

FLAGS ON SILVER INGOTS

by Linda Osborne, The Franklin Mint

I am with the Franklin Mint, a private mint in the United States with an office and subsidiary mint, John Pinches (Medallists) Ltd., in London. The Franklin Mint produces commemorative medals, plates, and ingots – an ingot is a bar or rectangular medal – and strikes the coinage for six foreign countries. One of the sets of ingots that we have produced depicts forty-two flags which have flown over the United States. The mint has sold 5,042 of these sets at \$1567.00 each. Thus, many Americans have been introduced for the first time to an accurate story about their flag and other flags important in United States history through the ingots and the accompanying reference book, *Great Flags of America*. I have a set of the Great Flags of America ingots here today, and I would like to speak to you about how they were produced, the kinds of problems we discovered and how we solved them, and the interest they evoked.

To begin, it would be useful to have an idea of the procedure for making all of our medals, including the flag ingots. A design is drawn from accurate reference material and this is usually sculptured in clay and then cast in plaster. If the design is not to be shown in relief, as in the case of these flag ingots, the sculpting part is not necessary. The finished sculptor's model or design is brought to the engraving department, where it is simultaneously reduced in size and engraved on a cylinder of steel called a hub, or master engraving. A hand engraver then puts the finishing touches on the master hub.

The master hub is bathed in 1,500°F molten salt until red hot, when it is quenched in water to harden the steel. The master hub is then squeezed against a block of softer steel, in a hydraulic press with a force of about half a million pounds, to produce the die. The die is machined to the proper shape and undergoes the same heat treatment as the master hub. It is then machined to a tolerance of less than one thousandth of an inch. The die and master hub are compared by a skilled die-maker to make sure the die is accurate.

The surface of each hardened die is polished with a compound of diamond powder. In the meantime, silver for the medals is melted, casted, and rolled. Blanks are punched from rolled sheets of silver and passed through an annealing oven to reduce their hardness. They are burnished and dried. In the clean room, where constant temperature and humidity controls are maintained, personnel enter through an air shower, and the air is completely changed every ninety seconds, the blanks are fed into a coining press and struck. The medals are immediately inspected and hallmarked if approved.

Before any of the manufacturing can take place, of course, an idea for a medal or series of medals must be developed. The idea of a flag series was first pursued as one of the interests

of Americans stimulated by the upcoming bicentennial of the United States in 1976. Since the flag shape corresponds exactly to that of an ingot, this format was chosen, rather than a circular coin. However, while other ingot series at the mint usually show a design and border, each flag in this series fills the face of the ingot, exactly forming a miniature silver flag.

Whitney Smith was asked to be our consultant at an early stage. The scope of the project was to be a series of American flags, but this, of course, left several possibilities for selection and presentation. The set we chose under Dr. Smith's direction includes forty two representative flags flown by sovereign nations over what is now United States soil. In each series the mint takes into account both historical importance and the attractiveness of the set. You can see that this set includes the flags of countries that once controlled part of what is now the United States, four flags of formerly independent countries annexed to the United States, three national flags of the Confederate States of America from the Civil War, and one stars and stripes from each period that new states entered the union. This gives, first of all, a good general view of the kinds of flags that have flown over the United States, as well as the events that were happening under them. In addition, the different kinds of flags form an attractive set. One thing that helped the appearance is that the star pattern of the United States flag was not standardized until 1912, and we were able to use a variety of unusual star patterns within the set.

The specific flags were chosen by Dr. Smith, and we used as models actual flags which have been preserved, contemporary prints, and written records. For example, the pattern used for the thirteen-star American flag is depicted a painting of the Battle of Cowpens and also appears in the flag from that battle preserved in Guilford Courthouse in Maryland. The stars arranged in a larger star in the thirty-star flag are taken from a print of Commissioner's Hall in Philadelphia. The famous Star Spangled Banner is the model for our fifteen-star, fifteen-stripe flag ingot. This is the flag which inspired the United States national anthem, written by Francis Scott Key during the War of 1812. It is now preserved in the Smithsonian Institution in Washington, D.C. Since this is probably the most well known flag in the United States, we have reproduced it exactly on the ingot, including an inverted "v" which appears on one of the stripes.

