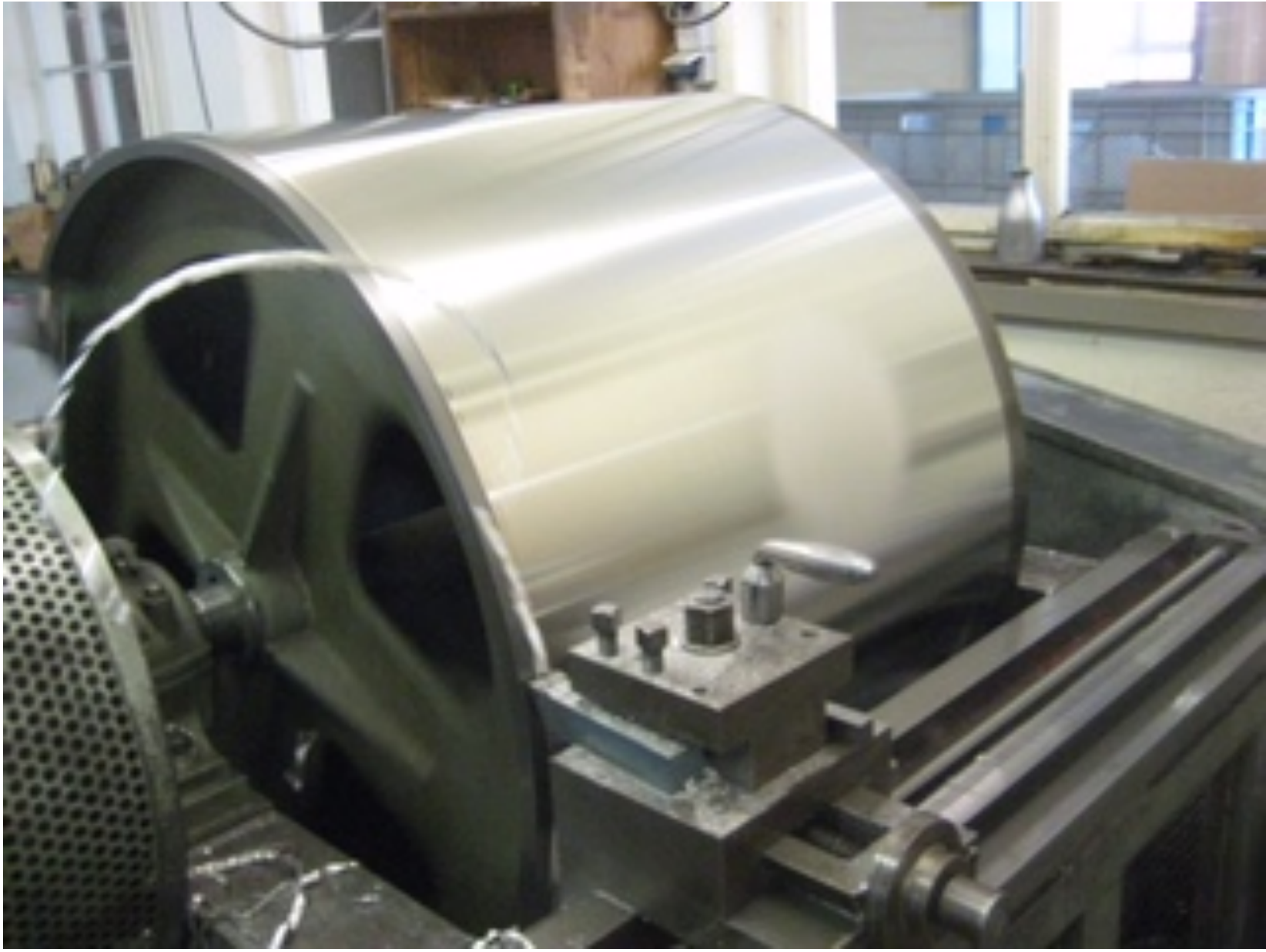
Metal organ pipes for Pilgrim's new organ
being made by hand by Killinger Pfeiffen Freiberg, of Freiburg, Germany

Metal shards (typically a combination of tin and lead) are melted in a vat and stirred.

The molten metal is poured into a wooden box with a thin slit at the bottom.

Two craftsmen slide the box along a counter as the metal runs out the slit creating a thin layer of metal.

When the metal cools it can be carefully peeled up.



The metal sheet is planed to the proper dimensions.

The sheets are painted with a gum-like sizing on one side, and after “seasoning” for three months are ready to be molded into pipes.

