How do you preserve several tons of decorative metalwork in a huge, busy historic building with a miniscule maintenance budget?

With a sustainable program!

- Off-the-shelf products
- Simple instructions
- Training
- Work within the system (staff, schedule, etc.)

Metals and finishes

- Cast iron, bronze plated and painted
- Wrought iron, bronze plated and painted
- Cast bronze, tinted varnish and painted
- Bronze sheet, natural patina
- Rolled brass, no coating on original; lacquer on reproduction

Condition issues

- Disfiguring polish residues
- Stained and etched surfaces (the culprit: Met-all)
- Uneven removal of protective coatings
- Chipped, scratched and worn paint
- Poorly executed paint touch-ups
- Corrosion products related to wet mopping, spilled liquids and ice-melting salts
- Fingerprints

Preserving Metalwork at the Legislative Assembly of Ontario

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Polishes tested on brass & bronze

- Nevr-Dull Magic Wadding Polish (George Basch Company Inc.)
  - Non-acidic, mechanical action only, no paste residue, mild abrasive, least danger of harmful residues, best for polished brass in this context
- Hagerty Silversmiths' Polish (Hagerty USA)
  - Non-acidic, mechanical action only, mild abrasive, not the first choice for any of the LAO metalwork
- Pre-Lim Surface Cleaner (Pcreator Enterprises Ltd.)
  - Non-acidic, mechanical action only, gentle abrasive, best for removing corrosion spots from bronze paint
- Renaissance Metal De-corroder (Pcreator Enterprises Ltd.)
  - Amine complex, pH 4.0, water-based, best for bronze with remnants of unknown varnish and for removing Met-All polish residue from brass handrails
- Met-All Brass and Copper Polish (Met-All Industries)
  - Composition unknown, pH 2.0, highly reactive, damaging residues
  - This was the polish that staff had been using.

Maintenance plan

- Location plan with photographs
- Preventive measures
- General cleaning advice
- Simple cleaning and inpainting instructions for individual elements, one sheet per element
- Product and supplier information
- Treatment forms
- Cleaning schedules (daily, weekly, monthly, quarterly, as needed)

Results

- Cleaners are happily using recommended polishes; Met-All has been banished
- No perceived benefit to waxing brass door hardware and handrails; rails still require frequent wiping with microfiber cloths to remove fingerprints
- Preventive measures have not been broadly adopted