At our St. Louis plant we operate a white metal department. All the metals handled in this department are melted in a round melt-out pot of about 12,000 pounds capacity. Normally, the temperature of the metals melted in these pots runs high enough to emit metallic fumes, but we do have gravity-type exhaust hoods over each one of these pots. Reclamation of chips and borings is usually done in this department, and here again we encounter heavy oil smoke because of the cutting oil used in the various cutting and machining operations. These pots, too, are protected with exhaust hoods.

Also, at our St. Louis plant we have a centrifugal casting building where bronze castings are produced by centrifugal casting process. Both the casting machines and the melting furnaces are handled in a manner similar to that of our main foundries, with roof ventilators for general exhaust were required.

In our pattern shops we have the usual exhaust system for removal of sawdust and shavings from the normal compliment of woodworking equipment. These shavings and sawdust are collected in a cyclone collector and regularly removed to reduce fire hazard.

In machining operations at our plants, we have at all plants car brass finishing and lining. The new finishing and grinding machines recently acquired by our division have exhaust connections on the machine and these are connected into an exhaust system. The babbitt pots used for lining do not require exhaust hoods from a fume standpoint, but in some plants we do have hoods over them to remove the excess heat to make for better working conditions. These pots are normally gas-fired and we do have products of combustion exhaust vents.

In our larger machine shops where rough and finished machining is done, we have encountered cases of lead intoxication which has been traced by our Medical Department to the inhalation of fumes given off from our high-speed machine tools. At the recommendation of the Medical Department, we have now on our drawing boards preliminary designs for an exhaust system for the various machine tools. This system will be comparable to that used by Brakeblok Division in their machine shop. At the present time the design of these systems is in a preliminary stage and we are not in a position to offer much along these lines. We hope in the near future, however, to install and test a portion of this exhaust system to determine the effectiveness in controlling our fume hazard. We believe, however, that in addition to the exhaust, it will be necessary to use a coolant in the machine operation in the form of a mist or fog to help suppress the fine particles causing the contamination.

I have attempted to outline briefly what has been done, what is being done, and what is contemplated for the future with regard to ventilation in our old plants. At this point I believe a word about the future would be in order. It is my opinion, based upon recent developments in Federal, State and Local Municipal health departments, that we are to be confronted with more strict health control ordinances than in the past. This is somewhat due to pressure exerted by labor unions for better working conditions, by people living in the locality of our plants for means of reducing air pollution, and by companies themselves in their endeavor to make their plants and our plants better places for men to work.

I believe that in the not-too-distant future we will be required by Ordinance to suppress any contaminated air that is now being discharged into