of the Senate saw this as a racist attempt to keep him out and approved his appointment by a 48 to 8 vote.

What in Revels’ background

enabled him to be elected as the first African American U.S. Senator? He was born a free man, of mixed African, Scottish, and Croatan Indian heritage, in North Carolina in either 1822 or 1827 depending on which source is used. Although it was against the law for Hiram to get an education, he attended a school taught by a free black woman. He later apprenticed in and then managed a barber shop. Most likely his father being a Baptist preacher helped to guide him to attending a Quaker seminary, and in 1845 he was ordained in the African Methodist Episcopal Church. He served as a traveling minister through much of the Midwest, and settled in St. Louis, Missouri in 1853. Revels knew Missouri law forbade “free blacks” from living in the state for fear of their inciting rebellion, and while he tried to fly low under the radar, in 1854 he was imprisoned for preaching to the black community. Upon his release he moved to Baltimore, Maryland, and served not only as a church pastor but as a principal of a school for black students. In 1857 he graduated from Knox College becoming one of the few college-educated

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### *Borrowed Words in English*

We know English is a hodgepodge of words incorporated from other languages. The information here is just a small portion drawn from a United Kingdom based educational and information web site by Kryss Katsiavriades and Talaat Qureshi, <http://www.krystal.com/borrow.html#s>. Be sure and check it out. **Guess which words were borrowed from Arabic, Algonquin, Cree, Dutch, French, Italian, Spanish, Sioux, or Sumerian.** Answers are on page 4.

Word	Meaning
1. <b>abyss</b>	bottomless
2. <b>admiral</b>	ruler of the seas
3. <b>alarm</b>	call to arms
4. <b>algebra</b>	reunion of broken parts
5. <b>alligator</b>	the lizard
6. <b>ambulance</b>	walking hospital
7. <b>ballot</b>	From the balls used for voting
8. <b>balsa</b>	raft
9. <b>bluff</b>	boast
10. <b>Camouflage</b>	disguise
11. <b>caribou</b>	A type of reindeer.
12. <b>confetti</b>	little sweets
13. <b>Dakota</b>	Friend
14. <b>decoy</b>	entice
15. <b>derrick</b>	Formerly a scaffold; named after a hangman
16. <b>elope</b>	run away
17. <b>Eskimo</b>	eaters of raw flesh. Actually a derogatory term; <i>Inuit</i> preferred
18. <b>Kansas</b>	land of the south wind people
19. <b>malaria</b>	bad air
20. <b>matador</b>	killer
21. <b>memoir</b>	memory
22. <b>nepotism</b>	nephew
23. <b>Oregon</b>	beautiful water
24. <b>resign</b>	surrender
25. <b>sabotage</b>	wooden shoes thrown into machinery to stop it.
26. <b>safari</b>	journey
27. <b>salvage</b>	to save
28. <b>sequin</b>	coin
29. <b>tepee</b>	dwelling
30. <b>umbrella</b>	little shadow
31. <b>Wisconsin</b>	grassy place

(Chinese Inventions—cont'd from page 1)

this, scatter seed farming was employed, but row cultivation allowed for higher successful seed cultivation, and intensive hoeing reduced weed growth, both resulting in higher crop success. The Chinese seed drill, which exponentially increased seed success, took place at least 3500 years before it was seen in Europe. In terms of plants China contributed to the world, peaches, apricots, oranges, lemons, and soy beans to name but a few. The Ginkgo tree, also from China, is geologically among living things one of the most ancient. Its fan shaped leaves imply an ancient relation to ferns. Such trees have been imported to the U.S. including the White House grounds, and even Chickasha, OK.

In terms of products, science and engineering, China is credited with inventing such things as silk, lacquer, the seismograph (measuring earth movement), mechanical clock, wheelbarrow, grindstone, horizontal loom, and bicycle chain. Evidence shows that the Chinese used gunpowder before the 11th century. Its use was wide range, from fireworks to religious purposes, rockets, bombs, grenades, to rocket arrows. The Chinese designed the first magnetic compass, used initially for divination and then eventually navigation. Perhaps the most famous Chinese engineering feat is the Great Wall of China. Over 2,000 years old; 4,163 miles long, covering desert, grasslands, mountains, and plateaus; taking centuries to build; and at the cost of two-three million Chinese lives.

These are but a few of China's contributions to the world. Two great references are *The Genius of China: 3,000 Years of Science, Discovery and Invention*, by Robert Temple and the website [http://afe.easia.columbia.edu/song/readings/inventions\\_gifts.htm](http://afe.easia.columbia.edu/song/readings/inventions_gifts.htm), but of course there are many more.



## The Literature Connection

This issue does not have a particular theme for this column, but all three books are based on actual events. Two are more appropriate for elementary, and one for secondary.

Since we just had the Summer Olympics with all the great achievements by Michael Phelps, the first book to be suggested is the New Voices Award Winner: *Sixteen Years in Sixteen Seconds: The Sammy Lee Story*, written by Paula Yoo and illustrated by Dom Lee. The story follows the real life story of Sammy Lee. It starts in California when at age 12 he saw swimmers perform dives at the public pool. But being Asian American, Sammy, and all people of color, was allowed in the pool only on Wednesdays. So on the next Wednesday Sammy tried his first dive.