Once the flag designs had been chosen, the mint faced three manufacturing problems which had never come up before. One was that there are several proportions of the flags which we wished to portray. Normally, a single die and blank size will do for an entire series. In this case each die and corresponding ingot have the same height, but the width varies according to the proportion.

Another problem – which did become a manufacturing question later, but began as a question of accuracy and appearance – was the one of colour. Obviously this is an identifying part of all flags, but also impossible to show in silver. We solved the problem by using heraldic hatching. Since a fair amount of silver on our ingots must be polished for it to be a proof set, white was indicated by polish or a mirror finish. (Small areas of design, such as those on the Spanish flag, were also polished.) Other colors were indicated by the traditional hatching code.

The third problem concerned the edges of the ingots. As already mentioned, our ingots have borders beyond the design. In this case the design of the flag exactly corresponds to the ingot shape. The edges are squared off. Apparently it was very difficult to cut these edges without having them either round off or form a ridge.

Once the front or obverse of the ingots had been determined, it was decided to inscribe the back or reverse with a sentence or two which stated something significant about each flag. A reference book was to accompany each set of ingots. This contains a general introduction and glossary of flag terms, as well as a section on each flag in the series. It discusses the history of the United States at the time of each flag.

Also included in the book are illustrations of each flag flying at a significant moment in American history, or at a significant place. An artist drew the pictures and was supplied with reference materials that would create a totally accurate historical scene. The flag in the scene had to meet Dr. Smith's approval, and the rest of the scene – places, costumes, houses, etc. – had to be thoroughly accurate.

In some cases, particularly those involving the modern flags, this was relatively simple. For example, we have numerous photographs of the fifty-star American flag flying over the moon. However, earliest American history does not have such a photographic record. Paintings are often inaccurate in terms of actual historic facts. For example, many of our American paintings of the thirteen-star flag were not done during the Revolution, but in the nineteenth century, and are very romanticized. Our other problem was finding a significant event where a flag would have been flying for each time period. Some of these American flags flew for only a year before new states were admitted, and there is little happening where a flag might have flown. If there is, an illustration of this often does not exist. Besides, our artist wanted to create a realistic drawing and often needed more than a contemporary sketch.

The drawing composed for the twenty-one-star flag illustrates this point. The 1809 Stephen Long expedition to the American west was finally suggested as the topic because there is a sketch done by Titian Peale, an American artist with the expedition, which includes a flag. The sketch shows the expedition's steamboat at Council Bluffs, Nebraska, but it was not enough for the artist to work from. With help from the Nebraska Historical Society he was supplied with pictures of the Bluffs and descriptions from the expedition records of vegetation and animals on the river. He was also shown what Indian tribes lived in the area and what their dress was. The men of the expedition would have been wearing general exploration/pioneer dress of the period. There is a portrait of Stephen Long, and pictures of flatboats which we knew were on the river at the time (from Titian Peale's sketch) were readily available. We never did find a clear picture of the steamboat, but we solved that problem by showing the men at the stern of the ship and concentrating on the flag flying there, which was, after all, the reason for the picture.

One interesting thing turned up after our sketch was completed and being approved for accurate-



cy. The artist had dressed the men in shirts and vests, but not heavy jackets. We knew they were there in the autumn, but not whether it would have been warm enough for them to have been dressed this way. By calling the National Climatic Center in Washington, D.C. and determining the average autumn temperature for nineteenth century Nebraska, we decided that woolen shirts and vests would have been appropriate dress for these men.

