Stir thoroughly and leave to cool, when the clear white dripping will form a solid lump on the top.

"Old Glory."

During the past 25 years Old Glory, changeless though it is as the emblem of liberty, has added four new stars to its splendid constellation. They represent Utah, Oklahoma, New Mexico and Arizona. With this growth has come (may it not well be said) a corresponding growth in staunch, united Americanism; so that to-day, even amid the perils of war, the humblest sailor or fisherman treads his deck in confident assurance of national power and justice.

The American flag, it is interesting and appropriate to recall, has a history and a course of evolution from the Cross of St. George. It was in 1265 that England adopted as her banner a white ground with a red cross, and this was the first flag to come upon our shores, being brought here in 1497 by John Cabot. The Scandinavians, who are said to have landed on the shores of what is now called America in the year 1000, brought no flag with them, and the flag borne by Columbus never did really reach the American continent.

The St. George flag is the flag under which the colonies were formed in 1643; in 1651 it was formally adopted by the Massachusetts colony and ordered placed on the "bastile," on all proper occasions. The St. George Cross was the flag of this country for 180 years. In 1686 Sir Edmund Andros arrived in Boston to become the governor of the colony and brought from the king a flag for New England. This was similar to the St. George flag, the red cross, however, being wider and in the upper part of the cross was a crown, signifying the king's authority, and in the lower part the letters "J.R.," standing for "Jacobus Rex," meaning James, the King. was known as the "Andros" flag and was our official flag for 21 years.

England and Scotland having united in 1707, England changed her flag, and our flag was changed with it. This one was a red body ground, with a canton containing the St. George cross of red on white, crossed by a St. Andrew's cross of white on blue, the latter from the Cross of Scotland. This flag was known as the "King's Union." When the king signed official documents he wrote "Jacobus Rex," and after a while the flag known as "King's Union" was frequently called "Jacques Union," and from this fact originated the term "Union Jack."

At the battle of Lexington, April 19, 1775, the minute-men from the town of Bedford, under Captain Nathan Page, brought a flag which was known as the Bedford flag. This flag is still preserved in the public library at Bedford, Mass. It is a maroon ground, upon which is an extended arm grasping a sword, from which is suspended a band containing the words, "Aut Vince Mori," meaning "conquer or die." In October, 1775, the Continental congress adopted a flag, white ground with a pine tree, and over it the words "An Appeal to Heaven." This was the first flag officially adopted by Congress, and was specially designed for the navy.

When the declaration of Independence was read, the Cambridge flag with the king's coat of arms was destroyed, and later a movement was set on foot to secure a national emblem. Many designs were offered to the committee, but the members could not agree, and finally left it to General Washington. He suggested that as the red and white stripes had been continued in use on many private flags, they be adopted as a body and a blue canton be added, with some different figure than that of the English Union Jack. Stars were finally adopted.

Mrs. Betsy Ross, a young widow, who was skilled in needlework and had done considerable fancy work for General Washington, had promised him to make the model flag. When Washington, with Robert Morris, the great financier, and John Ross, one of the signers of the Declaration of Independence, and Betsy's uncle called upon her in Philadelphia, and Washington drew out the design, she refused to make it, as the pattern had upon it a six-pointed star. "That star is a sign of heraldry," said she. "As they are to be placed in a circle, they will have to be put on always with much care, as they must be perfectly straight to look well, while a five-pointed star looks well any way it is placed. If you look at a star in the sky it always looks as if it had five points." Taking a piece of paper she folded it, and making one cut of the scissors, handed it to General Washington, who, opening it, said: "Gentlemen, it is perfect, let us have them five-pointed." This is the flag that was adopted June 14th, 1777.

Paul Jones, as commander of the Ranger, to which he was appointed on June 14, 1777, claimed he was the first to display the Stars and Stripes on a naval vessel. It is probable that the flag was first unfurled in battle on the banks of the Brandywine, September 11, 1777, the first battle after its adoption. It first appeared over a foreign stronghold June 28, 1778, when Captain Rathbone of the American cloop of war Providence captured Fort Nassau, New Providence, Bahama Islands. John Singleton Copley, the American painter, claimed to be the first to display the flag in Great Britain. On the day when George III. acknowledged the independence of the United States, December 5, 1782, he painted the flag in the background of a portrait of Elkanah Watson.

To Captain Moores, of the whaling ship Bedford, of Nantucket, Mass., is doubtless due the honor of first displaying the Stars and Stripes in a port of Great Britain. He arrived in the Downs with it flying at the peak, February 3, 1783.

This was the American flag for 18 years, but in 1794, Kentucky and Vermont having been added to the union, Senator Bradley of the latter State introduced a bill in Congress to change the flag to 15 stripes and the same number of stars, claiming that these two States should be recognized in the flag. The law was passed to take effect May 1, 1795. This was our flag during the war of 1812, and this was the flag that Francis Scott Key saw floating over Fort McHenry when he was inspired to write "The Star-Spangled Banner."

On April 4, 1818, Congress enacted the following bill, which is the law of to-day:

"Section 1. Be enacted, that, from and after the fourth day of July next, the flag of the United States be thirteen horisontal stripes, alternate red and white; that the Union have 20 stars, white in a blue field.

"Section 2. And, be it further enacted, that, on the admission of eveery new State into the union, one star be added to the union of the flag; and that such addition shall take effect on the fourth of July next succeeding such admission."

