



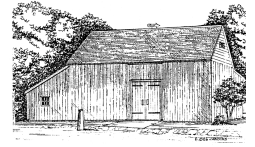
# Local Lore

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## Essay Contest Winner

In May the Society sponsored an Essay Contest for 5<sup>th</sup> and 6<sup>th</sup> graders on the topic of an important invention. Below is a portion of the 6<sup>th</sup> grade first place essay, written by Caroline Gallagher on "Plastic and Bakelite"

Plastics are one of the most common materials we have on earth, and it's not even a natural resource. It's difficult to believe plastics are only about a century old, but they are. Within the past century, plastics have replaced almost all of the things we use today, so much we take this valuable resource as something to take for granted. Look around any room, and at least five things in it are plastic. Surprisingly, however, plastic has an extremely complex makeup, something most people never think about. Actually, like many commonly used things, people have only an inkling of the history of plastic. Plastics are durable, complex, widely used, and simply amazing.

Plastic was created by one man who devised this ingenious substance after a lengthy trial and error process. The first plastic, Bakelite, which is still used today, was designed by Leo H. Baekeland, and American chemist. Baekeland was originally trying to develop a synthetic sap, but he created something much more valuable; the first completely synthetic resin and one of the first plastics. Bakelite was patented in 1909 and has been used ever since. In fact, what Bakelite is composed of was something scientists had created before, but never been able to control. What Baekeland created was something every American has to thank him for.

If you have ever seen a plastics ad by the American Medical Association, you know plastics are used in medicine for numerous purposes. However, plastic is used in far more than medicine, as indeed plastic is used to replace metals, natural fibers, paper, wood and stone, glass and ceramics, and to make things people can't make in any other Substance. Plastic replaces metal in things like car parts, such as bumpers, fenders, wheel covers and sometimes the whole car! Metal building materials have often been

*(cont'd next column)*

replaced, such as pipes and home siding, which are more lightweight and durable. Also, dentist will use plastic fillings because, unlike metal, plastic can blend in with a patient's normal tooth color. Astonishingly, plastics are used for fibers to make anything from bulletproof vests to sheer hosiery, because plastics are more resistant to stains, attack by moth, and flame than regular cloth. That is likely what children's pajamas are made from, as they must be flame resistant. Plastic replaces packing materials as well, since plastic provides more protection for boxed items, especially delicate or expensive ones. Many goods sold by stores, such as board games and computer discs are sealed in clear plastic wrap. Countertops are another thing plastic is often used for, as they are lighter, less expensive, resist marring and stains, and can be made to look the same as stone. Plastic is also widely used in cooking, from utensils to dishes to food containers. For example, Tupperware containers are widely used because of their "grab and go" ability, that they're lightweight, leakproof, and cannot be broken. Lastly, plastics allow us to create things you cannot duplicate in other materials, things that are helping people in all sort of ways. Already, plastics are used for many things, and tomorrow may bring a whole new flood of creations.

This famed material is extremely complex, with the secret to its success buried in its molecule chains. Plastic can be any color of the rainbow, or as colorless as glass, be rubbery or rigid, and form in any shape or size. The secret to these qualities lie in science and manufacturing. Plastics consist of long chains of molecules called polymers, which are made up of repeating patterns of smaller molecules that each form a "link" in the polymers chain. But polymer chains, like people, are not all the same, and that is the secret to plastic. Each chain has different characteristics, which give plastics their ability to be shaped. In fact, plastics derives from the Greek word "plastikos", which means "able to be shaped". However, plastic manufacturers often also used additives to change plastic's properties, which normally include reinforcements, fillers, plasticizers, and pigments. The ability to add additives makes plastics even more useful.....

## Upcoming Events

**Merrill Kohlhofer, Storyteller**  
**November 12<sup>th</sup>, 7:30 PM**  
**Gould Barn**

**Thanksgiving Open House**  
**November 25<sup>th</sup>, 10 AM – 12 PM**  
**Capen House**

**Society Holiday Party**  
**December 10<sup>th</sup>, 7:00 PM**  
**Gould Barn**

## Kids' Corner



So, what happened on the voyage to the new world that Columbus made? Well, on the third day of August in 1492, Columbus set sail from Spain. On September 6<sup>th</sup>, the crew men saw fire and smoke rising from a tall mountain. They were also afraid of sea dragons, and they wanted to turn back. They even threatened to kill Columbus! But finally, on October 12<sup>th</sup>, land was sighted; the voyage had taken 69 days.

Columbus named the new land San Salvador. He met the natives living on this island, and traded things from his ship for the gold rings the natives wore. They told Columbus with sign language that more gold could be found to the south. So he sailed south, visiting many beautiful islands, all the time looking for the gold he had promised he would find. Natives brought them gifts, including small pieces of gold, and Columbus was certain there was much more if only he could find it.

The Santa Maria was wrecked on a coral reef. The Nina had separated from the other two ships, and the crew from the Santa Maria sailed home on the Pinta. When Columbus arrived in Spain, he was a hero. He made four more voyages to what he thought was the Far East, but he didn't find more gold, and he died a disappointed man, not knowing he had actually found a whole new world.

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