Using a mandrel, the sheets are formed into pipe shapes. Here the bottom half of an organ pipe is being formed.

Most organ pipes are made in two pieces; the tops and the bottoms.

If you are Norwegian, you will notice these pipe bottoms look suspiciously like *krumkaker* but are NOT edible!

These pipe bottoms are ready to be soldered to their tops. The indented part of the pipe (which is the bottom part of the pipe's mouth) has been formed by hand.

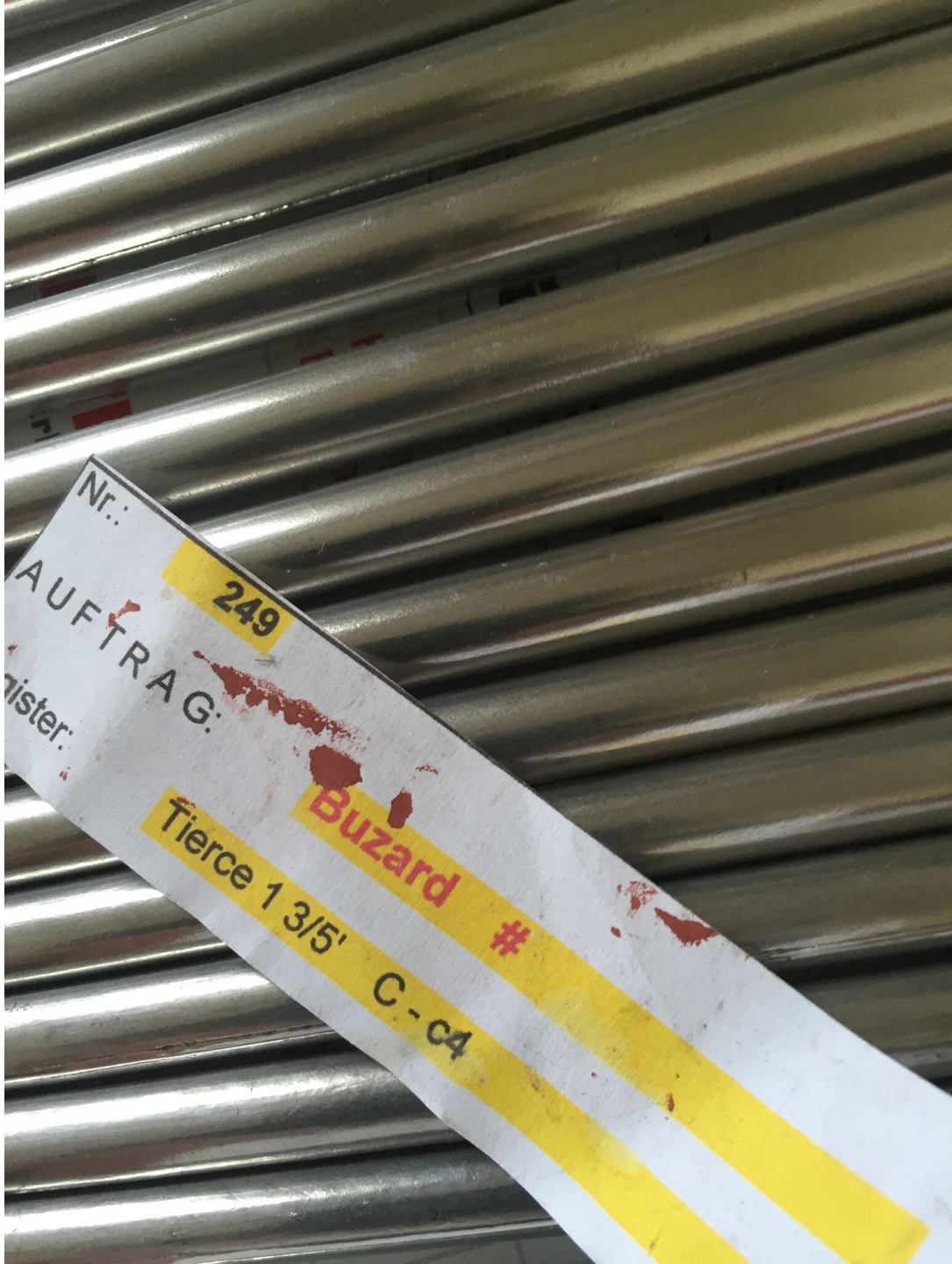
Each pipe is hand soldered. The pipe is painted with more sizing, and the sizing is scraped off in the exact area where solder is to be applied. This way solder does not run all over the pipe.

