To all whom it may concern:

Be it known that I, Paul A. Meehan, a citizen of the United States, and a resident of New Castle, in the county of Lawrence and State of Pennsylvania, have invented certain new and useful Improvements in the Art of Annealing, of which the following is a specification.

The object of the present invention is to overcome a difficulty which arises in the ordinary practice of annealing metallic articles which have been previously pickled in an acid bath. In annealing such articles it is practically difficult to remove all acid from the articles before they are put into annealing boxes, or on other supports and are moved into the annealing kiln or furnace. In consequence the annealing boxes or other supports for the articles, if made of metal as is ordinarily the case, are attacked by the acid fumes and are subjected to consequent rapid deterioration. If the kiln or annealing furnace contains metallic parts, these are also attacked by the acid fumes.

This is especially true when the annealing furnace is of the continuous tunnel type and comprises metallic cooling pipes in the cooling zone of the kiln.

I have discovered that this difficulty may be effectively and inexpensively overcome by the simple expedient of coating, from time to time, the boxes or other supports for the articles to be annealed with an acid neutralizing material, and in practice I coat the boxes or other supports with whitewash. When the acid from the pickling bath is sulfuric acid I remove the calcium sulfate formed by the reaction between the lime in the whitewash and the acid. If some other acid is used the corresponding calcium salt must be similarly removed. In practice I may remove the salt thus formed at the end of each annealing operation, and then recoat the boxes or other supports, but in some cases the boxes or other supports may be used in two or three annealing operations for each cleaning and coating operation, and thorough cleaning at any time is ordinarily not necessary.

Having now described my invention, what I claim as new and desire to secure by Letters Patent, is:

1. The improvement in the art of annealing acid pickled articles held by metallic supports which consists in neutralizing acid retained on such articles by acid neutralizing material supplied in the form of a coating to said supports from time to time.

2. The improvement in the art of annealing acid pickled articles in metallic boxes which consists in neutralizing acid retained on such articles by whitewash supplied to the boxes from time to time.

Signed at New Castle, in the county of Lawrence and State of Pennsylvania, this 10th day of April, A. D. 1920.

Paul A. Meehan.