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### Sketch of the process of Coining

The metal for coining having been brought to the correct standard of purity by such additions as may be required, it is ready for the first process, melting. The proportions of alloy in some of the principle coins are as follows.

In England - Gold coin, 22 parts gold & 2 parts of pure copper - Silver coin 222 parts silver & 18 parts pure copper. Bronze coin 95 parts copper, 4 parts tin & 1 part zinc -

In France. Gold coin 9 parts gold 1 part of alloy. Silver coin 9 parts silver 1 part of alloy.

Mexican dollar 901 parts silver 99 parts alloy.

This amount of alloy is added plus that





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oxidized in melting & annealing.

The metal when melted is cast in metal moulds varying in size with the coin to be made from it. These slabs & bars are then passed through powerful rolls & reduced in thickness, annealed & passed through again & cut into strips or "fillets," these are again annealed & passed through rolls of more delicate construction during which process they are frequently gauged to see that they are of equal thickness in all parts. Gold & silver fillets then pass through a machine called the "Drag Bench" which increases the equality of thickness so that "flanks" or circular pieces cut from any part of them vary but little in weight.

The rolling having been successfully



performed the fillets pass to the "cutting out machine" which cut out the "blanks" of the various sizes required. The Blanks are then weighed the light ones rejected & the heavy ones corrected.

The next process is to sound the blanks by letting them fall on a piece of metal, those with flaws that do not give the proper ring are termed "dumb" & are rejected.

Another annealing then takes place after which the coins are placed in an acid bath for a few minutes, washed in water & thoroughly dried in a stove for the purpose.



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The Blanks are then ready for the coining press when they receive the government impress.

The coin so stamped now passes through the "milling machine" by which the edges as well as the face of the coin are marked.

The last process of manufacture is that of "Shaking" by which any little roughness on the coin is removed.

The coins are now weighed singly & also in quantities & their weight plus or minus a fixed standard is taken one coin is also taken for assay <sup>which</sup> being found satisfactory the coins are ready for circulation.



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Assays are taken of each bar a pot  
from the foundry which if not satis-  
-factory, the bar is returned to the  
melting pot, with light coiner, faulty  
flanks, dust, parings, & the metal  
left from the cutting out machines,  
called "scrap".



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