Here are pipes that have been soldered together.
The bottoms of these pipes (the “toes”) have been formed by hand to make their characteristic shape – a tapered toe that will sit in its hole in the pipe rack.

These pipes have been soldered but will still need to have the “mouths” (the side openings) cut into them.

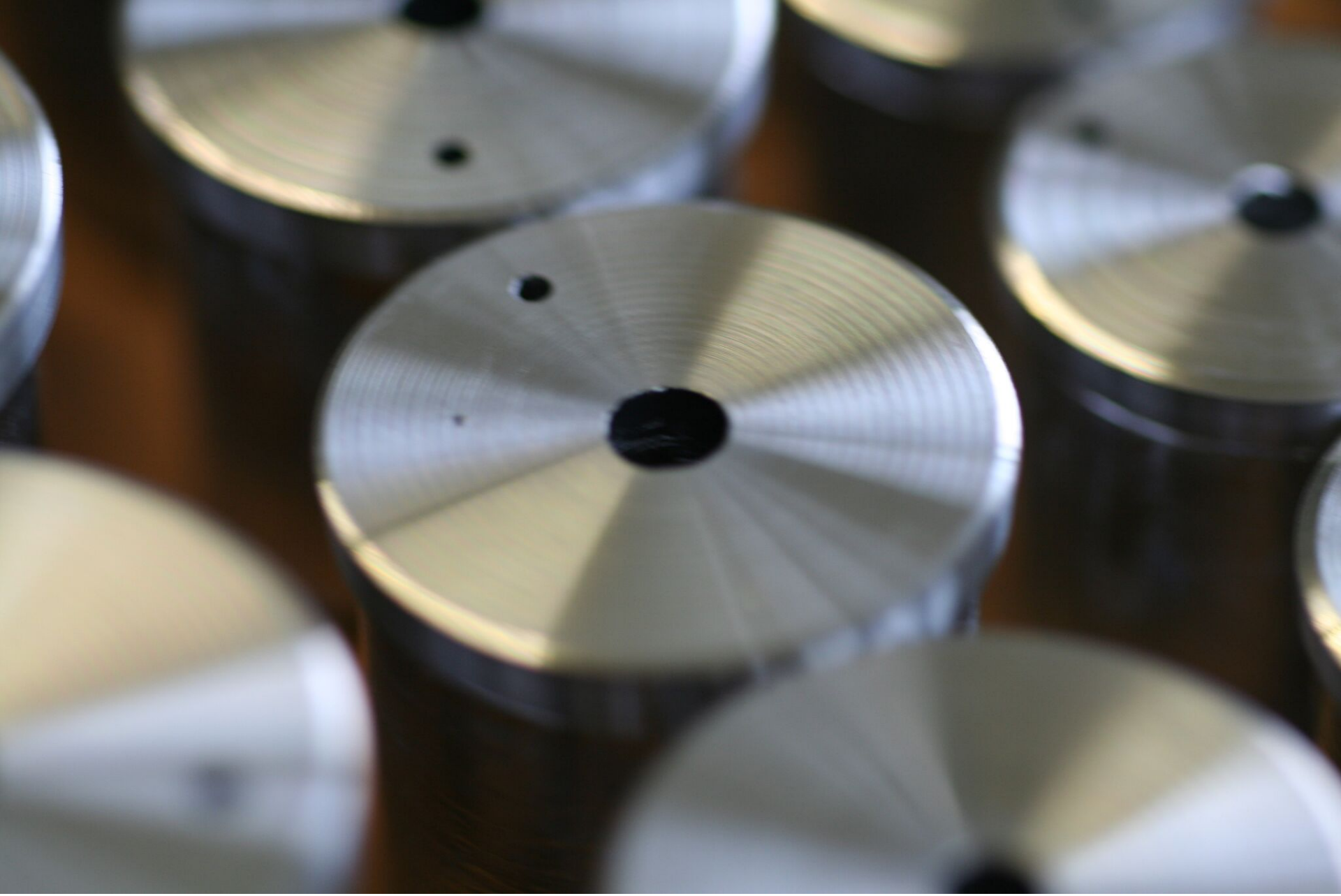
Of course, the pipes are polished – they shine up beautifully!

Here is a label for one rank of pipes – the Tierce 1 3/5’, pipes C-c4. The Tierce is a mixture rank, which will give our organ that characteristic “pipe organ sound.”



These are the stops which will sit in the top of one rank of pipes, the Lieblich Gedeckt 16’. Felt has been applied at the bottom of the stops.

Here the resonator boxes for reed pipes are being machined.



The toes of the reed pipes will sit in these resonator boxes.