Though not elegant it was a successful single somersault. Sammy was a natural, but his father preferred he spend his time on academics rather than sports. When L.A. sponsored the Olympics, Sammy knew he wanted to someday be an Olympian. At the age of 18 when sneaking into practice for a competition, Jim Ryan saw him, recognized his talent, and became his coach. Overcoming discrimination at the pool, at school, and in life, Sammy persevered both in his academ-

ics and his training. Sammy became a doctor in 1946, and at the age of 28 qualified for the U.S. Olympic swim team. He proceeded to win a bronze medal and a gold medal in the 1948 Olympics. Appropriate for fourth grade and up. ISBN 1-58430-247X

In a totally different vein is *The Flag with Fifty-Six Stars: A Gift from the Survivors of Mauthausen*, by Susan Goldman Rubin, illustrated by Bill Farnsworth, ISBN 0-8234-1653-4. Based on a true event, this touching story is not appropriate for elementary students, rather junior high and older. Based on accounts from prisoners at the Mauthausen concentration camp, a group of prisoners with little more than dedication, love, and scraps of sheets and jackets were able to sew a flag with fifty-six stars which they presented to the 11th Armored Division of the U.S. Army when they liberated the prisoners. While the story is inspiring, it shows the discrimination and horrors of the time. The illustrations are haunting. It includes acknowledgements, an afterword, a list of references for readers, and a photograph of the actual flag. A book highly recommended for a class studying World War II.

*Let Them Play*, by Margot Theis Raven, illustrated by Chris Ellison, ISBN 1-58536-260-3, is also based on true events. Set in seg-

(Continued on page 4)

## Who was the First Important Agriculturalist in the U.S.?

Did you say George Washington Carver? Well, if so, you were wrong. Carver was indeed an outstanding agriculturalist, but his contributions started in the late 1870s. The right answer is Eliza Lucas Pinckney.

Born in the West Indies in 1722, educated in England, she moved to South Carolina as a young child. While many women at this time were not educated, those who were, were expected to study arts and languages. Eliza, did so, but immersed herself in botany. This was fortunate as she would be forced at age sixteen to run her family's three plantations as well as care for her siblings. Elizabeth's interest in botany, education (especially early childhood education), and law would serve her well in managing the plantations, educating slaves as well as her siblings, and handling business transactions.

Indigo plants at that time were valuable for making a dye used for clothing and ink. South Carolina had only marginally the right climate to grow them. However, after four years of experimenting Eliza was able to successfully make a cash crop out of indigo. Through her efforts and sharing of her knowledge, indigo would become the second most important export crop in South Carolina. Using today's money \$30 million of indigo was exported in 1775.

The dye from the Indigo was used in the uniforms of the Revolutionary army, thus the term "Bluecoats." Her sons too, played major roles in the American Revolution, including signing the U.S. Constitution. The importance of Eliza Lucas Pinckney to our country is seen by George Washington serving as a one of her pallbearers.



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Answers for page 2 quiz: Algonquin-11, 23, 31; Arabic- 2, 4, 26, 28; Cree-17; Dutch—9, 14, 15, 16; French-6, 10, 21, 24, 25, 27; Italian -3, 7, 12, 19, 22, 30; Sioux-13, 18 29; Spanish-5, 8, 20; Sumerian-1

**In This Issue...**

African American Senator; Chinese Inventions; Words; Literature Connection; Pinckney

**Female Referee  
Removed from  
Officiating Boys'  
Basketball Game  
in 2008 because  
of Gender!**

Hard to believe, but St. Mary's Academy, a private school, demanded referee Michelle Camp not be allowed to officiate the boys' game. Why? The reason given was that, according to their beliefs, "a woman could not be put in a position of authority over boys." The official who was to work the game with Michelle and another backup official both refused to officiate in support of Michelle.

*(U.S. Senator—Cont'd from page 1)*  
black men in America at the time. During the war he helped recruit and organize black regiments from Maryland, and Missouri; served as a Union chaplain with a Mississippi black regiment, and served as provost marshal of Vicksburg. In 1863 he returned to St. Louis and established a freedmen's school. By 1868, he had moved and was living in Natchez, Mississippi, where he started his political career as an alderman and later was elected as Mississippi state senator. He worked hard to balance his political and religious duties and avoid racial conflict. After serving as U.S. Senator he returned to Mississippi and became the first president of Alcorn University, the first land-grant school in the U.S. for black students. He also served for a short time as Interim Secretary of State of Mississippi, and in 1875 was ac-

tively involved in ridding Mississippi of its carpet-bag government.

Perhaps it was a combination of Hiram Revels' education, relentless battle against racism, and staunch support of the Union and the rights of African Americans that enabled him to become the first African American U.S. Senator; and one of only two African Americans to serve as U.S. Senators in the 19th century. While his political views were not always popular: universal amnesty for former Confederates, based solely on a newly sworn loyalty to the Union; abolition of Jim Crow legislation; integration of the military; opposition to segregated schools; and opposition to forced social mixing; he was highly respected. Hiram Rhodes Revels, a man of integrity, fought against, and at times with the system, but always for the betterment of our country.

*(Lit. Connection—Cont'd from page 3)*  
regated South Carolina in 1955 it follows the story of the first black Little League all-star team in South Carolina, the Cannon Street All-Stars. But the boys and the coaches had to face the fact that no white team in South Carolina would play them, and while they qualified by default to go to the playoffs in the Little League World Series, they went as guests. They were allowed to take a field warm-up and their talent ignited the five thousand spectators to applaud, and demand "LET THEM PLAY!" But alas, this was not to be the case. It was not until 2002 that the team belatedly was awarded its 1955 South Carolina State Championship banner. A great book, check it out.