For the forty-three-star flag, the first Army-Navy football game was chosen as the subject of the illustration. (American football, not soccer, is played.) This is a traditional athletic event 'Which draws a great deal of public attention. The forty-three-star flag was another which flew for only a year, and it was difficult to find another significant event where a flag would be displayed. We had seen no illustrations, but it seemed logical that a flag would have been flying at the game, or at least somewhere at the U.S. Military Academy (West Point) on that day. The Academy sent copies of the only two photographs of the game that exist -there was no flag in view. Finally a picture was found which showed the Academy buildings as they would have appeared from the football field at that time. The man who sent the photo marked the exact spot where the flag-pole stood. Although a flag was not flying on the field, it would have been visible beyond the goalposts, according to this photograph. (It also would have been flying, since the day of the game was fair.) Thus we combined the pictures to recreate an accurate view of the United States flag over the first Army-Navy game.

Piecing together such scenes demonstrates very well the interaction of flags and history. The flag is the center of each of these illustrations, but events are happening all around them. If you look through our book, you will see flags flying from ships and forts and even a royal palace (Hawaiian flag); flags being carried by exploration parties and used by rebels establishing new states; flags at government events, like inaugurations; flags being raised or lowered as appropriate symbols of sovereignty. Taken all together, our set of ingots, text, and illustration give the non-vexillologist (and probably the vexillologist as well) a very sound beginning in the study and enjoyment of flags.

In fact, the people who have bought this set were not vexillologists at all when they started, but coin collectors or people interested in American history. 4,892 sets were sold to established Franklin Mint collectors, i.e. people who had bought coins or ingots before. one hundred fifty additional sets were bought by members of American Express, to whom we sent a mailing piece. That means that over 5,000 people have probably been newly introduced to flags through this series.

The flag ingot set has been extremely successful in promoting interest among collectors. We occasionally receive letters about the subject matter of our medals, and this series has elicited a larger number of comments than any other.

The first group of letters came because of an optical illusion caused by the hatching. The flag book explained that orange was indicated by horizontal and diagonal lines, and yellow by dots.

When collectors received the early flag of the Netherlands, they looked for the orange stripe and thought they saw dots, which would indicate yellow. What they were actually seeing was the spaces between the crossing horizontal and diagonal lines, which actually appear more *like ovals than dots. The silver etched lines were so small and fine that it was as easy to see this one way as the other. However, if the ingot is magnified, the lines of the hatching are further apart, and the true pattern is perceived. When the next flag in the series, the Swedish flag, came to collectors, they could see how the real representation of dots appeared.

Another letter involved our design for the thirteen-star flag. We had shown twelve stars in a circle, plus one in the center, and the collector wanted to know why we had not shown thirteen stars in a circle, as is usually depicted in popularized American paintings. His letter illustrates the kind of knowledge – or lack of it – that most Americans have about their flag. In fact, there is no reason for the gentleman writing the letter to have this knowledge, since it is rarely presented to him correctly. Even the United States Post Office has issued a set of historic flag stamps that contain several errors.

Parts of the letter read as follows:

"We ... have a reproduction of the 1777 flag with thirteen stars in a circle ... A 6 cent stamp shows the full 13 star circle and carries the printing 'First Stars and Stripes 1777' ... we researched the Book of Knowledge; Grolier Encyclopedia; U.S. history books and the Readers Digest Almanac. Each shows the full 13 star circle flag. Thus your flag medallions are not only beautiful but also a subject of keen interest and discussion, leading to our pointed question - would you please favor us with the source of your information that led to the 12 star circle plus a center star design on the medallion?"

Our reply explained our sources, such as the flag from the Battle of Cowpens, which appears in a photograph in an article in *National Geographic*. Actually, as was explained in our letter, most of the thirteen-star flags of which we have evidence actually had their stars arranged in rows, but the day is not yet at hand when this will be generally accepted.

One of the enduring myths about American flags is Betsy Ross' designing and sewing the first flag, with thirteen stars neatly arranged in a circle. The flag book issued with the ingots explains that this is not true. To date, we have not been challenged by our collectors, although three people from different departments within the mint itself have put in requests for the date Betsy Ross put the final stitches on the first flag, so that it can be included in a medal series. No doubt the day will come when Mrs. Ross will take her proper place in history. By giving this knowledge to some 5000 people that much sooner, the Franklin Mint is proud that it has struck one small pioneering blow for Vexillological truth.