It has often been said in orations that the red meant valor, the white purity and the blue loyalty, but Washington gave us a sentiment that is even grander. Gazing upon it, he said:

"We take the stars from heaven, the red from our mother country, separating it by white stripes, thus showing that we have separated from her, and the white stripes shall go down to posterity, representing liberty."—Fishing Gazette.

Wood Getting Scarce.

WHY NEW FORESTS ARE TO BE PLANTED.

So much wood has been used in the present war that soon the supply will not be able to meet the demand. Within recent years an increasing quantity of wood has come from Russia, but now most of her ports are closed.

Forests in the United States, Canada, and Scandinavia have yielded heavy toll, and as so much land in the two former has been cleared for settlement no new supply is being grown.

In England and Wales the total area of woodland is less than two million acres and very little of it gives its maximum yield. Canada possesses a forest larger in area than the whole of England, Wales, and Scotland put together. This forest is in the Hudson Bay and Labrador region and is a thousand by seventeen hundred miles in extent.

Another big forest stretches from Alaska to Washington State; the Amazon Basin, South America, comprises about two thousand one hundred miles by thirteen hundred miles of forest; while Central Africa has a forest region three thousand miles from north to south, and of unknown width from east to west, and the pine, larch, and cedar forests of Siberia are three thousand by one thousand miles in extent.

But in spite of these huge tracts things are so serious that the governments of the world are preparing vast schemes of re-afforestation when the war is over. Even now they have stopped the indiscriminate chopping down of trees, and in the United States and Canada it is a penal offence to damage growing trees or cut them down in certain districts.

Our own government has a scheme in hand to create a wind screen of trees along the top of the cliffs of the exposed western coast, at a cost of twenty millions. This screen will not only supply much wanted wood, but will prevent the salt Atlantic gales sweeping over and souring the land behind it, so freeing millions of acres of land for wheat and other cereal cultivation.—Ex.

An Unsinkable Ship.

A valuable contribution to the problem of constructing a so-called unsinkable ship is the French design. That the design has been subjected to expert naval discussion, and has been approved, is shown by the fact that The Foundation Company of New York has received from the French Government a contract for the construction and equipment of five steel cargo steamers of this type, and that work on this craft has actually begun.

The vessels will be built from designs of the French Naval Engineer, Le Parmentier, which are the result of practical experiments, as well as of the theoretical study of the stability of floating bodies. The French Government did not decide to have ships of this type built until it had completed tests upon a large-scale model, which demonstrated that it would probably be necessary to explode at least three torpedoes against the side of a full-sized hull before it could be sunk. Therefore, the term unsinkable can be applied to the Le Parmentier design in more than a figuerative sense; for under normal conditions a submarine would be forced to submerge by gun-fire from the ship attacked before it could launch more than two torpedoes.

In undertaking the development of an unsinkable ship design M. Le Parmentier adopted the following fundamental principles;

1. That the vessel must be divided into a number of watertight compartments.

2. That the details of the framing should not involve impractical and costly construction. Both of these principles will be fulfilled by the ships now under construction at one of The Foundation Company's Southern yards.

The vessel consists of two parallel cylindrical hulls joined by transverse bulkheads. The cylindrical shape gives the maximum of hull strength and provides inner walls to withstand the tremendous force of a torpedo explosion.

Furthermore ,these walls form two longitudinal watertight bulkheads strengthened by watertight transverse members, which join the two cylinders and form six centrally-located reserve buoyancy compartments. Each cylinder is itself sub-divided by watertight bulkheads, so that the vessel has a total of 18 watertight compartments.

The experiments made by the French government indicate that not more than two compartments in one cylindrical hull and possibly two in the adjoining reserve buoyancy space would be penetrated by the explosion of a torpedo at the side of the vessel. Assuming that only two compartments in the outside cylindrical portion of the hull were flooded the ship would list about four degrees and the effects upon the trim of the vessel of flooding first four and then six compartments of one hull are no more serious.

Calculations show that even though one hull were completely flooded, the buoyancy of the opposite hull and the adjoining reserve space would keep the vessel afloat. Even in this condition the ship could be brought into port by the propelling machinery in the undamaged hull, this unit being entirely independent of the engines and boilers installed in the submerged hull.

The present designs call for a ship 320 feet long, with cylinders 20 feet in diameter which will have a deadweight capacity of 4,250 tons on 16 feet draft . Twin-screw steam engines of 700 horse-power each will be installed and they are expected to give a speed of eight knots, when the ship is loaded. Steam will be furnished by two sets of independent watertube boilers fired with oil fuel. Three cargo masts with six cargo booms will be provided, the masts being stepped between the two cylinders, with winches in the fore-and-aft passage-way below deck.

A valuable feature of the double-cylinder construction of these ships is, that, to a certain extent, which will vary with the character of the cargo, they are self-righting. For it is evident that if it is carrying for instance, a full load of coal, the opening to the sea of two or three compartments on one side of the ship, with the consequent heeling, would cause the greater part of the cargo in these particular compartments to be spilled out of the hull, with a resultant lightening of the ship upon that side, a reduction of the angle of heel, and a return, more or less, to the condition of normal trim. These results, with variations according to the particular case in hand, would hold with any cargo that was heavier than water and which was of such a character that it could spill out through the breach in the ship's side as the angle of heel increased.—Scientific American.